THE SEPTEMBER, 1935

RADEX INDEX

The All-wave DX Log of the World



25°

30c in Canada

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

The "Perfect" Method of Using Head Phones

The Perfect Phone Adapter is a small metal box which may be fastened in the back of or under the console where it will be readily accessible. It contains small jacks for holding the tips of the phones and a toggle switch for silencing the speaker. A short cable has adapters attached which are placed under the power tube or tubes. That is all there is to it. It may be installed in a moment's time—no tools required. For DX work the switch is thrown and the speaker silenced. If the hard-of-hearing desire to use the phones, the speaker may be silenced or not as desired. No phone-plug is necessary. The price of the Perfect Phone Adapter is \$3.95 postpaid. (In Ohio add 12c state tax)

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If desired the phones may be connected direct to the Volume Control. This permits them to be used at a distance of twenty feet from the set and the volume of the phones may be regulated without changing the controls on the set.

THE RADEX PRESS INC.

Conneaut, Ohio

THE YARDSTICK BY WHICH ODX RECEPTION RECORDS ARE MEASURED

HIGH Usable Sensitivity in the new SCOTT Receiver—means that short wave reception is now yours with volume enough to shake the floor—and with less extraneous noise!

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FULL AUTOMATIC VOLUME CONTROL Keeps station at predetermined volume; prevents distant signals from fading in and out. Efficient operation over 13 to 555 meters.

FULL RANGE HI-FIDELITY Covers full tonal range of human ear; doubles that of any other receiver; 25 to 16.000 eycles.

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Send complete details of new SCOTT Receiver.

September 1, 1935



Reg. U. S. Patent

FRED CLAYTON BUTLER Editor and Publisher



PAGE TAYLOR Short Wave Editor

NUMBER 91

B. FRANCIS DASHIELL Technical Editor

TWELFTH YEAR

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\$2.00 Per Year

25c Per Copy

Foreign subscriptions 25c extra excepting Canada and Newfoundland

See Subscription Blank on Page 112

Published Monthly Excepting July and August

THE RADEX PRESS INC.

Publication Office: 326 Penton Bldg., Cleveland, Ohio Editorial and Advertising Office: Conneaut, Ohio

Entered as second-class matter April 23, 1931, at the post office at Cleveland, Ohio, under the Act of March 3, 1879.

Printed in the U.S. A.

What the New Season Promises

T IS rather difficult to realize that another new season is just around the corner. It seems orly last week that we were straining our ears during an unusually poor season of Australian reception. Yet the calendar shows that it will scon be time to dust off the headphones, brew some black coffee and start losing some sleep.

Needless to say, every DXer is hoping that the cooler months will bring some good reception. The chaps with modest logs will be trying for their first trans-oceanic catch, while the veteran globecirclers will attempt to complete their roster of continents.

For many years, scientists have been prognosticating reception during the winter months. Each fall brought the announcement that the sun-spot cycle would favor long--distance reception and that radio would return to the level of the late twenties. Unfortunately, it seemed that all our hopes for real DX were drowned under a surge of static, noise and weak signals.

Therefore, it is interesting to note that *poor reception* is being predicted for the coming winter. According to one well-known astronomer, the current sun-spot cycle will create a new low in long-distance reception which will last for several $y \in ars$.

The "Why" of Sun-Spots

While much has been written about the effect of these cycles, the chances are that few DXers know just why and how the changing cycles affect radio reception. So, in our best McGuffey manner, we will attempt an explanation. It may be decidedly technical, so you can clear out now before the water gets too deep.

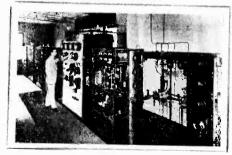
As most of us know, the earth is surrounded by an electrified shell,

an ionized layer of the atmosphere. Above the much-publicized stratosphere, we have the ionosphere. This censists of multitudes of molecules which have been split into positive and negative charges of electricity by radiations from away out in space.

The sun spots, which in reality are tropical hurricanes in the atmosphere of the sun, create an electromagnetic disturbance of tremendous proportions. The larger and more numerous the sun spots, the greater the radiation which hits the ionosphere. The greater the radiation, the more molecules are split up and the layer becomes thicker and lower.

Now, when the waves from a broadcasting station are created. they divide into two parts. The wave which travels along the ground for fifty miles or so is called the ground wave, while the wave which goes up is called the sky wave. When the sky wave hits the ionized layer above us, it reflects downward. If this reflecting ceiling is high, the sky waves come back to earth and the signal can be heard at a distance. If the reflecting ceiling is low, distant reception becomes very difficult to achieve.

Hence, when there are numerous



The 20,000 watt short wave transmitter, VK2ME, is situated at Radio Centre, Pennant Hills, Sydney, Australia. It was designed, manufactured and is operated by Amalyamated Wireless (A/sia) Ltd.

sun-spot disturbances, more molecules in the ionosphere are ionized and the layer settles down to a low ceiling. Such is the forecast for the next few years.

Different on Short Waves

Oddly enough, while the above is true for reception on the broadcast band, just the reverse is the case on short waves. On high-frequency transmissions, a high ceiling calls for poor reception while a low ceiling will result in good DX. Therefore, while the BC DXers are suffering, the short-wavers should be making hay.

Even if we cannot pull in Timbuctoo, there is one thing all DXers should remember in regard to even the local stations—and that is the sending of reports or thank-you cards whenever possible. Too often, a listener will verify a station early in his dialing and then forget about future broadcasts. To him, any additional special programs may be ignored with safety while he roams the air in search of new catches. This, of course, is decidedly unfair to the station and to the DXer who has yet to log the station.

Quite obviously, a station will soon lose interest in DX programs if the response fails to indicate that listeners appreciate the time and money expended on such a program. When a special may cost between fifty and one hundred dollars, a response of a handful of letters is hardly conducive to another program in the future.

Hence, it is largely up to the DXers how many stations will co-operate in the years to come. It takes culy a few minutes to send off a card of thanks and the results should be more than justified.

Encouraging Reports

Last year, the National Radio Club sponsored a contest to stimulate reports on programs dedicated to their members. Points were awarded on a basis of verifications received and thank-you cards mailed. In addition to the favorable reaction received by the stations, the prizes were quite worth-while.

During the coming season, the Newark News Radio Club will award five cash prizes to members verifying the most NNRC specials. In addition, certificates will be awarded to all members verifying 100 programs dedicated to the club.

It is hope that other clubs and organizations will devise means of stimulating response on programs.

Letters continue to come in, in which the writers want to know why they have been unable to receive European stations. Judging from past reports, it seems certain that any DXer in the Eastern states, given an average receiver and location, should be able to hear a few of the more powerful transmitters. Consequently, it was a bit difficult to understand why so many DXers have drawn blanks in that direction.

Looking over a schedule of European programs the other day, a possible answer to the problem presented itself. With few exceptions, most DXers concentrate on Saturday nights for their dial-twirling. They may be able to drag themselves out of bed during the week for an hour cr two of listening, but they generally "go to town" over the weekend.

What? No Europeans?

However, while it may be Saturday night over here, it is Sunday morning in Europe and most of the stations do not come on until an hour or two later than their weekday opening times. When they do come on, it is too late for their signals to reach this side of the Atlantic. Therefore, if we try for Europeans Sunday morning, we are bound to be disappointed.

Later on, when the season for trans-Atlantic reception is at hand, we will publish a schedule of the

(Continued on page 24)

WEAK LINKS in

the RADIO CHAIN

• • • By the TECHNICAL EDITOR

OR several years now this department has been attempting to diagnose at long range the radio troubles of its readers. seems that every possible disorder and problem that can occur in the radio world has been brought to our attention. While there are times when we are literally swamped inquiries. all are answered through these columns or by mail. Sometimes we are forced to seek definite information in the form of obscure circuits before an answer can be prepared. A reasonable delay, therefore, is likely to be expe-The Editors of your magrienced. azine desire to be of assistance no matter what your problem may be. but sometimes the value of complicated, long-range opinions of radio troubles are questionable. editors everywhere realize this to be a moot problem; some even go so far as to charge a substantial fee for certain answers in order to weed out inquiries from readers who are utterly unable to use any advice given.

Most radio troubles properly go back into the hands of the service-Realizing this, the technical department of RADEX unhesitatingly advises its readers to go to a good serviceman whenever the repairs invelved seem beyond the ability and instrumental equipment of the own-On the other hand, your Editor understands that thousands of readers are thoroughly versed in radio and know their sets very well, and, therefore, the hundreds of intelligent inquiries received are given the careful consideration they deserve. But, if you know you cannot use any advice given, your time can be saved



From this building come the signals of HAL, HAS3 and HAT4. It is located in Szekes-fehervar, Hungary. The photograph is furnished by J. Muranyi, 27 N. Highland Ave., Akron. Ohio. The programs of these stations are eagerly sought by Americans of Hungarian origin.

and wasted effort on our part prevented, if you seek the services of good. local radio some repair In any case, however, you are welcome to write and tell us all about your radio troubles. is no charge for the service. simply ask that you state the facts clearly and concisely; always give the model number and year of the set in question, and print your name and address plainly. Use a separate sheet from other letters to this magazine.

Thermal Distortion

As we start the Fall season it is noted that an old problem is being experienced by Mr. V. Mararian of Attleboro, Mass. "I have a new model 805 Zenith receiver," complains Mr. Mararian. "When it is turned on it works fine with a clear tone for about five minutes. Then its its tone suddenly becomes poor and distorted. I have noticed that the speaker field-coil and adjacent parts of the speaker become hot after a

short while and I wonder if this heating of the speaker coil is to blame."

Well, when this writer speaks of distortion he strikes right into a big subject. Naturally we think many things that might happen. that appears shortly Distortion after the receiver has warmed up is, without question, caused by a thermal effect. Heat brings about expansion, as we all know. stretching of a part, some place in the receiver, brings about a change in the value of a resistor or con-This changes the electrical potential of a circuit and distortion results. But where can the trouble he?

This is where your serviceman comes in, with his testing meters and practical experience. All the theory in the world cannot point to the exact resistor or condenser caus-There are many ing the trouble. small resistors in this circuit, but it is wise to concentrate first on those that bias the control-grids of amplifying tubes, particularly in the audio circuit. Defective coupling condensers in the audio circuit also cause All the resistors and this trouble. coupling condensers orbypass should be checked or shunted one at a time by a good unit until the trouble is located.

Then there is the matter of tubes. A lack of AVC action or an excessive action may indicate the need of a Gassy tubes elsenew AVC tube. where in the circuit may be at fault. All tubes must be carefully tested. The heat that causes this thermal distortion is created by the heat of the set itself-radiation from the tubes and transformer. Heating of the speaker field-magnet is not serious unless that heating is excessive. Considerable warmth appears in any metal that is subject to alternating currents and their associated magnetic fields. However, a test for a short-circuit should be made, checking on the resistance of the coil for breaks. Distortion sometimes appears when the voice coil and diaphragm become uncentered.

Recording Reception

A reader, apparently wishing to provide unquestioned verification, desires to record his reception. "I have a Majestic model 102 receiver," writes Mr. Thomas B. Davis, Jr., of Washington, D. C. "I desire to couple the pickup of this receiver to the output in order to record. Can you tell me the impedance of the pickup and the output transformer? I have tried to secure this information from the manufacturers but have received no replies."

A pickup, in general, is a different device than a recorder. In the pickup the vibration of a magnetic needle, created by the roughness of the record track, sets up tiny, fluctuating electric currents in the pick-These currents are ampliun coil. fied by a high-ratio pickup transformer and sent into the audio system of the set for amplification. Such a pickup, therefore, is unsuited for reverse action as its coils could not handle the powerful currents in the speaker which would be necessary to vibrate mechanically the needle and cut into the blank record. There are some pickups that will vibrate weakly, but whether they can cut into a blank is not known to us. The pickup of your set is of the induction coil type and may work slightly in reverse action. You can determine this by touching its leads to a 45-volt B battery and observing the action of the needle. If you attempt to use it on the output of your shunt it across the transformer voice-coil of the speaker, but with a 50.000-ohm variable resistance in series with the pickup.

Our suggestion is that you procure a regular recorder. Most of these recorders have a feed-screw drive that moves the head across the blank record, cutting the groove and recording at the same time. Such recorders, however, are rather ex-

pensive, listing at approximately forty dollars. The impedance of a recorder is usually about 15 ohms, while that of a pickup may range up to 7,500 ohms.

Light-Socket Speaker

Out in Melrose Park, Ill., Mr. A. F. Gehrke wishes to do a little experimenting. He asks, "I have a Jensen dynamic speaker of the sixvolt type which I want to change into a light-socket type. Can you advise me how to make the change?"

Not knowing the use to which you wish to put the revamped speaker we can only advise you briefly. This speaker is designed to handle 6 volts of direct current only; to plug it into a 110-volt light socket as it is would be ruinous, of course could be rewired so that its field coil can handle 110 volts. This would require much wire of a very fine variety and lots of patience. At any rate, when alternating current from the light-socket passed through its coil the speaker is going to hum at a 60-cycle rate. Also, not knowing the wattage of the field coil or its resistance we cannot advise accurately, but you might try placing a 15-watt 110-volt light bulb in series with the speaker field coil and then plugging into the light socket. This will allow 15 watts to flow through the circuit. If more or less is required decrease or increase the wattage of the lamp used in the series circuit.

Parallel Power Tubes

"I would like to increase the power of my R.C.A. radio set," states John Patterson, of Ancon, Canal Zone, "Please tell me how to connect a second type 47 power tube to my present power tube. I read somewhere that by adding another tube in parallel the power can be increased."

We do not know where you read that the power can be increased by adding a second power tube in parallel; we feel certain it was not in

RADEX. If water is drained from a tank by one pipe the addition of another pipe will not increase the power or force of the water flowing from the outlet. But it will double the flow or amount of water. same occurs when tubes are placed The power or energy is in parallel. not increased, but the flow of current, measured in milliamperes, will Thus, this increased be doubled. flew of current, which provides less cramping or resistance to the power output, will tend to reduce distortion and make clearer reception. You will not be able to get greater power or louder reception, but tone quality can be improved.

This effect is very noticeable when smaller tubes are used, such as battery types—30s and 99s, as well as the O1As and 27s. The heavier power tubes, such as 47s, 2A5s, etc., have sufficient current flow, and doubling up by parallel arrangement will have little effect on tone except at full power or volume.

Get a standard 5-contact socket and place it as close to the present 47 socket as possible. Do not detach any of the present connections from the 47 socket but run very short insulated wires from each of the five socket contacts to similar contacts on the new socket.

A Whimsical Set

The tribulations of Thomas J. Butler, Pleasant Plains, Ill., have been experienced by many. sets can become as capricious as the well-known tooth that stops aching when the dentist's office is reached. Now, what can you do about a set that, as Mr. Butler writes, "got the second night after f weak bought it?" The receiver was an Atwater Kent, model 559. Mr. Butler remarks further, "After letting the set rest for a while it was all The serviceman could find right. nothing wrong, then some days later it got weak and went dead, and a second serviceman could find nothing wrong with it. All parts tested

perfect and when the set came home the second time it was excellent in its action. Then it again went dead, got all right the next day, and now it is dead once more."

The problem of intermittent reception of the kind that worries this writer should be well-known to every When the set is workserviceman. ing there is nothing at all that defective about found can ho kind trouble οf this it. And does not mean that the set is a poor The defect, when located, probably will be found in one little unit The remedy then or poor contact. is simple and quickly applied.

After the set is turned on a short time it naturally warms up. Heat causes expansion and some tiny unit, such as a resistor or bypass condenser, becomes defective under this condition. After the set is turned off and cooled down the defective part returns to normal position and the set starts up as good as ever. And the defect will not show every time the set is turned on because the part causing the trouble does not repeat its cycle of failure at regular intervals.

There is only one real cure by the serviceman when the set is working well and testing devices will not locate the trouble, and that is to replace all small resistors and con-When trouble is experidensers. enced, the substitution test, that is, connecting a good resistor across each suspected resistor, will reveal the location of the open circuit or short circuit, whichever it may be. This is one of the most stubborn forms of radio-set trouble and it may take a long while to find the actual seat of annoyance.

Space Winding

Among the many readers of RADEX who have built the short-wave converter described in the May and June issues of 1933, is Mr. G. A. Hamilton of DeLand, Fla. He asks, "Your article specifies both No. 26 and No. 28 wire for winding the plug-

in coils. Which size shall I use? Also, are the coils space wound, and if so, how much space between turns?"

We have been answering inquiries for two years advising that No. 26 wire is the size to use, and putting the blame on the poor, long-suffering printer. Space winding is not necessarv, but on the short waves, below 80 meters, there is some benefit. Wind on a length of hard linen thread, a little larger than the wire, as the wire is wound on the form. After the wire has been made secure, remove the string and the wire will be found to be evenly spaced. Larger wire may be used, if easier to wind this way. No. 22 or No. 24 can be used on the very short-wave The shorter the wave lengths coils. to be covered, the larger the wire commonly used.

Telephone Resistance

The resistances quoted by different radio headset manufacturers puzzles William B. Brown of Washington, D. C. "Please give the meaning of earphones having resistances like, Brandes—2,000 ohms; Frost—3,000 ohms; Baldwin—4,000 ohms; and also a new one of 24,000 ohms," begs Mr. Brown, who suggests that the 24,000-ohm rating given the new phone set may be in error and mean 2,400 ohms instead.

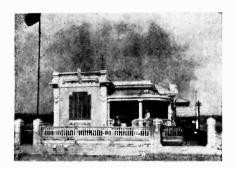
Resistance measured in ohms does not always indicate a good telephone receiver. A phone magnet could be wound with a very fine wire of special high-resistance qualities so as to get a great resistance in a few turns and thus save wire, time and The number of turns labor costs. wrapped around the magnet core with as little resistance as possible indicates the efficiency of the phone. These turns are known as ampereturns, and many turns carrying a high current create a stronger magnetic field and more powerful action of the diaphragm.

When a great length of fine wire is measured for resistance it will be

found to oppose the flow of current (amperes) by a great many ohms. Thus, the thousands of turns of fine wire (No. 40 and smaller) wrapped around the two poles of a telephone will soon measure up to 2,000 ohms resistance against the flow of a direct current. But its resistance to the flow of an alternating current. or a rapidly fluctuating and pulsating current, is much higher. This then, no longer is known as resistance due to the size and length of wire, but becomes impedance, due to the number of turns and frequency of the pulsations of current passing through. So, if a telephone having a normal d.c. resistance of 2,000 ohms. is measured for its impedance against alternating or pulsating plate current of a certain frequency ,it may be found to have 20,000 or more If you investigate further you will likely find that the 24,000ohm headsets you mention show a 24,000 ohms impedance and not d.c. resistance. High impedance phones are very good for DX work for they respond to very weak currents and cover all the audio frequencies. Direct-current resistance alone is not always a measure of good phones, but from 2.000 to 3.000 ohms has been accepted as a standard.

All-Wave Antenna

The antenna question has been given careful consideration by Mr. L. J. Borstelmann, Greensburg, Pa. Among some things complimentary to RADEX Mr. Borstelmann states. "My 7-tube Airline receiver is located in the corner of the second floor of my home. Apparently the only available location for an antenna is to attach it to the next house. An antenna between the top of that house and my own would be 39 feet in length and 33 feet above the ground. Another antenna, stretched lower down, between houses, could be made 42 feet long but only 23 feet high. Can I bring the leadin around the electric light wires, the cornice of the house to the other



In this picture we have a view of the transmitting building and antenna system of CR6AA. The building is beautiful and the equipment modern.

side? Also, what about a lightning arrester?"

It appears to us that the length between tops of the two houses, 39 feet in all, is satisfactory for an allwave antenna. It will cut down the total length of wire advocated by some makers, but you should experience little signal loss on that account. While there are a number of excellent all-wave antennas now on the market, and it is difficult for us to recommend any particular make, we believe that the General Electric antenna system perhaps adapts itself to your specific situation because of its dropped "V" center which permits of a longer length of antenna being stretched between two points. The leadin of this or any all-wave antenna can be carried in all directions and the length of wire, or transmission line, does not matterseveral hundred feet being permissible. A lightning arrester is always advisable. Simple directions accompany that device which can be procured from any local radio supply The G-E "V-Doublet" anhouse. tenna was described in the May. 1935, issue of RADEX.

Short Waves On DeForest

',I have a very good five-tube De-Forest reflex loop set," writes Mr. William Edwards of Chicago, Ill. "There are two plugin, four-prong coils used in the circuit for use on the broadcast band. Is it possible to substitute coils for these so as to get the short waves as discussed in your article in the June, 1935 issue?"

We wish that all the old, broadcast sets still in use could be rebuilt so short waves can be tuned in. many of the old circuits had strange pecularities that no one can revise them without redesigning and The DeForest happens rebuilding. to be one of these unusual circuits. However, if you wish to experiment, which can do no harm to the set since you will simply make a new set of plugin coils, here is what we Get a new plugin form suggest. with prongs similar to the ones now being used. Also, some wire of the same size and insulation.

We believe, in this set, that one coil on the form is connected between the plate and B90-volts of the first tube, and that the second coil on the same form is connected between the plate of the second, or detector, tube, and the P of the primary of the first audio transformer. This method of tuning is not well adapted to the short waves. However, if you wind a new coil, similar to the one in use, but having only one-half as much wire on it, maintain the present proportions existing between the two It may be necessary to vary coils. the number of turns of wire, making them greater or less, in order to tune in some of the nearby short-wave stations.

Constant Hum

A real grievance is uttered by Mr. Murray Wilson who lives up in Port Arthur, Ont. It deals with annoying, constant hum in his Sonora, model 80 radio set. "A bad hum is present in the set as soon as the switch is turned on," he advises. "Tuning different stations has no effect on it. The tubes have all been tested. A high tension power line passes the front of my home, but when the antenna and ground are disconnected, the hum persists."

Mr. Wilson fails to advise us whether this hum has recently appeared or if it has always been noticed. If the hum is something new and was not noticed when the set first was obtained, although the power wires were there, that fact would eliminate the induction from the wires. We think hum from the power line to be a remote possibility, however, and feel that the trouble should be looked for within the receiver.

Constant hum never seems associated with signals or volume control. It persists all the time. Usually its source will be found in the second



This modern ten-kilowatt transmitter of "Radio Moroc" may be heard on 23.3 and 37.3 meters. It is located at Rabat, Morocco. North Africa.

detector in a superheterodyne, or the audio circuit or power supply. Also, look to faulty tubes, defective plate grid resistors, faulty coupling condensers, failure of some circuit to furnish proper voltages, such as a defective voltage-divider resistance. In the power unit it is likely that a bad filter condenser or leaking choke coil or old rectifier tube is the cause. First test the parts of the power supply for proper values. The signal circuit may then be tested from the speaker back to the detector by use of headphones touched to the plate output of each stage. When a stage is reached where no hum is heard the rest can be eliminated. dividual tests of the parts of the stage causing the hum will soon show up the defective part.

SHORT WAVE Gossip and Comment

● ● By PAGE TAYLOR

HE increased demand complete and accurate shortwave station information has made it essential that a revised and more complete listing be offered readers of this magazine. fore the shortwave stations were listed but four times a year in The DX Log of the World, but on combining the DX Log with RADEX it is now possible to list these stations completely every other month. Comments and suggestions on the new log were invited from readers and as a result several valuable suggestions and many helpful bits of information were received. Most of this information has been incorporated in the new lists and the Editors respectfully submit the new listings for the approval of s.w. fans everywhere. Our heartiest thanks are extended to everyone who aided in this compilation.

Although the Editors have conscientiously tried to avoid error in the indices, it is possible, due to conflicting sources of information, that errors have crept in. Readers are urged to advise us of any discrepancies noted.

The Passing Season

The summer has not been a very active one, shortwavely speaking. Old stations have continued to come through with fair regularity and just a few new stations have been heard. One of the best of the new stations is COCD, and the most interesting, VPD.

COCD, "La Voz del Aire." Vedado, Havana, Cuba, works somewhat irregularly in the evenings, on 6.130 megs, (48.91 meters). This station relays the programs of CMCD from the Palace Hotel and is heard

most regularly between 2200 and 2400 (10 pm and midnight). nouncements are nearly always in Spanish, English being used only once in a while. Four chimes precede the announcements, as a rule, Ted Lewis' familiar Night Song" closes the programs at midnight. We understand this station desires and acknowledges reports of reception.

One of the most desirable stations, from a DX point of view, is VPD at Suva in the Fiji Islands. As previously reported in RADEX, VPD works on 13.045 megs. or 22.98 meters from 0030 to 0130 EST daily except Sunday. Programs Suva consist of news bulletins and phonograph recordings, and the programs close with "God Save the This station has been re-King." ported by many listeners in this Reports should country. be addressed to Amalgamated Wireless (A/sia), Ltd., Suva, Fiji.

The 24-Hour Clock

Some readers may not understand our new method of recording time so a few remarks anent the 24-hour clock may not be amiss. Midnight is indicated either by 0000 or 2400; noon is always 1200. Morning hours are written as usual, except the colon is omitted. Thus, the schedule for VPD given in the paragraph above (0030-0130) means 12:30 and to 1:30 am. Afternoon hours do not commence over again at 1 pm, but continue up to 2400 for midnight. Thus, 1 pm is 1300, 2 pm is 1400. Any number less than 1200 (noon) is am and any number greater than 1200 is pm; to convert pm hours to standard hours, subtract 1200. . . . 1900 minus 1200 gives 7:00 pm.

Abbreviations, which are oftentimes confusing, have been avoided as much as possible in our indices, but the necessity of conserving space demanded the use of a few. One of these is N. E. I., which means Netherland East Indies (formerly Dutch RCA is the Radio East Indies). Corporation of America; A. T. & T. is the American Telephone and Telegraph Co.; NBC. The National Broadcasting Co.: CBS, The Columbia Broadcasting System, and T. H. stands for the Territory of Hawaii.

Some South Americans

Mr. Wm. H. Reeks advises us that Station HJ1ABE, "La Voz de los Laboratorios Fuentes" at Cartagena, Colombia, is now dedicating special programs to Australia on Sunday mornings at 0400 (4:00 am EST or 6900 GMT), these programs having been inaugurated last July. Reports or these transmissions are invited by the station owner. Sr. Antonio Fuentes L., who can be addressed at Apartado 31, Cartagena. This 100watt station has a large audience in the Americas and it is hoped Mr. Fuentes will find many new listeners in the Antipodes by means of these special tests.

"This is to inform you that HCJB is now transmitting on a new waveof 36.5meters (8.214)length megs.)." writes Mr. Clarence W. Jones, Director of the station. "We are on the air each evening of the week except Mondays from 7 to 11 pm (1900-2300). Sundays we broadcast from 4 until 10:30 pm (1600-Quito time is 14 minutes slower than EST. HCJB gladly sends its verification card to all radio fans who prove reception of our program by a short log and who send an International Reply Coupon." HCJB is known as "La Voz de los Andes" and Mr. Jones can be addressed at Casilla 691, Quito, Ecuador.

In Mexico and Cuba

The only communication that this

magazine (or any magazine, as far as we know) ever received from the Trens News Agency follows: "Mr. Radio operator! Tune in on radiotelephone station XEBT, El Buen Tono, 50 meters (6.000 megs.), Mexico City, and hear every midnight, FST, Mexico's today's sport news today; 500 words press news report, by Trens wire news agency."

"There is another new shortwave station in Cuba which I received a few days ago, testing," postcards Ansel E. Gridley, Box 1294, Sarasota, Fla. "The call letters are CMHB and they work on about 10.3 megs. The address announced was Box 85, Sancti Spiritus. They come in here nicely, QSA5, R8-9 with good quality and modulation." It is believed that future broadcasts from this station will employ the call letters CO9RY.

A Floridan (above) reports on Cuba, and now a Cuban reports on shortwaves make the Celombia: world a pretty small place. Mr. R. Abella, la No. 11-E, La Sierra, Marianao, advises us by postal card cf a station HKV operated by the Colombian Army and located in Bogeta. "They work on 8795 kcs. and come in very strong here in Cuba," writes Sr. Abella. He adds that the best stations are in the U.S.A. and the Europeans are a long second.

Our list of Javanese and other Asiatic stations was compiled from lists sent in by Mr. J. V. McMinn of New Zealand, Mr. C. H. Mann, Karapiro, Cambridge, N. Zealand, and Mr. Wolff M. Henius of the M. S. "Tosari", whose address is c/o Anierican Express Co., Esplanade Road, Bombay, British India.

"The past few weeks have been rather profitable to yours truly," says Joe Stokes, 7318 Woodlawn Ave., Swissvale, Pa., Broadcast band commentator on the KDKA DX Club. Mr. Stokes says he has become a 20-meter phone addict and submits an imposing list of foreign "hams" heard on 20 meters. He

lists as the most consistent of the lot, F8DR, G5BJ, -5NI, -6XR, LU6AP, HJ5ABE, VK2EP, VK3KX and HP1A.

Verifying Phones

"Some phone stations certainly seem aloof when it comes to verifying but there is at least one phone in the world that appreciates reports, and that is the Marconi Radio Telegraph Co. of Egypt," states Geo. W. Acker, 267 N. Lyman St., Wads-"They have promptly worth. Ohio. replied to every letter I have sent them. I haven't heard Budapest for several weeks now and probably will not until late summer as that is when the 19-meter Europeans really roll in during the morning." Mr. Acker's letter continues for three pages to describe his latest experi-He is, as we ments with aerials. have mentioned before, our premier aerial experimenter; if readers are interested we will ask him to describe his antenna arrays in detail in a special story for this magazine.

Mr. J. H. Goldberg, operator and owner of several radio stations in Java, sends the following information on one of his stations, "Our station is still in operation but now on a wavelength of 102.39 meters. or 2.930 megs, and the transmission time is daily exc. Sundays) 8:30-11 am East-Java Time. Our correct call letters are YDO5; we do not use a slogan nor an identifying signal. YDO5 is situated in Sourabaya." The time given by Mr. Goldberg converted into Eastern Standard is: Daily Exc. Saturday from 1930 to 2200. Address reports to YDO5, C/O J. H. Goldberg, Sourabaya, Java. N.E.I.

A Good Report

"The 19-meter band has been marvelous this summer," submits G. H. Millican, 321 E. 24th Ave., Amarillo, Texas. "GSF, PCJ and sometimes HVJ come in swell after surrise. W2XE and W2XAD have been good, especially the few extra programs transmitted by 2XAD. The

best band on the s.w.was, however, the 25-meter band. Boy! how those Europeans come in after 10:30: GSD. DJD. Pontoise. DJD has had an R7 signal right up until nightfall and sometimes later. HJ4ABA and CJRX have been fair. W1XAL of Boston has been using this band all summer on Tuesdays, Thursdays and Sundays. EAQ, 9.862 megs, has not been up to par all summer, being usually weak and noisy. On 31meters signal strength varied: between 8 am and 3 pm signals were very poor, but the other sixteen hours of the day offered good varietv as well as fair signals. DJN is easily the best station in this band, followed closely by CT1AA. 2RO. HP5J usually R5-6, PRF5. GSB was always a good signal while GSC was just fair. The VK's, 2ME, 3LR and 3ME were good, bad, and otherwise, depending upon the amount of dust in the air. Warm weather and dust storms wrought havoc between 32 and 51 meters. The new Daventry station GSL was heard poorly most of the time due to too much interference from YV2RC. CO9GC, Santiago de Cuba was heard often after midnight, HC2JSB, 7900 kcs, eliminated that terrific howl from his signals, but he plays right in the midst of plenty of amateur code. HJ2ABD, Bucaramanga, chose poor spot, 5790 kes, to do his broadcasting: Dominica and Guatemala were not heard."

Other Reports

"For the past month I have been playing the s.w. as well as the BCB and have been quite successful in 44 stations," contributes logging H. H. Searles, 251 Broadway, Rochester, N. Y. "I have already verified three, W2XE.12ROHJ3ABD. Others heard include VK3LR, PRF5, HJ2ABC, HJ4ABA, TIGPH. HIH, HCJB, CP5 I am using an RCA Vic-YV5RMO. tor 6-tube all-wave radio and am thoroughly satisfied with it."

"In a recent RADEX a Mr. Black

of Canon City, Colo, states that his state is not favorably located for reception of European s.w. stations. I have not found this to be the case," differs Henri T. Mershon, Corwin Hospital, Pueblo, Colo. "Listeners arcund here are hearing about everything that is worth hearing. England, France, Germany, Russia, Japan, Australia, Spain, Portugal, many other Belgium, Fiji, and countries have been logged at my listening post. I am using two receivers, an RCA 281 and an ACR 136 Communications receiver." Mr. Mershon was one of the first to hear VPD, Suva, and says they are still being heard frequently.

Geo. F. Yursik, 511 Old Orchard Road, Baltimore, Md., is one of the first persons to receive a verification from Bermuda. We are told that now reports on ZFD at St. George should be addressed to the Town Clerk, but Mr. Yursik's QSL came directly from the station and reads: "ZFD is located at St. George, Bermuda and operates on 10335 kcs. No regular schedule is in effect. ZFD uses an aerial input power of 2 and employs non-directional The transmitter, of transmission. British Marconi manufacture, owned and operated by Cable and ZFD is Wireless, Ltd. London. centrolled from the receiving and control station at Devonshire, miles distant from St. George."

Noise Spoils S.W.

"I really cannot agree with RA-DEX that the s.w. are the Thrill Bands," complains A. E. Pringle, S. S. Tahchee, San Pedro, Calif. "I have had three radios and they all have the same fault, noise and static which spoils everything. I enjoy hearing good music but up to the present I have not had even one night in the last 8 months which was worth listening in on the s.w. first set was a 6-tube Philco run from the Ship's dynamo but the noise from the engine was too much so I got an RCA 'Magic Brain' and

an AC-DC motor, but this gave no better results. Now I have a larger 'Magic Brain' and an RCA aerial, but still have noise. It is out of the question for me to hear good music." RADEX has a number of readers on ships and undoubtedly some of these shipboard DX'ers can advise Mr. Pringle how to get away from the usual ship noises. We still believe the s.w. are the Thrill Bands.

That Verification Question

Because of the fact a verification recently received by R. C. Messer, 107 Fillmore Ave., So. Portland, Me., did not contain the magic words "Reception positively verified." Mr. Messer feels that 8 hours' tuning spread over 6 nights, two letters and two coupons were wasted. We believe he does have a verification. however, as the card he has from HC2AT is the standard card always sent out by this station. It shows a picture of five monkeys in coconut trees, one of them holding a radio in his hand: volcanoes make up the background. The card reads: "HC2AT at last! Broadcasting daily on 35.7 meters or 8400 kcs. Box 872. Guavaguil, Ecuador. This station is owned by the American Trading Co., the largest importers of radios in Ecuador. Send us \$10.00 for a first class Panama Hat!"

Recent verifications received by A. C. Lyell, Box 4536, Johannesburg, South Africa, include XEBT, PRF5, PLV, YV3RC, COH, HI1A and HKE. "FZS, 25.02 m., was heard several times at R4 just after 8 pm." he writes. "OXY, 49.4, was also heard several times at R3-4 near midnight. PRA8, Pernambuco, Brazil, 47.6 m., comes in at R3/S/X at midnight."

More S.W. Comment

"I am using a 6-tube RCA Victor model 128. Several people have told me that reception is bad at this time of year but, while I haven't logged a lot of stations, those I have logged have come in well. At present I have a total of 49 with 10 ver-

ified. I have logged one station which must be new as it is not listed: COCD at Vedado, Havana. Cuba. The freq. is 6.130 megs. I would like to hear from any or all s.w. fans and will answer all letters." This letter and request is from J. G. Storms, Jr., 622 El Prado Way, W. Palm Beach, Fla.

"Recently I bought the latest and I'm told, the best thing in Victor radios, standard and shortwaves. Canadian make," explains Wm. Ward Spinks, 1354 Craigdarroch Road, some city in Canada. "The standard wave is splendid and so would be the s.w. but for the static. I have a Victor antenna, put up by an expert; it is fully fifty feet from the ground and our house is on a hill. On s.w. I have had Caracas several times, always clear and without noise. Japan just once. London once, very clear, but only once, Every other time there has been more noise than anything else. Paris is generally better than London, but not much better. Why do I get so rauch noise?"

The Icelander

Several usually reliable sources of information advise us that the new Icelandic stations at Reykjavik are about ready to commence their initial tests. These stations should be heard before the end of the year. Many reports of "reception" have already been seen but these reports cannot be used until the station has actually commenced operating.

"Here are a few items I hope will be of use to you when compiling your grand total of handy information," kindly submits Samuel A. Meyer, Jr., 83 Canterbury Road, Rochester, N. Y. "Manuel Mantilla Barranguilla. Colombia, 0... HJ1ABF, 6.074 megs. Cesear y Mario Arango, Pereira, Colombia, HJ4ABC, 6.090 megs. Universidad Narino. Popayan, Colombia, HJ5ABF, 8.215 megs." The rest of the information is in the indices.

"Reception here is really good



One of the treats those listeners hear who are able to tune in "Radio Moroc" is the native Arab orchestra. Here we see them in their native costumes.

and all the large English and German stations are to be heard roaring in every day," reports Maxwell Smith, Corner Brook, Bay of Islands, Newfoundland. "GSA, B, C, D, E, F, and at times the 49 meter GSL. DJB and DJD are heard without the slightest interference. I consider EAQ and HJ4ABE about the best of my catches."

Bill Bundlie, 614 N. 6th St., Grand Forks, N. D., reports good reception of the portable station W10XFN, located in the Stratosphere Bowl near Rapid City, S. D. "These summer days I pick up W8XK, CJRO, and all the other N. American stations easily. My set is a 3-tube home-made all-electric receiver."

"I have been DXing for about five months now on my new National FBX-A-7 and would appreciate hearing from other users of this type receiver," requests Thaddeus Grabek, 1921 Welch Ave.. Niagara Falls, N. Y.

A Summary of Results

"On the s.w. my verifications number 104," summarizes Carl Forestieri, 2272 Bathgate Ave. New Ycrk, N. Y. "These veries represent 27 countries on 5 continents, as follows: Africa, 1; Asia, 3; Australia, 3; Europe, 33; South America, 29; Central America and West Indies.

(Continued on page 21)

In Spite of Summer's Static

• • • Reports from Our Readers

ITH the thermometer playing tag in the nineties and ball games from Chicago and Detroit lost in a maze of static, it is rather difficult to think about DX, much less brave a session with the earphones. Maybe in a month or two, but not now!

Yet S. R. Lewis, Rt. No. 3, Box 660, Toledo, Ohio, seems to have jumped the gun on the new season—and gotten away with it. "One night last week," he writes, "I couldn't sleep and went downstairs to twiddle a dial or two. By golly, if I didn't go and get me a couple of new ones—WPAR and KRNT. And then, the other night, doggone if I didn't snag another new one—WMFO, Decatur, Ala.—which I should have saved for next fall.

"With a belated veri from XEE standing out, my total is well over the 950 mark and I see 1000 in the I still have some twenty foreign stations out for verification. Some are very delinquent, but at least ten should verify some day and I still have hopes. My oldest offenders are OAX and KZRM, whom I heard in 1932. Among the South Americans, LS5, LR4 and LR8 are 'on the cuff' for not verifying. One German, one Spaniard one Italian are overdue in Europe. the Italian comes through okay, I'll have that country completely verified. Guess that's one for the books.

"No really startling catches are in my batch of veries. I suppose EAJ41 is the best, with TIC and LV1 coming close. There are no Aussies of less than 500 watts power, although some lucky birds report 50-watters. Still and all, I often sit back and marvel at what can be accomplished with a decent radio, good aerials and

grounds, and the old perseverance at the job."

Eric Butcher, Cokeville, Wyo., ran into difficulties when he moved to a new location. "At the present time." he bemoans. "I am in the shadow of a semi-circular hill some 600 feet high. The hill has a phosphate mine and, while I don't know how the mineral affects reception, something is surely playing tricks. Recently. I brought two sets up for experiment. Before leaving town, we tuned in eight stations: when we got up here. the only one we could hear was KSL. 300 miles away. KSEI, less than 200 miles distant, could not be heard at all. Guess I'll have to move. would be especially glad to hear from BCB and SW foreign DX hounds in Wyoming, Nebraska, Colorado, Montana and the Dakotas. I have some news which may be of interest to them."

About Interference

"There are tenants in our building," protests William J. Wood, 817½ Lake St., Oak Park, Ill., "who enjoy running battery chargers at night. And, boy, does that spoil DXing! Isn't there some way to minimize this uncanny racket? Whoever runs these noise-makers at night should have his name published on a 'black list'."

However, just to show can be done under decidedly adverse conditions, let's listen to Charles 2214 Herman Hesterman. Saskatoon, Sask. He writes: personally am cursed with endless interference caused by a high frequency rectifier, a multiple telegraph printer, a telegraph system and a variety of compressors-all located in the CNR yards which are less than five blocks from my home.

fortunately, this noise continues day and night, seven days a week, with absolutely no let-up. Even so, I have managed to verify the following stations since October 1, 1934: JOAK-Q, JOAK-2, JOCK-1, JOCK-2, JOFK, JOGK, JOIK, JOJK, JOLK, JONK, JOOK, JOPK, JOQK, JOAG, JOCG, JODG, JOFG, JQAK, JOXK, 2BL, 2CO, 2FC, 2GB, 2HD, 2KO, 2SM, 2UE, 2UW, 2WL, 3AR, 3DB, 3HA, 3KZ, 3LO, 3TR, 3UZ, 4BC, 4BH, 4QG, 4RK, 4RO, 5CK, 5CL, 7UV, 7ZL, TGW, HHK, LR5, CPX, 1YA, 2YA, 3YA, OKB, OKP, HAL, YLZ, Cologne, Leipzig, Stuttgart. Fecamp. Monte Ceneri, Vienna. Bucharest, Budapest. SBA an d Verifications from all these stations have been passed by the I.D.A. contest examiners.

"Incidentally, as Praha also transmits on short waves, I asked them if this particular program had been broadcast by their high frequency transmitter as well. They answered very promptly and stated definitely that the program which I reported had been transmitted only by their medium-wave station. This point was introduced as one of the rules in the I.D.A. contest and serves as additional proof that a station has been heard only on the broadcast band."

"Down here in South Africa," reports A. C. Lyell, P. O. Box 4536, Johannesburg, "not a single U.S.A. station has been heard, even though the peak season has been at hand for some time past. I suppose this is due in part to the unsettled and stormy weather, not to mention the phenomenal dust storms.

"The Argentine stations continue to come in throughout the early morning hours, although quite a few of the medium-power transmitters have not been heard at all. Even the European BC stations have been erratic and, with the exception of Rome, which has been heard fairly regularly, only the more powerful ones have been picked up—and then only at about R3-4."



Here we have the antenna system of d'Union Radio, Madrid, Spain, together with a glimpse of the Spanish capital city.

The Moon Again

"Just out of curiosity," recalls A. V. Deterly, 125 East Blvd., Baton Rouge, La., "I have kept a record of reception conditions at different times of the month. After four months of observations, I found that reception was very good during the first and third quarters of the moon, fair during the second quarter and very poor during the fourth quarter."

"Though I have had my 7-tube Stromberg-Carlson table model just three weeks," preambles Evan S. Morrow, 2161 Ashland Ave., Detroit, Mich., "my log now totals 113 stations, ranging from KPO to WEAF. My best so far is WSAR, Fall River, The other night, I heard an-Mass. nouncements from KSTP, WJSV, WSAR and WSAN within thirty seconds. An amazing thing is that I have difficulty in getting stations around 1270 to 1290 keys, due to the volume of WCAM, Camden, N. J., while it is absolutely impossible to get WGN, Chicago, on some evenings."

"DXing in Texas is not as good as some places because of the short season," points out Bireley Ross, 2426 Alco, Dallas Texas. "However, despite the fact that we don't have much cold weather for DX, I have tuned in 1YA, 2BL, 4QG, 3YA, LR5, 5AD, YV1RC, TGW, 7ZL, XGOA, JOAK-1, JOCK-1, JOIK, JOHK, JOBK-2, JOJK, JOXK, 5CK, 2CO,

3LO, HHK and, of course, the Canadians, Cubans and Mexicans. I saw my first RADEX last November and, with its help, increased my log by 350 stations. The total is now 705, all verified. With the help of the DX LOG, I tuned in my first foreign station. I am a shut-in and my pastime is radio, so you can imagine my thrill at hearing my first TP."

More About Veries

"Since the publication of a letter from one of our members in the May, RADEX," preludes Harold J. Clark, Acting Secretary of the Plainfields' DX Club, 431 Watchung Ave., North Plainfield, N. J., "there has been considerable misunderstanding as to just what a verification really is. The dictionary states one single word: proof. In DXing, proof of reception of a radio station's program at a definite hour and day.

"Stations verify in many ways:
(a) a positive verification giving the listener's time of reception; (b) a standard form letter which thanks the listener for the report. This last mentioned letter cannot be obtained unless a definite, accurate report has been given. In other words, just try to get this 'thank you' unless your report coincides with the station's log.

"Our club has gone on record as acknowledging this type of 'thank you' letter to be the only exception in verification contests."

Just how such a thank-you letter can constitute proof of reception is difficult to understand. And, as for such letters being sent out only when an accurate report has been submitted. Lorenzo Riggins, Jr., Stephenville. Texas, has a very timely reply. "In the spring of 1934," he recalls, "I wrote JOHK, inquiring if and when they announced in English, so that I might verify them. I gave no report whatsoever except to say that I had been hearing what I thought station in the early was their morning.

"Later, I received a card which read: 'Dear Sir: We thank you heartily for your earnest report. We are glad to know what part our programs are playing for the mutual friendship. We here wish you every happiness and your profounder investigations than ever. Yours truly, Sendai Broadcasting Station."

"Last March, I wrote to XEW, requesting addresses of tourist bureaus in Mexico, adding that I often listened to their station and enjoyed their music. In a few days, I received a card as follows: 'We appreciate and thank you for your report dated March 7, 1935, and hope our concerts continue to be interesting to you. Come to Mexico, The Land of Eternal Spring. Cordially yours. XEW, The Voice of Latin America from Mexico.'"

"With reference to the discussion on verifications in the May issue of RADEX," avers William H. Ansell, 168 Wascana St., North, Regina, Sask. "I want to endorse your stand on the card sent out by XEWZ. Under no circumstances can this be termed a verie. The working—'We thank you for your report in which you tell us you heard our transmission'—condemns it as an official confirmation. It is just a thank-you card—no more, no less.

"They mentioned no date, they didn't state whether the report was correct or not and, finally, the report is not verified. These are the three things which a contest judge looks for before passing a verie in a DX contest. Even though the station may have intended this as a confirmation, it certainly cannot be classed as such.

"Here is an example of what I call a first-class verie: 'We were delighted to receive your letter of 23/1/25 reporting reception of our transmission of that date. Upon checking our log, we find your report is correct and we have much pleasure in verifying same.'

"There is absolutely no comparison between the two and I think all DXers will agree with me. Of course, not all veries are first-class, but they should state that a report on a transmission of a certain date is correct, verified, or words to that effect."

There seems to be little doubt as to what constitutes a verification. A majority of DXers agree that it affords proof of reception of some station and, as such, it is a welcome addition to any log. There are, naturally, many ways in which such proof may be given. A station may "confirm" or "verify" a report, or it may say that a report is "correct" or "checks with our log."

Unfortunately, many stations do not realize just what a DXer wants and their replies are sometimes most unsatisfactory. In such cases, it might be well to send the station a second report and enclose a return card on which a verification form has been written. This might read: "This will verify your reception of CKMC, Cobalt, Ont., at 2:43 AM, EST, on October 1, 1934. Signed. L. MacAdam, Owner," space for the signature being left vacant.) As a matter of fact, many DXers use this form or return card exclusively and, while their collection of station letterheads may not be very large, they usually have less grief getting replies of the right type.

Why He Doesn't Verify

Speaking of CKMC, an interesting item about this elusive station appeared in the CDXR bulletin of May 8th. Mahlon Moore, Kirkland Lake. Ont., reported: "I'n regard CKMC, under no circumstances will the owner reply to any letter about his station. His reasons for this policy are quite in form under the circumstances. CKMC was a purely amateur station which he built for his own pleasure. However, on the completion of the station, the town of Cobalt requested that he give pro-

grams Sunday afternoons. At the time, short wave receivers were not as common as today and, of course, broadcast band reception during the day was impossible. The owner consented to this request on the condition that the town would help him in covering his operating expenses. With this idea in view, he spent in the neighborhood of \$5000.00 building the 'shack' and transmitter. town gave him no help. After he had been on the air three times a week for a year, he asked the Town Council for help on his expenses, Thev 'raised cain' because he solicited funds for his personal use over his own radio station. He is by no means a wealthy person and \$5000 was very nearly all he had at the time, so he now maintains the station on the condition that he use it only for his personal enjoyment."

"Recently I received a QSL card from JOBK," advises Eric Butcher, Cokeville, Wyo., "with the name of Carl Bryan on it. It is possible that he has mine by mistake and I'd like to swap with him. Anyhow, I'm sure he'd like to have his and I'll send it to him if he lets me know his address.

Steady Reception of Aussies

"Looking back on last season," recapitulates Raymond C. Corbett, 619 Twelfth St., Sacramento, Cal., "I find that I had a few good catches and brought my log up to 477 stations. The year was a very erratic one, with only a few good nights for DX. However, during nights, I was able to hear WAGF, KQV, KLUF, WBIG, WKBV, WHEC, WJMS and CKBI. During March and the first of April, I enjoyed very steady reception from 1YA, 2YA and 3YA. Many of the Australian stations also were heard with great volume, but no consistency. This was the poorest season I have ever experienced for Japanese stations, as even some of the old stand-bys failed to come in.

A very creditable record is reported by George E. Bott, Hastings, New Zealand, who has just passed the two-hundred mark in verifications. He writes: "Reception has been very bad here for the past two weeks, with heavy static every night. However, I have been able to get reports off to CMQ, XELO, XHHG, XQHA, WOR, KGMB, and 2KO. Recent veries include KFBK, WIBW, CKAC, WCAE, WJR, 4AY, 5DN, 5KA and 2GF."

"I have a Silver Masterpiece III," boasts K. Albrecht, 241 Palm St., Hartford, Conn., "and think it the best on the market. I have had it six months and have logged 450 stations, of which 269 are verified. With the exception of LS2, I haven't had any luck with the foreigners. Next season, I hope to verify at least two Europeans and possibly even one T. P. I am 13 years of age and would like to correspond with any boys of my own age who are interested in foreign broadcast reception."

Henry J. Green, Jr., 3424 67th St., Chicago, Ill., is a new convert to the Loyal Order of Midnight Marauders. DXing only since March, he submits a log which covers most of the better-known short-wave stations in the world. "I don't know if you can call this a good log for a beginner or not," he apologizes. "I haven't done much DX on the broadcast band so far, logging only 190 in four months, but I intend to go after it in a big way next season. I wonder if anyone could give me information on how to get stations in Asia and Africa."

SILENT DX'ER

Donald Weber, Secretary of the Plainfields' DX Club, drowned when a boat capsized during a Sea Scout cruise. To his family, RADEX extends its deepest sympathy.

"There are many queer things about radio," observes Clifford Drain, 617 Camden St., Parkersburg, W. Va. "For instance, while I have heard Frankfurt, Germany, about a dozen times and very well on some occasions, the more powerful stations were much harder to tune. I have heard Radio Normandie, 1456 kcys, (now 1113 kcys) as late as 3:50 A.M., E.S.T., and I am sure that it is broad daylight in France at that time. Trieste, Italy, (10 KW) has been heard on a few occasions and seemed to be as loud as the 50-KW Milan station. I can't explain it at all."

On Getting Veries

"As I am a lover of classical music," remarks Charles G. Patterson. Russellville, Tenn., "one of my chief thrills in listening to foreign stations is to recognize some favorite musical composition. Merely by mentioning that I heard a famous march at such a time on a certain date, I got my first verification from the old 2YA on 720. This is certainly the most simple way to get a verification, for it is far easier to hear and maybe identify a few bars of music than to attempt to copy down pages of talks, announcements and the like."

In this connection, if memory serves us right, the CDXR started a plan whereby stations would use only easily-recognized selections on DX specials. The members voted on the tunes with which they were familiar and the list was sent to stations DXing for the club. This was a meritorious idea, for just a few bars heard above a high noise level can mean the difference between a satisfactory verification and a wasted night at the dials.

"I am starting off the new season with a new radio," boasts Julian Schaefer, 2036 W. 83rd St., Cleveland, Ohio. "I have logged 620 different active stations on the BCB and have received 260 verifications

since January. My best catches are 2BL, 4QG, 1YA, KGU, KWG, KPJM, KERN, KXO and KGCX. I would like a correspondent in Canada."

"I am considering the purchase of a new receiver this fall," admits Stanley Brus, 1441 Bell Ave., North Braddock, Pa., "and would appreciate letters from DX fans using receivers such as the Skyrider, Patterson or other models in that class.

A Novel Aerial

"The only antenna of its type in this country has just been completed for WRVA," contributes E. H. Morris, 3219 Garland Ave., Richmond, Va. "There is a wooden tower of triangular shape, painted white and orange. Atop this tower is a large telephone pole some 80 feet high, making a total height of 320 feet. On the top of the pole is a large circular aluminum plate, resembling a man-hole cover. On this disk are two electric lights. Now, the strange part of the aerial is this: the current for these bulbs is sent up through an ordinary double wire, strung in the center of the mast. Around this conductor is entwined a mesh of twenty fine copper wires. This mesh is the aerial itself. Germany is the only other country to have an antenna of this design and a German engineer came over to supervise the erection of this one."

"The Cleveland Chapter of the CDXR was formed last winter and now has ten active members," supplies George R. Schneider, Chapter President, 1625 Lee Road, Cleveland Heights, Ohio. "Regular meetings are held every other Saturday evening from September to June. The first meeting in the new DX season will be held at 7:30 P.M. on September 7th."

About the Clubs

"The Universal DX Club had its beginning in September, 1933," recalls Corresponding Secretary Elbert M. Hoppenstedt, 345 Maple Ave., Oradell, N. J. "During our two years of existence, we have grown steadily and our second year was, if possible, more successful than the first. Our monthly bulletin is divided into definite departments, which are devoted to news about the members, club activities, F. C. C. data. etc. The short wave department, edited last year by Harry Hozey, is now being conducted by Elmer Mercer. The membership feet of a dollar a year includes the regular monthly bulletin as well as a tip sheet issued on the fifteenth of each month."

"The United States Radio DX Club," writes Frank Wheeler, Erie, Pa., was founded as a local organization under the name of the Shrewsbury Radio Club. However, when the club began to spread over the United States, the present and more suitable name was adopted. Membership in the club is entirely free. During the DX season, we publish a six-page paper which contains a short wave page, list of specials, Singleton-Eliminator contest, latest F. C. C. news, letters from members, etc. Subscription to the paper is a dollar a year. Information about the club and a sample copy of the bulletin will be sent to those writing the Secretary-Treasurer, Howard Morse, 7 Water St., Shrewsbury, Mass."

"I have been reading RADEX for



The Crosley Radio Corp. now possesses not only the world's most powerful broadcasting station—WLW with its 500,000 watts power—but the world's tiniest. WEE, with but .004 watts—less current than is used by an automabile tail-light. WEE has a range of 200 feet. Its towers are 24 inches high. WEE is a complete broadcasting station with studios, microphomes 'n' overything.

over a year," greets George W. Haylock, 115 Grange Park Road, London E. 10, England, "so I take this opportunity to send my first report. My BCB log consists of 36 stations, all over 2000 miles distant. Of these, twenty-four are verified. The past season has not been so good and, at times, it was quite a task to pull in stations such as WTIC. In a month, I have logged well over 100 amateur on 20 meters. I have heard all of the W districts except 6 and 7, the first three VE's, one VO, two Cubans and one Costa Rican."

"Recently, I verified KLUF, 100 watts, and WMC," announces Allan Ford, Portneuf Station, Quebec. "The latter sent me \$2.50 as a prize to the most distant listener to their DX on March 3rd. I also closed the season with a very fine diploma from LR5. What do you think of that for DX on one tube?"

During the past year or two, many DXers have turned for diversion from multi-tube receivers to the one- and two-tube regenerative circuits so popular in the early days of radio. As pointed out by Mr. Ford, some rather remarkable reception has been possible, although one can well imagine the variety of squeals and howls these "bloopers" create for other DXers. For this reason, this type of DXing has been frowned upon by many listeners.

However, as long as we have reverted to early tube circuits, why not go a step farther and see what can be done with a crystal set? World Radio, official organ of the British Broadcasting Corp., recently published a number of interesting reports on reception with the humble crystal set — some listeners going so far as to claim trans-Atlantic reception.

While we realize protests will follow any remarkable claims, we might inaugurate the "Grain of Salt" or the "Tongue in our Cheek" department and see what can be heard. If sufficient interest is shown, we might be able to persuade Mr. Dashiell to give us a few circuits using the crystal detector. Anyhow, it might be rather interesting, although Heaven help the chap who logs a 50-watt Aussie and dares to report it.

Concerning Verifications

COPY of the Midsummer RA-DEX was sent to London and the article "Verifications in the Shortwave Field" was brought to the attention of the British Broadcasting Corporation. We are pleased to include herewith, in its entirety, their reply.

"With regard to the questions of verifications of reception, we would point out that the reasons why we do not give specific verifications have been set forth a number of times and are mainly as stated in your ar-We would add, ticle in RADEX. however, that even when technical details or particulars of programs which have not been published are given, it would only be possible to check those items against the programs as transmited, but to do this would involve an enormous amount of work and would serve no useful purpose as far as the Empire Serv-The information ice is concerned. contained in the advance programs which are published, in addition to call-signs and announcements the which are radiated, is, of course, quite sufficient to enable listeners to determine which of the Empire transmissions are being received.

We are nevertheless always glad to receive reports on the reception of our transmissions, as these are of material assistance to us in the development of our shortwave service and are, therefore, to the ultimate benefit of listeners themselves."

The EDITORIAL Microphone

FTER eleven years in Cleveland, RADEX is this month changing its address to Conneaut, Ohio. Conneaut is a beautiful little city not far from Cleveland where, we are sure, we of the editorial staff will find life much more enjoyable than in a large city. There is no change in this magazine other than that of location. The same staff that has served you so long will continue to do so from the new headquarters. Please remember, therefore,, to address us at Conneaut, Ohio, in future, instead of at Cleveland.

When you write to us, it would help us greatly if you would put matters pertaining to the broadcast band, to the short waves and to technical problems on separate pieces of paper. It will materially hasten replies to your inquiries if you will do this as part of this material goes to Mr. Dashiell and part to Mr. Taylor.

Our New Size

With this issue of RADEX, we merge the DX Log of the World. This magazine will now cover the entire field-long waves, medium waves and short waves. We are increasing our size by sixteen more pages, making a total of 116 pages as against the 48 of a few years ago! The indices covering the short waves will appear in every other issue, alternating with the data concerning the long waves and the foreign broadcast stations. The usual indices covering the broadcast stations of North America will appear, as in the past, in each issue of RADEX.

The North American Index by Frequencies appears this month again in condensed form. Questionnaires are now going out to the stations in these lists for their time on the air and other information. This material will appear in the October issue. These

three indices give about all the information that is possible regarding each station. We are anxious to make the indices to the short-wave and foreign broadcast stations just as informative. Readers will help both us and themselves by giving us such data as may come to their attention regarding the stations in these lists.

Our Referenda

The vote which was taken some time ago in regard to the desirability of more educational features such as lectures and operas, was unfortunately inconclusive as indicating any major trend. Those voting regarding more operas were. Yes 2051, No 857. Those voting on more lectures were: Yes 1253, No 1358.

The requests for preferences of our readers published in the last two issues of this magazine, indicated a desire for material in the following order:

Letters about DX
Articles on Aerials, etc.
Radio problems
Stories of new devices
Photos of Stations, etc.
Descriptions of New Sets

It is evident that our stories about the radio stars and even their pictures are of minor interest at least to those who were kind enough to return the coupons. This being the case, we will endeavor to stress those matters which pertain to the use and improvement of radio reception, and leave the stars to their fate in the magazines published entirely in their interest.

When is One O'Clock

Just one reader, so far, has objected to our use of the 24-hour clock in giving time on the air. We feel certain that the method we are now using will become almost universal in a few years and we bespeak our readers' patience in learning to use

it. There is neither sense nor reason in splitting the days at noon and numbering anew. One o'clock in the afternoon is the thirteenth hour of the day and we might as well become accustomed to thinking of it as such. The main advantages of the 24-hour system so far as we are concerned are its simplicity, its lack of confusion and its saving of space. How much simpler it is to write 1145-2230 than "11:45 a. m. to 10:30 p. m." When this saving of space is multiplied a thousand times, it gives us pages to devote to other matters. We wish stations would adopt the radio former method. When they report a DX program Friday at 12:15 a, m. sometimes they mean Friday morning and sometimes Friday night. There can be no mistaking "Friday 0015."

The New Zealand DX magazine, "Tune In" has resumed publication after a period of incorporation with the N. S. Radio News. This little publication is crammed full of DX news and gossip of the Antipodes. The subscription price is 9d a copy or 8/a year. Their address is P. O. Box 706, Dunedin, N. Z.

After many years with the NBC, Station WJR of Detroit will become, on September 29, a principal outlet of the CBS, replacing CKLW as the Voice of Columbia in the Detroit area.

After many false reports of a change in frequencies by WIS, Columbia, S. C., and WNOX, Knoxville, Tenn., we are advised that this "swap" will actually take place in September. WNOX will go from 560 to 1010 and WIS from 1010 to 560. We have made this change several times upon what seemed authentic information. We hope that this time it will go through.

A few changes in Mexican stations come to our attention too late to incorporate in this month's indices. They will appear in October.

The New Season

(Continued from page 4)

stations heard most frequently in this country.

Incidentally, our old stand-by Poste Parisien will probably be missing from our logs this winter. Since Dcctor Brinkley took over XEAW, on 960 kcys, it is likely that his allnight programs will kill all chances of hearing the Frenchman.

The DXers who have braved sum. mer static are reporting reception of many of the new stations licensed by the F.C.C. during the spring and Most of these staearly summer. tions are now operating on regular such New calls schedules. KAST. KRLC. WLEU. WMFF. KIUL. WTMV. KINY. KHSL. WMFO. WMFN, KPLC. WMFD. WPAY. WNBC. WMFJ. WAIM. WCMI and others will be heard during the first seven days of each month during frequency checks.

Short Wave Gossip

(Continued from page 15)

13; North America, 22. Many shortwavers say that S. Americans verify only once in a while, but I seem to have fared quite well. So far the Peruvian stations (5) have ignored my reports, and CEC in Chile. But I had good luck in Ecuador, 4 QSL's out of 6 trys. Colombia, 12 out of 18, and the good Venezuelans, 9 out of 9."

"I wish to report on what a 2-tube Doerle can do," says Henry Beisel, J1., 272 Washington Ave., Carteret. N J. "Among the stations heard during the spring and summer are CT1AA, KKZ, HAT4. HC2RL, HI4D. HI1A. HJ4ABD, ORK, PCJ. VK2ME, DIQ, LSY and HI'F. I would like to hear from RADEX'ers who are interested in radio networks."

WHAT'S ON THE AIR TONIGHT

Fill in calls and dial numbers for those stations through which you best receive the three chains. You can then turn quickly to the one that has the feature you want.

COLUMBIA(C		
Call	Dial	

NATIONAL	L, Red (R)
Call	Dial

NATIONAL, Blue (B)				
Call	Dial			

TIME: ED Eastern Daylight; E Eastern; C Central; M Mountain For Pacific Time subtract one hour from Mountain.

RADEX is the only publication listing stations in alphabetical order for your convenience.

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

MONDAY

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

ED-6:15 p.m., E-5:15, C-4:15, M-3:15 **Bobby Benson**

WAAB WABC WCAU WDRC WEAN WFBL WGR WHEC WOKO

ED-6:45 p.m., E-5:45, C-4:45, M-3:45 C — Concert Miniatures

CFRB CKLW KFAB KFH KGKO KLRA KLZ KMBC KRLD KRNT KSCJ KTSA KTUL KWKH WAAB WABC WBBM WBIG WBNS WBRC WBT WCAO WCCO WCOA WDAE WDBO WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WICC WISN WJSV WKRC WLAC WLBZ WMBD WMBG WOKO WORC WOWO WSJS WSMK WSPD WWVA

Lowell Thomas

CRCT KDKA WBAL WBZ WBZA WFLA WGAR WHAM WIOD WJAX WJZ WLW WMAL WRVA WSYR

ED-7:00 p.m., E-6:00, C-5:00, M-4:00 R — Amos 'n' Andy

CRCT KYW WBEN WCAE WCSH WEAF WEEL WFBR WGY WJAR WLW WRC WTAG WTIC

ED-7:15 p.m., E-6:15, C-5:15, M-4:15 C — Patti Chapin

CFRB CKLW KFAB KFH KGKO KLRA KLZ KMBC KRLD KRNT KSCJ KTSA KTUL KWKH WAAB WABC WBBM WBIG WBNS WBRC WBT WCAO WCCO WCOA WDAE WDBO WDNC WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WIIP WICC WISN WJSV WKRC WLAC WLBZ WMBD WMBG WOKO WORC WOWO WSJS WSMK WSPD WWVA

R — Uncle Ezra

KYW WBEN WCAE WCSH WDAF WEAF WEEL WFBR WGY WHO WHIO WJAR WMAQ WOW WRC WSAI WTAG WTAM

B — Tony and Gus

KDKA WBAL WBZ WBZA WCKY

WENR WEIL WELA WGAR WHAM WIOD WIS WJAN WJZ WMAL WPTF WSOC WSYR WTAR WWNC

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

CKLW KMBC KMON KOMA KRLD WABC WBBM WBT WCAO WCAU WCCO WDRC WEAN WFBL WGR WHAS WHE WJAS WJSV

B — Dangerous Paradise

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

ED-8:00 p.m., E-7:00, C-6:00, M-5:00 C — Guy Lombardo and Orchestra

KLRA KWKII WABC WBIG WBT WCAO WCAU WDBJ WDNC WDOD WORC WOSU WEAN WESG WFBL WGR WHP WIBX WICC WJAS WJSV WLAC WMAS WNAC WNOX WOKO WORC WPG WREC WSJS WWVA

- Fibber McGee and Molly

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

ED-8:30 p.m., E-7:30, C-6:30, M-5:30 C — One Night Stands

CKLW KFAB KMBC WABC WADC WBBM WBT WCAO WCAU WDRC WEAN WFBL WGR WHEC WHK WHP WICC WJAS WJSV WKRC WLBZ WMAS WMBG WNAC WOKO WORC WSPD

R — Voice of Firestone

CFCF CRCT KFYR KPRC KSD KSTP KTBS KTHS KYW WAPI WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEL WEAL WFBR WFLA WGY WHO WHIO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WLW WMAO WMC WOAL WOW WPTF WRC WRVA WSM WSMB WSOC WSB WTAG WTAM WTAR WTIC WTMJ WWJ WWYC

B — Evening in Paris

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

ED-9:00 p.m., E-8:00, C-7:00, M-6:00 - Lux Radio Theatre

CFRB CKAC CKLW KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOMA KRLD KRNT KSL KTRH KTSA KTUL KVI KWG KTRH KTSA KTUL KVI KWG WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDRC WDSU WEAN WFBL WFBM WGST WHAS WHEC WHK WICC WISN WJAS WJSV WKBW WKRC WLAC WNAC WNAX WOKO WORC WQAM WREC WSPD

A. & P. Gypsies

KSD KYW WBEN WCAE WCSH WEAF WEEL WGY WHO SLAC 27 WHIO WIRE WJAR WMAO WOW WSAI WTAG WTAM WTIC WRC WWJ

B - Sinclair Minstrels

KDKA KDYL KFYR KOA KOIL KPRC KSO KSTP KTBS KVOO KWK WBAL WBZ WBZA WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WIS WJAX WJDX WJZ WKY WLS WLW WMAL WMC WMT WOAI WPTF WREN WRVA WSB WSM WSMB WSOC WSYR WTAR WIMJ WWNC

ED-9:30 p.m., E-8:30, C-7:30, M-6:30 B — Princess Pat Players

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

ED-10:00 p.m., E-9:00, C-8:00, M-7:00 C - Wayne King's Orchestra

CKLW KOB KERN KFAB KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KRLD KSL KVI KWG WAAB WABC WADC WBBM WBNS WCAO WCAU WCCO WDRC WDSU WEAN WFBL WFBM WHAS WHE WIBW WJAS WJSV WKBW WKRC WOKO WSPD

MONDAY (Continued)

R — Contented Program

KDYL KFI KGW KHQ KOA KOMO KPO KSD KYW WBEN WCAE WCSH WDAF WEAF WEEI WFAA WFBR WGY WHO WJAR WMAQ WOW WRC WSAI WTAG WTAM WTIC WWI

ED-10:30 p.m., E-9:30, C-8:30, M-7:30 C — March of Time

CKLW KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KRLD KRNT KSL KVI KWG WABC WADC WBBM WCAO WCAU WCCO WDRC WDSU WEAN WFBL WFBM WGST WHAS WIIK WJAS WJSV WKBW WKRC WNAC WOKO WSPD

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

C — Tito Guizar, Tenor CFRB CKAC CKLW KDB KFBK KFH KGB KGKO KHJ KLRA KLZ KMBC KOH KOL KOMA KRLD KSL KTRH KTSA KVI KVOR KWG KWKH WAAB WABC WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WDAE WDBO WDNC WDOD WDRC WFBL WFBM WGR WGST WHAS WHK WHP WIBW WIBX WISN WJAS WJSV WKBN WKBW WKRC WLAC WLBZ WMBR WNOX WOKO WORC WOWO WPG WOAM WREC WSBT WSFA WSMK WSPD WTOC

ED-11:00 p.m., E-10:00, C-9:00, M-8:00 C - Abe Lyman's Orchestra

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

- Amos 'n' Andy

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

ED-11:15 p.m., E-10:15, C-9:15, M-8:15 B - Tony and Gus

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

ED-11:30 p.m., E-10:30, C-9:30, M-8:30 C - Little Jack Little

WABC WBRC WBT WCAO WCAU WCOA WDAE WDBJ WDBO WDOD WDRC WEAN WFEA WICC WJSV WLAC WLBZ WMAS WMBG WMBR WNAC WNOX WORC WREC WSFA WSJS WTOC

One Night Stands

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

R - Voice of Firestone

KDYL KFSD KGHL KGIR KGU KGW KHQ KOA KOMO KPO KTAR

TUESDAY

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

ED-6:15 p.m., E-5:15, C-4:15, M-3:15 C - Carson Robison

WAAB WABC WCAU WDRC WEAN WFBL WGR WHEC WOKO

ED-6:30 p.m., E-5:30, C-4:30, M-3:30 Russian Bear Orchestra

KLRA WABC WALA WBIG WBRC WBT WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WGST WLAC WLBZ WMAS WMBG WMBR WNOX WORC WOAM WREC WSFA WSJS

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

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

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

C — Vocals by Verrill
CFRB CKLW KGKO KHJ KLRA KMBC KMOX KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KWKH WABC WACO WADC WALA WBBM WBNS WBRC WCAO WCOA WDAE WDBO WDNC WDOD WDRC WDSU WESG WFBL WHEC WHP WIBX WISN WJSV WKRC WLAC WMBD WMBR WNOX WOC WOKO WOWO WOAM WSBT WSFA WSJS WSMK WSPD

B --- Tony and Gus, See Monday

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

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

C - Frank Munn; Bernice Claire CKLW KFAB KMBC KMOX KRNT WABC WADC WBBM WCAO WCAU WDRC WEAN WFBL WFBM WGR WHAS WHK WJAS WJSV WKRC WNAC WOKO WSPD

R - Leo Reisman's Orchestra KSD KYW WBEN WCAE WCSH WDAF WEAF WEEI WFBR WFLA WGY WHO WIOD WIS WJAR WJAX WMAQ WOW WPTF WRC WSOC WTAG WTAM WTAR WTIC WWJ

- Eno Crime Clues

KDKA KOIL KSO WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLW WMAL WMT WREN WIS WSVR

ED-8:30 p.m., E-7:30, C-6:30, M-5:30 R — Wayne King and Orchestra

KFYR KPRC KSD KSTP KTBS KVOO KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEEL WFAA WGY WHO WIBA WIRE WJAR WJDX WKY WMAQ WMC WOAI WOW WRC WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ

Edgar Guest in Welcome Valley KDKA KOIL KSO KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLS WLW WMAL WMT WREN

ED-9:00 p.m., E-8:00, C-7:00, M-6:00 C - Lud Gluskin and Orchestra

CKLW KDB KERN KFAB KFBK KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KRLD KSCJ KSL KTRH KTSA KTUL KVI KWG WABC WADC WBNS WBRC WBT WCAU WCCO WDBO WDNC WDRC WDSU WEAN WFBL WFBM WHAS WHEC WHK WIBX WISN WJAS WJSV WKBW WKRC WLAC WNAC WOKO WOWO WREC WSPD

R — Ben Bernie and Orchestra

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

B -- N.T.G. and His Girls

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

ED-9:30 p.m., E-8:30, C-7:30, M-6:30 C - Fred Waring and Orchestra

CFRB CKAC CKLW KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KSCJ KŠL KTSA KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WEAN WFBL WFBM WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJSV WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBR WNAC WNAX WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

Eddie Duchin and Orchestra

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

ED-10:30 p.m., E-9:30, C-8:30, M-7:30 C -- March of Time, See Monday

ED-11:00 p.m., E-10:00, C-9:00, M-8:00 C -- Carl Hoff's Orchestra

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

R - Amos 'n' Andy, See Monday

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

ED-11:30 p.m., E-10:30, C-9:30, M-8:30 R - Leo Reisman's Orchestra

KDYL KFI KFSD KFYR KGHL KGIR KGW KHQ KOA KOMO KPO KPRC KTAR KTBS WAPI WAVE WBAP WDAY WEBC WIBA WIRE

TUE SDAY (Continued)

WJDX WKY WMC WOAI WSB WSM

WEDNESDAY

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

ED-6:15 p.m., E-5:15, C-4:15, M-3:15 C — Bobby Bensen, See Monday

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

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

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

R — Uncle Ezra, See Monday

B — Tony and Gus, See Monday

ED-7:30 p.m., E-6:30, C-5:30, M-4:30 C — Jan Savitt's Orchestra WABC WALA WBRC WBT WCAC

WABC WALA WBRC WBT WCAO WCAU WDAE WDBJ WDBO WDNC WDAE WAST WJSV WLAC WMBG WNAC WNOX WQAM WREC WSJS WTOC

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

B - Dangerous Paradise, See Monday

ED-8:00 p.m., E-7:00, C-6:00, M-5:00 C — Johnnie and Foursome

CKLW KFAB KMBC KMOX KRNT WABC WADC WBBM WCAO WCAU WCOO WDRC WEAN WFBL WFBM WGR WHAS WHEC WHK WJAS WJSV WKRC WLBZ WNAC WOKO WSPD

R — One Man's Family

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

ED-8:15 p.m., E-7:15, C-6:15, M-5:15

C — Emery Deutsch's Orchestra CKLW KDB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KMOK KOL KRLD KRNT KSCJ KTHK KTSA KTUL KVOR KWG KWKH WABC WACO WADC WALA WBBM WBT WCAU WCOA WDAC WLAC WEAN WESG WFBL WFBM WGR WCST WHAS WHK WIBX WISN WJAS WJSV WKBN WKRC WLAC WASWAG WOOK WOKO WOWO WQAM WREC WSJS WSMK WSPD WTOC WWA

ED-8:30 p.m., E-7:30, C-6:30, M-5:30 B — House of Glass; Drama

KDKA KOIL KSO KWK WBAL WBZ WBZA WFIL WFLA WGAR WHAM WIOD WIS WJAX WJZ WLS WLW WMAL WMT WPTF WREN WSOC WSYR WTAR WWNC

ED-8:30 p.m., E-7:30, C-6:30, M-5:30 C — Broadway Varietles

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

R — Wayne King, See Tuesday

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

C - Six Gun Justice

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

R — Town Hall Tonight

KSD KYW WBEN WCAE WCSH WDAF WEAF WEEL WFBR WGY WHO WJAR WLW WMAQ WOW WRC WTAG WTAM WTIC WUJ

B — John Charles Thomas

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

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

C — Presenting Mark Warnow
CFRB CKAC CKLW KDB KERN
KFBK KFPY KFRC KGKO KIJ
KURA KLZ KMBC KMJ KOIN KOL
KSI, KTUL KVI KWG WAAB WABC
WADC WALA WBIG WBNS WBRC
WADC WALA WBIG WBNS WBRC
WBT WCAO WCOA WDAE WDBJ
WDBO WDNC WDOD WDRC WDSU
WFBL WFBM WFEA WGST WHAS
WHEC WHP WIBX WICC WJAS
WJSV WKBW WKRC WLAC WLBZ
WMAS WMBG WMBR WNOX WOKO
WORC WOWO WPG WQAM WREC
WSBT WSFA WSJS WSPD WTOC

ED-10:00 p.m., E-9:00, C-8:00, M-7:00 C — Burns and Allen

CKLW KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMON KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KVI KWG WABC WADC WBBM WBIG WBT WCAO WCAU WBDJ WDRJ WCAO WCAU WFBM WHEC WHK WJAS WJSV WKBW WKRC WNAC WOKO WORC WSPD

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

KDYL KFI KGW KHQ KOA KOMO KPO KPRC KSD KTBS KTHS KVOO KYW WAVE WBEN WCAE WCSH WDAF WEAF WEET WHAA WFBR WGY WHO WING WIAW WMAQ WKY WOAL WOW WRC WSB WSM WSMB WTAG WTAM WTIC WWJ

C - March of Time, See Monday

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

ED-11:15 p.m., E-10:15, C-9:15, M-8:15
C—Claude Hopkins' Orchestra
CFRB CKAC KDB KFAB KFIB
KFPY KFRC KGB KGKO KILJ
KLRA KLZ KMBC KOH KOL
KOMA KRLD KRNT KSCJ KTRH
KTSA KTUL KVI KVOR KWKH
WAAB WABC WACO WADC WALA
WBBM WBIG WBNS WBRC WBT
WCAO WCCO WCOA WDAE WDBJ
WDBO WDNC W DOD WDRC WFBL
WFBM WFEA WGR WGST WHAS
WHEC WHR WHP WIBW WIBN
WICC WISN WJAS WJSV WKRC
WLAC WLBZ WMAS WMBD WMBG
MBR WNOX WOC WOKO WORC
WOWO WPG WQAM WREC WSBT
WSFA WSJS WSMK WSPD WTOC

B — Tony and Gus, See Monday

ED-11:30 p.m., E-10:30, C-9:30, M-8:30 B — House of Glass; Drama

KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KTBS WAPI WAVE WDAY WFAA WIBA WIRE WJDX WKY WMC WOAI WSB WSM WSMB WTMJ

THURSDAY

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

ED-6:15 p.m., E-5:15, C-4:15, M-3:15 C — Carson Robison, See Tuesday

ED-6:30 p.m., E-5:30, C-4:30, M-3:30 C Russian Bear Orchestra

KLRA WAAB WABC WALA WBIG WBRC WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WGST WLAG WLBZ WMAS WMBG WMBR WORC WQAM WREC WSFA WSJS WTOC

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

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

ED-7:15 p.m., E-6:15, C-5:15, M-4:15 C — Buddy Clark, Singer

CFRB CKLW KFAB KFH KGB
KLRA KLZ KMBC KMOX KRLD
KRNT KSCJ KSL KTSA KTUL
KWG KWKH WAAB WABC WACO
WBBM WBIG WBNS WBRC WBT
WCOA WDAE WDBO WDNC WDOD
WDRC WDSU WFBL WFBM WFEA
WGR WGST WHAS WHEC WHP
WIRX WJSV WKRC WLAC WLBZ
WMRD WMBG WMBR WOKO
WORC WOWO WQAM WREC WSJS
WSMK WSPD WWYA

B - Tony and Gus, See Monday

ED-7:30 p.m., E-6:30, C-5:30, M-4:30 C — Frank Dailey and Orchestra

KLRA WAAB WABC WALA WBIG WCAO WCOA WDAE WBBJ WBBO WDNC WDOD WBSU WGST WJSV WLAC WLBZ WMBG WMBR WORC WQAM WREC WSFA WSJS WTOC

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

ED-8:00 p.m., E-7:00, C-6:00, M-5:00 C — Kate Smith Hour

CFRB CKAC CKLW KDB KFAB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH

THURSDAY (Continued)

KOL KRLD KRNT KSCJ-KTRH KTSA KVOR KWG KWKH WAAB WABC WACO WADC WALA WBIG WBNS WBRC WCAO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WEAN WIBL WIBM WEEA WGR WGST WHEC WHK WHP WIBX WICC WJAS WJSV WKBN WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WNAC WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWVA

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

ED-9:00 p.m., E-8:00, C-7:00, M-6:00 C - Manhattan Choir

CKLW KEAB KEBK KEH KGB KGKO KHJ KLRA KLZ KMBC KMOX KOL KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KVI KWG KWKH WAAB WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WFBL WFBM WFEA WGST WHAS WHEC WHK WIIP WIBW WIBX WICC WISN WJAS WJSV WKBN WKBW WKRC WLAC WLRZ WMAS WMBD WMBR WNAC WNAX WOKO WORC WOWO WQAM WREC WSFA WSJS WSMK WSPD WTOC

- Maxwell House Show Boat

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

Death Valley Days

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

WREN WSYR

ED-9:15 p.m., E-8:15, C-7:15, M-6:15 C - Charles Hanson Towne

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

ED-9:30 p.m., E-8:30, C-7:30. M-6:30 C — Marty May, Comedian

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

ED-10:00 p.m., E-9:00, C-8:00, M-7:00 C — Horace Heidt's Orchestra

CKLW KDB KERN KFAB KFBK KEH KEPY KERC KGB KIIJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KRLD KRNT KTRH KTSA KTUL KVI KWG WABC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDBO WDRC WOSH WERL WERN WGST WHAS WHK WISN WJAS WJSV WKBW WMBG WKRC WLAC WNAC WNAX WOC WOKO WQAM WREC

R — Paul Whiteman's Music Hall CFCF CRCT KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KTHS KYW WAPI WAVE WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEL WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WOAI WOW WPTF WRC WTAM WTIC WTMJ WWJ WWNC

ED-10:30 p.m., E-9:30, C-8:30, M-7:30 C - March of Time, See Monday

ED-10:45 p.m., E-9:45, C-8:45, M-7:45 Louis Prima and Orchestra

CFRB CKAC CKLW KDB KERN KFAB KFBK KFH KFTY KFRC KGB KGKO KHLI KLRA KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDOD WDRC WDSU WFBL WEBM WEEA WOST WHAS WHEC WHIK WIIP WIBW WIBX WICC WISN WJAS WJSV WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBR WNAX WNOX WOC WORD WORG WOWO WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

ED-11:00 p.m., E-10:00, C-9:00, M-8:00 Johnny Hamp and Orchestra

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

R - Amos 'n' Andy, See Monday

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

FRIDAY

ED-6:00 p.m., E-5:00, C-4:00, M-3:00 C - Intercollegiate Council

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

ED-6:15 p.m., E-5:15, C-4:15, M-3:15 **c** — Bobby Benson, See Monday

ED-6:30 p.m., E-5:30, C-4:30, M-3:30 C — Allan Leafer's Orchestra

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

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

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

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

C — Jerry Cooper, Songs CFRB CKAC CKLW KDB KERN KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH KOIN KOL KOMA KRED KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG WABC WACO WADC WALA WBIG WBNS WBRC WCAO WCCO WCOA WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WFEA WGR WGST WHEC WIIP WIBW WIBX WICC WISN WJAS WJSV WLAC WLBZ WMBD WMBG WMBR WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSFA WSJS WSPD WTOC

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

ED-7:30 p.m., E-6:30, C-5:30, M-4:30 - Bert Block's Orchestra

CFRB CKAC CKLW KDB KERN CFRIS CNAC CILLW KDB KERN KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH KOIN KOL KOMA KRLD KRYT KSCJ KSL KTRH KTSA KTUL, KVI KVOR KWG WABC WACO WADO WALA WBBM WBIG WBNS WBRO WCAO WCCO WCOA WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WFEA WGR WGST WHEC WHP WIBW WIBX WICC WISN WJAS WJSV WKRC WLAC WLBZ WMBD WMBG WMBR WNOX WOC WORO WORC WOWO WPG WOAM WREC WSFA WSJS WSPD WTOC

FRIDAY (Continued)

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

B — Dangerous Paradise, See Monday

ED-8:00 p.m., E-7:00, C-6:00, M-5:00 C — Johnny Green and Orchestra WABC WCAU WDRC WEAN WFBL WGR WHEC WICC WLBZ WMAS WNAC WOKO WORC

R — Cities Service Concert

CRCT KDYL, KOA KPRC KSD KSTP KTBS KTHS KVOO KYW WBAP WBEN WCAE WCSH WDAF WEAF WEBC WFEI WFAA WFBR WGY WHO WHIO WIOD WJAR WKY WMAQ WOAI WOW WRC WRVA WSAI WTAG WTAM WTIC WTYJJ WWJ

B—Irene Rich; Dramatic Sketch KDKA KDYL KFI KGW KHQ KOIL KOMO KPO KSO KTAR WAVE WBAL WBZ WBZA WGAR WHAM WIRE WJZ WLS WMAL WMC WMT WREN WSB WSM WSYR

ED-8:30 p.m., E-7:30, C-6:30, M-5:30 C — True Story Court

CKLW KFAB KMBC KMOX WABC WADC WBBM WBT WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGR WHAS WHK WJAS WJSV WNAC WOC WOKO WSPD

B—Ruth Etting; Red Nichols KDKA KDYL KFI KFSD KGW KHQ KOLL KOMO KPO KSO KTAR KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLS WLW WMAL WMT WREN WSYR

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

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

R—Frank Munn; Vivienne Segal KSD KYW WBEN WCAE WCSH WDAF WEAF WEEI WTBR WGY WJAR WLW WMAQ WOW WRC WTAG WTAM WWJ

B — Palmolive Beauty Box Theatre
CFCF CRCT KDKA KFYR KOIL
KPRC KSO KSTP KTBS KWK
WAPI WAVE WBAL WBZ WBZA
WCKY WDAY WEBC WENR WFAA
WFIL WFLA WGAR WHAM WIBA
WIOD WIRE WIS WJAX WJDX
KYJZ WKY WLS WMAL WMC WMT
WOAI WPTF WREN WRVA WSB
WSM WSMB WSOC WSYR WTAR
WTMJ WWNO

ED-10:00 p.m., E-9:00, C-8:00, M-7:00 C—Richard Himber and Orchestra CRLW KFAB KFH KMBC KMOX WAAB WABC WADC WBIM WBNS WBT WCAO WCAU WCCO WDRC WFBL WFBM WGST WHAS WHK WJAS WJSV WKBW WKRC WOKO WSRT WSPD

R - Compana's First Nighter

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

ED-10:30 p.m., E-9:30, C-8:30, M-7:30 C — March of Time, See Monday

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

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

ED-11:30 p.m., E-10:30, C-9:30, M-8:30 C — Luigi Romanelli's Orchestra

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

B — Palmolive Beauty Box Theatre KDYL KFI KFSD KGHL KGIR KGW KHQ KOA KOMO KPO KTAR WLW

ED-12:30a.m.,E-11:30,C-10:30,M-9:30 C—Richard Himber's Orchestra KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMJ KOIN KOL KVI KWG

SATURDAY

ED-6:00 p.m., E-5:00, C-4:00, M-3:00 C — Tito Guizar, Tenor

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

ED-6:15 p.m., E-5:15, C-4:15, M-3:15 C — Dalton Brothers Trio

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

€D-6:30 p.m., E-5:30, C-4:30, M-3:30 C — Allan Leafer's Orchestra

CFRB CKAC CKLW KDB KERN KFAB KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH KOIN KOL KOMA KRLD KSCJ KSL KTSA KTUL KVI KVOR KWG KWKH WAAB WABC WACO WADC WBBM WBIG WBNS WBRC WCAO WCAU WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WESG WFBL WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJSV WKBW WKRC WLAC WLBZ WMAS WMBG MMBR WNOX WOC WOKO WORC WOWO WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWVA

ED-7:00 p.m., E-6:00, C-5:00, M-4:00 C — Johnny Hamp's Orchestra

CFRB CKAC CKLW KDB KERN KFBK KFB KGH KKB KGK OK HJ KLRA KLZ KMBC KOH KOL KOMA KRLD KSCJ KSL KTSA KVI KVOR KWG KWKH WAAB WABC WACO WADC WBBM WBIG WBNS WBRC WBT WCAU WCOA WDAC WDAR WDAR WDAR WBS WFBL WFBM WFEA WGR WGST WHAS WHEO WHK WHP WIBW WHS WICC WISN WJAS WJSV WKRC WLAC WLBZ WMBD WMBG WMBR WNON WOC WOKO WORC WOWO WQAM WREC WSBT WSFA WSJS WSJS WSJK WSPD WTOC

ED-7:45 p.m., E-6:45, C-5:45, M-4:45 R — Briggs Sport Review

KDYL KFYR KOA KSD KSTP KYW WAPI WAVE WBEN WCAS WCSH WDAY WEAF WEBC WEEL WFBR WFLA WGY WHIO WIBA WIOD WIRE WIS WJAR WJAX WJDX WMAQ WMC WOW WPTF WRC WRVA WSAL WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WWJ WWYCE

ED-8:00 p.m., E-7:00, C-6:00, M-5:00 R — Lennie Hayton and Orchestra

KOYL KFI KESD KEYR KGIIL
KGIR KGU KGW KHQ KOA KOMO
KPO KPRC KSD KSTP KTAR
KTHS KTHS KVOO KYW WAPI
WAVE WBAP WHEN WCAE WCSH
WDAF WDAY WEAP WEBC WEEI
WFAA WFBR WFLA WGY WHO
WHO WIBA WHOD WIRE WIS
WJAR WJAX WJDX WKY WLW
WMAQ WMC WOAI WOW WPTF
WRC WRVA WSB WSM WSMB
WSOC WTAG WTAM WTAR WTIC
WTMJ WWJ WWNC

ED-9:00 p.m., E-8:00, C-7:00, M-6:00 C — Howard Barlow's Orchestra

CKAC CKLW KDB KERN KFAB KFBK KFH KGB KGKO KHJ KLRA KLZ KMBC KOH KOL KOMA KRLD KSCJ KSL KTSA KVI KVOR KWC KWKH WAAB WABC WACO WADC WHIG WBNS WBRC WBT WEAU WCOA WDAE WDDJ WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBW WIBX WIBX WICC WISN WJAS WKRC WLAC WLBZ WMBD WMBG WMBR WNOX WOC WOKO WORC WOWO WQAM WREC WSBY WSFA WSJS WSMK WSPD WTOC

R — G-Men; Drama

KDYL KFI KFSD KFYR KGHL KGIR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KYW WAPI WAVE WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFLA WGY WHO WHIO WHA WIDD WIRE WIS WJAR WJAN WJDN WKY WLW WMAQ WMC WOAI WOW WPTF WRC WRYA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMI WWJ WWNC

SATURDAY (Continued)

ED-9:30 p.m., E-8:30, C-7:30, M-6:30 C — California Melodies

CFRB CKLW KDB KFAB KFH KFRC KGKO KHJ KLRA KLZ KOH KOL KOMA KRLD KSCJ KSL KTSA KVI KVOR KWG KWKH WAAB WABC WACO WADC WBBM WBIG WBNS WBRC WCAU WCCO WCOA WDBJ WDBO WDNC WDOD WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBX WICC WISN WJSV WKRC WLAC WLBZ WMAS WMBR WNOX WOC WOKO WORC WOWO WQAM WREC WSFA WSJS WSMK WSPD WTOC

R - Al Jolson: Victor Young

KDYL KFI KFSD KFYR KGHL KGIR KGW KHQ KOA KOMO KPO KSD KSTP KTAR KYW WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFLA WGY WHO WHIO WIBA WIOD WIS WJAR WJAX WLW WMAQ WOW WPTF WRC WRVA WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

- National Barn Dance

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

ED-10:30 p.m., E-9:30, C-8:30, M-7:30 C — Jan Garber's Orchestra

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

ED-11:00 p.m., E-10:00, C-9:00, M-8:00 C — Abe Lyman and Orchestra

CKLW KDB KERN KFBK KFH KFPY KFRC KGB KGKO KLRA KLZ KMBC KMOX KOH KOIN KOL KOMA KRLD KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WBBM WBIG WBNS WBRC WBT WCAO WCAU WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WJAS WJSV WKBW WKRC WLAC WLBZ WMAS WMBR WNOX WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWVA

B - National Barn Dance

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

ED-11:30 p.m., E-10:30, C-9:30, M-8:30 C — Claude Hopkins' Orchestra

CFRB CKAC CKLW KDB KERN KFAB KFBK KFH KFPY KFRC KGKO KHJ KLRA KOH KOL KOMA KRLD KSCJ KSL KTSA KTUL KVOR KWKH WABC WACO WADC WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE

WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJSV WKBW WKRC WLAC WLBZ WMAS WMBD WNAC WNAX WNOX WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

ED-12:00p.m., E-11:00, C-10:00, M-9:00 C - Isham Jones and Orchestra

CKAC CKLW KDB KERN KFBK KFH KFPY KGB KGKO KLRA KLZ KOH KOIN KOL KOMA KRLD KSL KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WBNS WBRC WBT WCAO WCAU WCOA WDBJ WDBO WDNC WDOD WEAN WFBL WFBM WHAS WHK WHP WIBX WICC WKBW WKRC WLAC WMBR WNAC WNOX WOC WOKO WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

SUNDAY

ED-11:30 a.m., E-10:30, C-9:30, M-8:30 C — Salt Lake Tabernacle Choir CKLW KFAB KFBK KFH KGKO KLRA KLZ KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KSCJ KSL KTRH KTSA KTUL KWKH WACO WADC WALA WBIG WBNS WBRC WBT WCAO WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WESG WFBL WFEA WGST WHP WIBW WIBX WISN WJAS WJSV WKBN WLAC WLBZ WMAS WMBD WMBR WNAC WNAX WOC WOKO WORC WOWO WPG WQAM WREC WSFA WSJS WSMK WSPD WTOC

- Major Bowes' Capitol Family KDYL KFYR KOA KPRC KSTP KTBS KVOO WAPI WCAE WDAF WDAY WEAF WEBC WFAA WFBR WFLA WGY WHO WHIO WJAR WJAX WKY WMAQ WMC WOAI WRC WRVA WSAI WSMB WTAG WTAM WWNC

ED-12:30p.m.,E-11:30,C-10:30,M-9:30 C — Musical Footnotes

CFRB CKAC CKLW KDB KERN KFAB KFH KFRC KGB KGKO KHJ KLRA KLZ KMBC KOH KOIN KOMA KRNT KSCJ KTRH KTSA KTUL KVOR KWG KWKH WAAB WABC WACO WADC WALA WBNS WBRC WBT WCAU WCCO WCOA WDAE WDBO WDNC WDOD WDSU WEAN WESG WFBL WFBM WGR WGST WHAS WHP WIBW WIBX WICC WISN WJAS WJSV WKBN WLAC WLBZ WMBD WMBR WNAX WOC WOKO WORC WPG WQAM WREC WSFA WSPD WTOC

B — Radio City Music Hall CFCF CRCT KDKA KDYL KFI KFYR KGO KGW KHQ KOA KOIL

KOMO KPRC KSO KVOO WAPI WBAL WBZ WBZA WCKY WDAY WEBC WGAR WHAM WIS WJDX WJZ WKY WMAL WOAI WREN WSMB WSYR WWNC

ED-1:00p.m., E-12:00, C-11:00, M-10:00

C — Compinsky Trio CFRB CKAC CKLW KDB KFAB KFBK KFH KFPY KFRC KGKO KHJ KLRA KLZ KOH KOIN KOL KOMA KRLD KRNT KSCJ KTRH KTSA KYI KVOR KWG KWKH WDRC WDSU WEAN WESG WFBL WABC WACO WADC WALA WBIG WFBM WFEA WGR WGST WHAS

WBNS WBRC WBT WCAO WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WESG WFBL WFBM WGR WGST WHAS WHEC WHP WIBW WISN WJAS WJSV WKBN WKRC WLAC WLBZ WMBD WMBR WOC WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWVA

ED-2:00 p.m., E-1:00, C-12:00, M-11:00 C-Johnny Augustine and Orchestra CFRB CKAC CKLW KDB KERN KFAB KERK KEH KEPY KERC KGB KGKO KHJ KLRA KMBC KMOX KOH KOL, KOMA KRLD KRNT KSCJ KTRH KTSA KVI KVOR KWG KWKH WABC WADC WALA WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDOD WEAN WESG WFBL WFBM WGR WGST WHAS WHEC WHK WHP WIBW WIBX WICC WJAS WJSV WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBR WNAC WOC WOKO WORC WOWO WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWVA

ED-2:45 p.m., E-1:45, C-12:45, M-11:45 Eton Boys, Quartet

CKLW KERN KFPY KFRC KGB KGKO KIIJ KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KRNT KSCJ KSL KVI KVOR KWG WABC WACO WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDBJ WDBO WDRC WDSU WEAN WESG WFBL WFBM WGST WHAS WHEC WHK WIBW WIBX WJAS WJSV WKBN WKBW WKRC WLAC WMBG WNAC WOKO WOWO WSPD

ED-3:00 p.m., E-2:00, C-1:00, M-12:00 C-Symphonic Hour, Howard Barlow CFRB CKAC CKLW KERN KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KMOX KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KVOR KWG KWKH WABC WACO WADO WALA WBBM WBNS WBRC WBT WCAO WCCO WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WEAN WESG WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WKBN WKBW WKRC WLAC WLBZ WMAS WMBG WMBD WMBR WNOX WOC WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

ED-3:30 p.m., E-2:30, C-1:30, M-12:30 R - Penthouse Serenade

KSD KYW WBEN WCAE WCSH WDAF WEAF WEEL WEBR WGY WHO WHIO WJAR WMAQ WOW WRC WSAI WTAG WTAM WTIC

ED-4:00 p.m., E-3:00, C-2:00, M-1:00 C — St. Louis Parade

CFRB CKAC CKLW KDB KERN KFBK KFH KFPY KGB KGKO KHJ KLRA KLZ KMRC KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KVOR KWG KWKH WAAB WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCCO WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WEAN WESG WFBL

SUNDAY (Continued)

WHEC WHK WHP WIBW WIBX WICC WISN WJAS WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WNOX WOC WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

ED-5:00 p.m., E-4:00, C-3:00, M-2:00 C — Abe Lyman's Orchestra

CFRB CKLW KFAB KMBC KMOX KRNT WAAB WABC WADC WBBM WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGR WHAS WHEC WHK WJAS WJSV WKRC WOKO WSPD

R — Rhythm Symphony

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

B — Roses and Drums

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

ED-5:30 p.m., E-4:30, C-3:30, M-2:30 C-Frank Crummit-Julia Sanderson CKLW KFH KMBC KMOX KOMA KTUL WAAB WABC WADC WBNS WCAO WCAU WDRC WDSU WEAN WFBL WFBM WGR WHAS WHEC WHK WIBX WICC WJSV WMAS WOKO WORC WSPD WWVA

P -- Dream Drama

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

B — Bob Becker's Dog Chats

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

ED-6:00 p.m., E-5:00, C-4:00, M-3:00 C — National Amateur Night CFRB CKLW KERN KFAB KFBK

KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KRLD KSL KVI KWG WAAB WABC WBBM WBNS WBT WCAO WCAU WCCO WDRC WDSU WFBL WFBM WGST WHAS WHEC WHK WJAS WJSV WKBW WKRC WOKO WOWO WREC

ED-6:30 p.m., E-5:30, C-4:30, M-3:30 C — Smiling Ed McConnell

CKLW KMOX WAAB WABC WBBM WCAU WCCO WDRC WEAN WFBL WHAS WJAS WJSV WKBW WKRC

B -- Compana's Grand Hotel

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

ED-7:00 p.m., E-6:00, C-5:00, M-4:00 C - Vivian Della Chiesa, Soprano

CFRB CKLW KDB KFAB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WEAN WESG WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJSV WKBN WKRC WLAC WLBZ WMAS WMBD WMBR WNAC WNAX WNOX WOC WOKO WORC WOWO WPG WOAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWVA

B - Lanny Ross' State Fair

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

ED-7:30 p.m., E-6:30, C-5:30, M-4:30 C - Joseph Gallichio's Orchestra

CFRB CKLW KDB KFAB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WEAN WESG WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBW WIBX WICC WJAS WJSV WKBN WKRC WLAC WLBZ WMAS WMBD WMBR WNAC WNAX WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWVA

R — Fireside Recitals KSD KYW WBEN WCAE WCSH WDAF WEAF WFBR WGY WHIO WIRE WJAR WMAQ WOW WRC WSAI WTAG WTAM WTIC WWJ

Sidewalk Interviews

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

ED-7:45 p.m., E-6:45, C-5:45, M-4:45 R — Sunset Dreams; Morin Sisters CFCF KSD KYW WBEN WCAE WCSH WEAF WFBR WGY WHO WHIO WIRE WJAR WLW WMAQ WRC WTAG WTAM WTIC WWJ

ED-8:00 p.m., E-7:00, C-6:00, M-5:00 C - Rhythm at Eight

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

R - Major Bowes' Amateur Hour

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

ED-8:30 p.m., E-7:30, C-6:30, M-5:30 C -- Gulf Headliners

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

ED-9:00 p.m., E-8:00, C-7:00, M-6:00 C — America's Hour, Drama CFRB CKAC CKLW KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WEAN WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJSV WKBN WKRC WLAC WLBZ WMAS WMAS WMBD WMBR WNAC WNAX WNOX WOC WOKO WORC WOWO WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

- Manhattan Merry-Go-Round CFCF KDYL KFI KFYR KGW KHQ KOA KOMO KPO KSD KSTP KYW WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFBR WGY WHO WHIO WIBA WJAR WMAQ WOW WRC WSAI WTAG WTAM WTIC WTMJ WWJ

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

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

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

B -- Cornelia Otis Skinner KDKA KOIL KSO KWK WBAL WBZ WBZA WENR WFIL WGAR WHAM WJZ WLW WMAL WMT

ED-10:00 p.m., E-9:00, C-8:00, M-7:00 - Wayne King's Orchestra

WREN WSYR

CKLW KDB KERN KFAB KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KRLD KSL KVI KWG WAAB WABC WADC WBBM WBNS WCAO WCAU WCCO WDRC WDSU WFBL WFBM WHAS WHK WIBW WJAS WJSV WKBW WKRC WSPD

R — Ivory Tent Show KDYL KFI KFYR KGW KHO KOA

SUNDAY (Continued)

KOMO KPO KSD KSTP KYW WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WGY WHO WIBA WJAR WLW WMAQ WOW WRC WTAG WTAM WTIC WTMJ WWI

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

C — Benay Venuta. Songs
CFRB CKAC CKLW KDB KERN
KFH KFPY KFRC KGB KGKO
KILJ KLRA KLZ KMBC KMOX KOH KOL KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KVI KVOR KWG KWKH WAAB WABC WADC WALA WBIG WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDBO WDNC WDOD WFBL WFEA WGST WHAS WHEC WHK

WHP WIBW WIBX WISN WJAS WJSV WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMRG WMBR WNOX WOC WORC WQAM WREC WSBT WSFA WSMK WSPD WTOC

ED-11:00 p.m., E-10:00, C-9:00, M-8:00 - Musical Mirror

CKAC CKLW KFAB KFBK KFH KGKO KHJ KLRA KLZ KMBC KMOX KOH KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVOR KWG WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WDSU WFBL WGST WHEC WHK WHP WIBX WISN WJSV WKBN WKRC WLAC WMAS WMBD WMBG WMBR WNAX WOC WOKO WPG WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC

R - Sunset Dreams: Morin Sisters KDYL KFI KFSD KGW KHQ KOA KOMO KPO KPRC KTAR KTBS KTHS WBAP WDAF WKY WOAI

ED-11:15 p.m., E-10:15, C-9:15, M-8:15 B — Cornelia Otis Skinner KDYL KFI KFSD KGHL KGIR KGW KHO KOA KOMO KPO KTAR

ED-11:30 p.m., E-10:30, C-9:30, M-8:30 B - Lanny Ross' State Fair KDYL KFI KFSD KGHL KGIR KGU KGW KHQ KOA KOMO KPO KTAR

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

CLASSIFIED INDEX TO CHAIN PROGRAMS

Time in Eastern Daylight Saving

C-Columbia: R-National (Red); B-National (Blue)

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

CONCERTS

Howard Barlow, 9:00 p.m. Saturday, C Concert Miniatures, 6:45 p.m. Monday, C Radio City Music Hall, 12:30 p.m. Sunday, B Symphonic Hour, 3:00 p.m. Sunday, C DANCE BANDS

Victor Arden, 8:30 p.m. Wednesday, C Johnny Augustine, 2:00 p.m. Sunday, C Ben Bernie, 9:00 p.m. Tuesday, R. Frank Dailey, 7:30 p.m. Thursday, C Emery Deutsch, 8:15 p.m. Wednesday, C Eddle Duchin, 9:30 p.m. Tuesday, R Jan Garber, 10:30 p.m. Saturday, C Lud Gluskin, 9:00 p.m. Tuesday, C Al Goodman, 9:00 and 11:30 p.m. Friday, B Johnny Green, 8:00 p.m. Friday, C Johnny Hamp, 7:00 p.m. Saturday, C Lennie Hayton, 8:00 p.m. Saturday, R. Horace Heidt; 10:00 p.m. Thursday, C Richard Himber, 10:00 and 12:30 p.m. Friday. C Wayne King, 10:00 p.m. Sun. and Mon., C; 8:30 p.m., Tues. and Wed., R Allan Leafer, 6:30 p.m. Friday and Saturday, C Little Jack Little, 11:30 p.m. Monday, C

Guy Lombardo, 8:00 p.m. Monday, C Abe Lyman, 5:00 p.m. Sun.; 11:00 p.m. Mon. and Sat., C; 9:00 p.m. Friday, R Red Nichols, 8:30 p.m. Friday, B Ray Noble, 10:30 p.m. Wednesday, R

Charles Previn, 9:00 and 12:00 p.m. Sunday, B Leo Reisman, 8:00 and 11:30 p.m. Tuesday, R. Jan Savitt, 7:30 p.m. Wednesday, C Rudy Vallee, 8:00 p.m. Thursday, R Fred Waring, 9:30 p.m. Tuesday, C Paul Whiteman, 10:00 p.m. Thursday, R Victor Young, 9:30 p.m. Saturday, R DIALOG

Amos 'n' Andy, 7:00 and 11:00 p.m. daily except Sat.

and Sun., R Burns and Allen, 10:00 p.m. Wednesday, C Fibber McGee and Molly, 8:00 p.m. Monday, B Lou Holtz, 10:00 p.m. Thursday, R Marty May, 9:30 p.m. Thursday, C Pick and Pat, 8:30 and 11:30 p.m. Monday, C Stoopnagle and Budd, 9:30 p.m. Tuesday, C

America's Hour, 9:00 p.m. Sunday, C Dangerous Paradise, 7:45 p.m. Mon., Wed. and Fri., B Death Valley Days, 9:00 p.m. Thursday, B

Dream Drama, 5:30 p.m. Sunday, R. Eno Crime Clues, 8:00 p.m. Tuesday, B First Nighter, 10:00 p.m. Friday, R G-Men, 9:00 p.m. Saturday, R Grand Hotel, 6:30 p.m. Sunday, B House of Glass, 8:30 and 11:30 p.m. Wednesday, B Lux Theatre, 9:00 p.m. Monday, C One Man's Family, 8:00 p.m. Wednesday, R Princess Pat Players, 9:30 p.m. Monday, B Irene Rich, 8:00 p.m. Friday, B Buck Rogers, 6:00 p.m. Mon., Tues., Wed., Thurs., C Roses and Drums, 5:00 p.m. Sunday, B Six Gun Justice, 9:00 p.m. Wednesday, C Cornella Otis Skinner, 9:30 and 11:15 p.m. Sunday, B Tony and Gus, 7:15 and 11:15 p.m. daily, except Sat.

and Sun., B
True Story Court, 8:30 p.m. Friday, C
Welcome Valley, 8:30 p.m. Tuesday, B
POPULAR PROGRAMS

A. and P. Gypsies, 9:00 p.m. Monday, R Album of Familiar Music, 9:30 p.m. Sunday, R Major Bowes, 11:30 a.m. and 8:00 p.m. Sunday, R. Broadway Varieties, 8:30 p.m. Wednesday, C California Melodies, 9:30 p.m. Saturday, C Cities Service Concert, 8:00 p.m. Friday, R Contented Program, 10:00 p.m. Monday, R Evening in Paris, 8:30 p.m. Monday, B Fireside Recitals, 7:30 p.m. Sunday, R Fleischmann Variety, 8:00 p.m. Thursday, R Gulf Headliners, 8:30 p.m. Sunday, C Hollywood Hotel, 9:00 p.m. Friday, C Ivory Tent Show, 10:00 p.m. Sunday, R Manhattan Merry-Go-Round, 9:00 p.m. Sunday, R March of Time, 10:30 p.m. daily, except Sat. and Sun., (Maxwell House Show Boat, 9:00 p.m. Thursday, R

Musical Footnotes, 12:30 p.m. Sunday, C National Amateur Night, 6:00 p.m. Sunday, C National Barn Dance, 9:30 and 11:00 p.m. Saturday, B N.T.G. and His Girls, 9:00 p.m. Tuesday, B Palmolive Beauty Box, 9:00 and 11:30 p.m. Friday, B Penthouse Serenade, 3:30 p.m. Sunday, R Rhythm at Eight, 8:00 p.m. Sunday, C Rhythm Symphony, 5:00 p.m. Sunday, R St. Louis Parade, 4:00 p.m. Sunday, C Sinclair Minstrels, 9:00 p.m. Monday, B Town Hall Tonight, 9:00 p.m. Wednesday, R. Uncle Ezra, 7:15 p.m. Mon., Wed., Fri., R Voice of Firestone, 8:30 and 11:30 p.m. Monday, R

SINGERS

Lois Bennett, 10:00 p.m. Sunday, R l'atti Chapin, 7:15 p.m. Monday, C Bernice Clair, 5:00 p.m. Sunday; 8:00 p.m. Tuesday, C Buddy Clark, 7:15 p.m. Thursday, C Jerry Cooper, 7:15 p.m. Friday, C Gerry Cooper, 715 p.m. Friday, C Crumit-Sanderson, 5:30 p.m. Sunday, C Dalton Brothers Trio, 6:15 p.m. Saturday, C Vivlan Della Chiesa, 7:00 p.m. Sunday, C Jessica Dragonette, 8:00 p.m. Friday, R Eton Boys, 2:45 p.m. Sunday, C Ruth Etting, 8:30 p.m. Friday, B Foursome, 8:00 p.m. Wednesday, C Tito Guizar, 10:45 p.m. Monday; 6:00 p.m. Saturday, C Helen Jepson, 10:00 p.m. Thursday, R. Al Jolson, 9:30 p.m. Saturday, R Frances Langford, 9:00 p.m. Friday, C Elizabeth Lennox, 8:30 p.m. Wednesday, C James Melton, 8:30 p.m. Sunday, C Morin Sisters, 7:45 and 11:00 p.m. Sunday, R Frank Munn, 8:00 p.m. Tuesday, C; 9:30 p.m. Sunday.

and 9:00 p.m. Friday, R

Dick Powell, 9:00 p.m. Friday, C Carson Robison, 6:15 p.m. Tues, and Thurs., C Lanny Ross, 7:00 and 11:30 p.m. Sunday, B; 9:00 p.m. Thursday, R

Vivienne Segal, 9:30 p.m. Sunday and 9:00 p.m. Friday,

Smiling Ed McConnell, 6:30 p.m., Sunday, C Kate Smith, 8:00 p.m. Thursday, C Nina Tarasova, 7:15 p.m. Wednesday, C Conrad Thibault, 10:00 p.m. Sunday; 9:00 p.m. Thursday, R

John Charles Thomas, 9:00 p.m. Wednesday, B Benay Venuta, 10:30 p.m. Sunday, C Virginia Verrill, 7:15 p.m. Tuesday; 8:00 p.m. Friday, C

TALKS Bob Becker's Dog Chats, 5:30 p.m. Sunday, B Boake Carter, 7:45 p.m. daily, except Sat. and Sun., C Thornton Fisher, 7:45 p.m. Saturday, R

Intercollegiate Council, 6:00 p.m. Friday, C Sidewalk Interviews, 7:30 p.m. Sunday, B Lowell Thomas, 6:45 p.m. daily, except Sat. and Sun., B Charles Hanson Towne, 9:15 p.m Thurs., C

The Summer's Changes in Station Data

		POWER	900	KSEI	Pocatello, Idaho, from 890
530	CJKL.		980	XEAF	Nogales, Sonora, from 1010
550	CFNB	Kirkland Lake, Ont., 100 to 1000 Fredericton, N. B., 1000 to 500	1020	WDZ	Tuscola, Ill., from 1070
600	CMW	Havana, Cuba, 100 to 1000	1120	CMKM	Manzanillo, Cuba, from 940
600	CRCW	Windsor, Ont., 1000 to 500	1120	WGCM	Mississippi City, Miss., from 1210
660	CMCX	Havana, Cuba. 250 to 150	1150	XEFL	Tiluana, B. C., from 1160
750	CMCW	Havana, Cuba, 117 to 125	1160	CMHJ	Cienfueros, Cuba, from 1180
750	WJR	Detroit, Mich., 10000 to 50000	1199	VONE	St. John's, Nfld., from 950
770	CMBS	Havana, Cuba, 130 to 120	1210	CJCS	Stratford, Ont., from 1200
790	CMOA	Havana, Cuba, 72 to 75	1240	KGKO	Wichita Falls, Texas, from 570
920	CMX	Havana, Cuba, 650 to 500	1310	KINY	Juneau, Alaska, from 610
940	CMBC	Havana, Cuba, 195 to 200	1340	CMJL	Camaguey, Cuba, from 960
960	CMCD	Havana, Cuba, 180 to 200	1340	KGIR	Butte, Mont., from 1360
1000	CMBZ	Havana, Cuba, 120 to 150	. 1360	KCRC	Enid, Okla., from 1370
1010	WIS	Columbia, S. C., 1000 to 500	1390	CMJC	Camaguey, Cuba, from 1380
1020	WDZ	Tuscola, Ill., 100 to 250	1410	CHNC	New Carlisle, Que., from 1210
1120	CHSJ	St. John, N. B., 100 to 500	1420	WCBS	Springfield, Ill., from 1210
1120	CMKM	Manzanillo, Cuba, 100 to 50	1490	KFBK	Sacramento, Calif., from 1310
1120	WGCM	Mississippi City, Miss., 100 to 500			NEW
1130	CMJI	Ciego de Avila, Cuba, 45 to 50	580	CFPR	Prince Rupert, B. C.
1140	CMBG	Havana, Cuba, 325 to 300	760	CMHX	Cienfuegos, Cuba
1170	CMBD	Havana, Cuba, 163 to 150	880	CMBN	Havana, Cuba
1200	CKNX	Wingham, Ont., 25 to 50	1050	CMKD	Santiago, Cuba
1200	CMCJ	Havana, Cuba, 500 to 350	1140		Rockville, Md.
1210	CJCS	Stratford, Ont., 15 to 50	1190	CMKV	Santiago, Cuba
1210	WPAX	Thomasville, Ga., 100 to 250	1200	WMFR	High Point, N. C.
1230	CMCB	Havana, Cuba, 112 to 100	1200	WNRI	Newport, R. I.
1240	CMHB	San Spiritus, Cuba, 30 to 50	1210	KFUH	Del Monte, Calif.
1240	KGKO	Wichita Falls, Texas, 500 to 1000	1310	KVOL	Lafayette, La.
1255	CMCG	Havana, Cuba, 162 to 150	1310	WISC	Milwaukee, Wis.
1290	KTRH	Houston, Texas, 500 to 1000	1370	KIUP	Durango, Colo.
1310	CKCV	Quebec, Que., 50 to 100	1400	CMKR	Santiago, Cuba
1310	KINY	Juneau, Alaska, 250 to 100	1420	KALB	Alexandria, La
1320 1340	KGMB CMJL	Honolulu, Hawaii, 250 to 1000	1420	WPAR	Parkersburg, W. Va.
1350	CMCA	Camaguey, Cuba, 50 to 75	1500		Brady, Texas
1360	KCRC	Havana, Cuba, 435 to 450 Enid, Okla., 100 to 250			CALLS
1370	CMGE	Cardenas, Cuba, 30 to 50	560	KSFO	San Francisco, Calif., from KTAB
1380	CMBX	Havana, Cuba, 171 to 150	780	KEHE	Los Angeles, Calif., from KTM
1410	CHNC	New Carlisle, Que 100 to 500	1200	CKNX	Wingham, Ont., from 10-BP
1410	CMCR	Havana, Cuba, 122 to 150	1210	CJCS	Stratford, Ont., from 10-AK
1420	CMGI	Colon, Cuba, 30 to 50	1380	WNBC	New Britain, Conn., from WMFE
1430	CMJP	Moron, Cuba, 75 to 100	1410	KGNC	Amarillo, Texas, from KGRS
1460	CMKF	Holquin, Cuba, 30 to 50	850	WWPA	DELETED Clariou, Pa.
1490	KFBK	Sacramento, Calif., 100 to 5000	1410	WDAG	Amarillo, Texas
1500	CMCN	Havana, Cuba, 162 to 150	1420	KGIX	Las Vegas, Nev.
		FREQUENCIES	1420		LOCATION
*00	OTET	•	550	WSVA	Harrisonburg, Va., from Staunton, Va.
530	CJKL	Kirkland Lake, Ont., from 1310			CHAINS
630	CFCO	Chatham, Ont., from 1050	750	WJR	Detroit, Mich., new CBS
780 850	CMJK KWKH	Camaguey, Cuba, from 760	750 850	WESG	Elmira, N. Y., new CBS
890	KFPY	Shreveport, La., from 1100 Spokane, Wash., from 1340	1430	KECA	Los Angeles, Calif., new NBC
9110	KFF	Spokane, wash., from 1940	1490	RECA	Los Augues, Cam., new ADC

FOREIGN B. C. STATIONS BY FREQUENCIES

Wavelength in meters is given in parentheses following frequencies in kilocycles. Entering dial number in square provided will enable you to identify stations heard. Power is given in second column in kilowatts and decimals thereof. Actual frequency is given in parentheses. While call letters are given wherever possible, very few European stations use these calls. Time is Local unless otherwise stated.

	,				
520	(576.6)	600 (499.7)	ZTJ	10. Johannesburg, S. Af. (645)
LKH OFH	.7 Hamar, Nor. (519) 10. Viipuri, Fin. (527)	CNR 2	5. Rabat, Mor. (601) Radio Maroc. Office	5CK	7.5 Crystal Brook, Ausl.
	1. Innsbruck, Aust.		Cherifien des Postes et Telegraphes.	650	(461.3)
	(519) 5. Ljubljana, Yug. (527) .5 Tartu, Est. (517)		Frounze, U.S.R. (608) U.S. Sundsvall, Swe. (601)	OCC CX6	10. Montevideo, Uru. .3 Asahikawa, J. (655)
		XMHA 1			Pres. NBC, Hokkaido
530	(565.7)	ZTC 1 4QN .	O. Cape Town, S. Af. N. Queensland, Ausl.		Asahikawa Branch, EST Daily 11 p.m
HBZ	1. Bolzano, I. (536)			JQAK	7:30 a.m. .5 Dairen, Mnch. (652)
	16. Wilno, Pol. (536)	,	(491.5)	RW46 1YA	.5 Dairen, Mnch. (652) 10. Karaganda, USR (653) 10. Auckland, N. Z.
540	(555.2)	CX4 1 I1FI 2	0. Florence, I. EIAR		100. Cologne, G. (658) DagoberIstrabe No. 38
HAL	120. Budapest, Hun. (546) Budapest VIII, San-	JODK2 1	Stazione di Firenze. O. Keijo, Ko.		
	dor Utca No. 7.	KZRM 5	0. Manila, P. I. (618.5)	660	(454.3)
	/F4F 4\		0. Oufa, U.S.R. (617) 0. Murmansk, U.S.R.	CE66	1. Santiago, Ch. (665)
550	(545.1)	XGSS .0	015 Hsing-shih, Chn.	CMCX	.25 Havana, Cuba
RW34	10. Stalingrad, USR (554)		.5 Sydney, Ausl.	RW36	10. Archangel, USR. (662)
2CR	Central NSW Ausl.	(20 /	100 ()	XGOA	75. Nanking, Chn. 7. Grafton, Ausl.
	100. Beromunster, Sw. (556), Report to PTT,	620 (483.6)		50. Manchester, G. B.
	Berne, Speichergrasse	CE62 1	. Santiago, Chl. (625)		(668) North Regional
	No. 6.	CT1AA 2	0. Lisbon, Por. (629)	670	(447.5)
560	(535.4)	JOTK .5	Emissora Nacional. Matsuye, Jap. (625)	070	,
500	`		0. Trondelag, Nor. (629)	JFAK	10. Taihoku, For.
I1PA	4. Palermo, I. (565)		.5 San Juan, Arg.	LS4 MOHB	 Buenos Aires, Arg. Harbin, Mnch. (674)
MTAY		LV3 2. RW31 1		MTFY	1. Harbin, Mnch. (674)
RW41	1.2 Syktyvkar, USR (563)	XTOY .5	Taiyan, Chn. (625)	RW32 RW23	2. Elista, U.S.R. (671) 1.2 Groznyi, U.S.R. (676)
XLHB ZTG	.06 Shanghai, Chn. 10. Grahamstown, S. Af.	4ZP .5 No. 1 1	5 Invercargill, N. Z. 5. Brussels, Belg. la	XGOF	1. Foochow, Chn. (675)
6WA	South West, W. Aust.		Rue du Bastion	2CO	7.5 Corowa, Ausl.
	60. Athlone, IFS (565) Radio Atha Luain.		0. Cairo, Egypt. 0. Jerusalem, Pal.		25. Sottens, Swi. (677) Report to PTT Berne,
	Raujo Atha Luain.		v. Jerusalem, Fai.		Speichergrasse No. 6.
570	(526)	630 (475.9)	680	(440.0)
CX2	Montevideo, Uru.	JODG .3		υου	(440.9)
XGOH	1. Changsha, Chn.	JUDG	(635)	HJN	.5 Bogota, Col. (681)
2YA	5. Wellington, N. Z. 100. Stuttgart, G. (574)		.5 Buenos Aires, Arg.	JOVK	.5 Fukuoka, J. .5 Hakodate, J.
	Charlottenplatz No. 1	OKP 1	20. Prague, Cz. (633) The Radio Journal,	RW27	4. Makhatch, USR.(689)
	10. Magnitogorsk, U.S.R.		Praha, Cz.	RW46	1.2 Karaganda, USR. (686.5)
500	(571)	RW28 .7	(635)	RW71	1.2 Petropavlovsk, USR.
580	(516.9)	RW84 1.	.2 Oust-Abrakomsk, U.S.R. (635)	RW74	1.2 Tcheboksarv, U.S.R.
CE58	1. Santiago, Chl. (585)	RW85 2.	. Igarka, U.S.R. (635)	XGOK	1. Canton, Chn. (682) 2.5 Belgrade, Yug. (686)
RW35 RW38	10. Astrakhan, USR (589) 1.2 Alexandrovsk, U.S.R.	3AR 4.			1.5 Salisbury, S. Af.
YLZ	15. Riga, Lat. (583)		,		(681.9)
3 WV	West Victoria, Ausl.	640 (468.5)	600	(424 E)
7ZL	1, Hobart, Ausl. 20. Lisbon, Por. (629)	JOUK .3		090	(434.5)
	15. Grenoble, F. (583)	RW17 10	0. Kazan, U.S.R. (644)	CX8	1. Montevideo, Uru.
700	(500 2)	RW29 10	0. Petrozavodsk, U.S.R.	XGOY 6WF	.5 Yuen-nan, Chn. 3.5 Perth, Ausl.
590	(508.2)	RW48 1.	(648) .2 Tomsk, U.S.R. (645)		7. Paris, F. (695) FPTT
JOAK2	10. Tokyo, Jap. M. Tomabecio, EST.	RW56 1.			Ecole Superieure des Postes et Telegraphes
	Daily 4 a.m7:30 a.m.		Doua (testing).	700	(490 9)
LS10 RW42	5. Buenos Aires, Arg. 10. Gorki, U.S.R. (598)	ZEK .5	Hong Kong, Chn. GMT Mon., Thurs.,	700	(428.3)
7 ZL	Hobart, Ausl.		Sat., from 12:30. The	CE70	1. Santiago, Chl. (705)
	100. Vienna, Aust. (592) Wein No. 1, Johan-		Secretary, Hong Kong Brdcstg. Com., P. O.	JOKK SBA	.5 Okayama, J. 55. Stockholm, Swe. (704)
	wein No. 1, Johan- nesgrasse No. 4B.		Box 200.	VPB	1.75 Colombo, Cey. (705)

XMHC ZP15 2NR	.5	Shanghai, Chn. Villarrica, Par. Northern Rivers,	PRD9 XLHI XLHJ	.1	Sorocaba, Brz. (769) 5 Shanghai, Chn. Shanghai, Chn.	LR5	16.	4 a.m7:30 a.m. Buenos Aires, Arg Radio Excelsior. Ave
710	/49	Ausl.		50.	Falkirk, G.B. (767) Scottish Regional	RW39	100.	de Mayo 821. Moscow, U.S.R. (832 Innan Marr, Esc
710	50.	Z.3) Rome, I. (713)	<i>77</i> 0	(38	39.4)			Moscow-Stalin Radi Station.
JOJK	3.	Kanazawa, J.	CX12	1.	Montevideo, Uru.	XGWH		Wuhu, Chn.
LS1	5.	Buenos Aires, Arg.	JOHK	10.	Sendai, J.	3GI	7.	Gippsland, Ausl.
XGML		Kashing, Chn. (714.3)	LKF RW26	.7 10.	Frederikstad, N. (776)	940	/25	(c 0)
AGUS	1	Chunching Chn. (711)	VUM	.2	Stalino, U.S.R. (776) Madras, In.	040	(25	56.9)
720	(A1	6.4)	ZP1	.5	Asuncion, Par.	F31CD	12.	Saigon, Indo.
720	(41	0.4)	1ZH	.04	Hamilton, N. Z.	LT8	.35	Rosario, Arg.
JFBK	1.	Tainan, For.	3LO	3.5	Melbourne, Ausl.			Chang-sha, Chn
JORK	.5	Kochi, J. Mr. Mat- suo, Mgr., EST Daily 10:15 p.m7:30 a.m.;	(3	2.	Toulouse, F. (776) PTT	XHHA ZBW	2.	Shanghai, Chn. Hongkong, C. (845 The Secretary, Hong
		Sun., 10:30 p.m7:30 a.m.	<i>7</i> 80	(38	(4.4)			Kong Brdcstg. Com. P. O. Box 200.
PRF2	.25	Rio Clara, Brz. (725)	C E 78	1.	Santiago, Chl. (785)	2YC	.2	Wellington, N. Z.
RW9	36.	Kiev, USR (722)	JOPK	.5	Shizuoka, J.		100.	Berlin, G. (841) Radio Reichssender
RW28 RW73	10. 10.	Viavivos., USR (725)	KZEG LT1	1. 5.	Manila, P. I.			Berlin Brdcstg. House
	10.	Simferopol, USR (725)	PRE7). 1.	Rosario, Arg. Sao Paolo, Brz. (788)			
XLHD	.1	Shanghai, Chn.	XGOD		Hangchow, Chn.	850	(35	2 7)
3YA	2.5	Christchurch, N. Z.			(977.5)	000	(00	4.1)
6GF		Kalgoorlie, Ausl.	хннс		Shanghai, Chn.	CX16	2.5	Montevideo, Uru.
720	/41	0.71		120.	Leipsig, G. (785) Temporarily on low	EAJ3	1.5	Valencia, Sp.
<i>7</i> 30	(41)	0.7)			poer.	HSPI	2.5	Bangkok, Siam (857)
CE73	1.	Vina del Mar, Chl.	700	/ 05	(A E)	JOFK	10.	Hiroshima, J.
CX10 EAJ2	1. 3.	Montevideo, Uru.	790	(31	9.5)	LKA LKB	.35	Aalesund, Nor.
EAJ2	3.	Madrid, Sp. (731) Radio-Espana	EAJ1	5.	Barcelona, Sp. (795)	LKD	1. .5	Bergen, Nor. Bodo, Nor.
EAJ5	1.5	Seville, Sp. (731)		٠.	Union Radio.	LKP	.7	Porsgrund, Nor.
JOSK	1.	Kokura, J. (735)	JOGK	10.	Kumamoto, J.	PRA4	.5	Bahia, Brz. (857)
RW65	1.	Saransk, USR. (734)	LR10	8.	Buenos Aires, Arg.	PRB3	.25	Juiz de Fora, Brz
XHGS 5CL	.05 2.	Huchow, Chn. Adelaide, Aust.	ZTB 4YA	.5 .5	Bloemfontaine, S. Af. Dunedin, N. Z.	RW52	10.	(857) Simferopol, U.S.R.
	20.	Tallin, Est. (731)	00.00	16.	Lwow, Pol. (795)			(859)
740	/40	- 2/			Polskie Radjo SA, Rozglosnia we	VQ7LO VUB	.6 3.	Nairobi, Ken. (858) Bombay, In. (855)
740	(40:	5.2)			Lwowie	XOST	.5	Tsinan, Chn. (855)
OFD	1.	Pori, Fin. (749)	000	/OF		5RM	.5	Tsinan, Chn. (855) Renmark, Ausl.
	1.5	Uberaba, Brz.	800	(37	4.8)	*****	1.	Sofia, Bul.
	1.2	Naltchik, USR. (748.1)	LU2	.5	Bahia Blanca, Arg.		35.	Strasbourg, F. (859 Radio Strasbourg
XHHB 2BL		Shanghai, Chn.	PRB7	.5	Rio de Janeiro, Brz.			PTT, 30 Rue du 2
		Syndey, Ausl. Munich, G., Funk-	XLHL	.1	Shanghai, Chn.			Nov.
		haus Rundfunkplatz	4QG	2.5	Brisbane, Ausl.			
		No. 1 Marsellles, F. (749)		50.	Cardiff, G.B. (804) West Regional	860	(34	8.6)
		PTT Sortavala, Fin. (749)	810	(37	0.2)	CE86 LV10	1. .5	Santiago, Chl. (865) Mendoza, Arg.
750	/nn-	0)	CE81	1.	,	PRA3	2.5	Rio de Janeiro, Brz.
750	(395	J.8)	CX14	1. 5.	Valparaiso, Chl. Montevideo, Uru.	XHHD		Shanghal, Chn.
JOBK1		Osaka, J.	IIMI	50.	Milan, I. (814)		16. .6	Poznan, Pol. (868)
	1.	Osaka, J. Buenos Aires, Arg.	JOCK1		Nagoya, J.	* * -	.0	Agen, F. (868)
LUHO	.02	T'ung Hsien, Chn.	PRA6	1.	Sao Paolo, Brz. (815)	870	121	4.6)
DAX4A	1.5	Lima, Peru. Daily 11 a.m1 p.m.; 6-7; 9-11	VUC	3. /2C	Calcutta, In.	O/U CE87	.1	Talcahuano, Chi.
PRA2		p.m. Rio de Janeiro, Brz.	820	(20	5.6)	JOAK1	10	(875)
PRA8	3.	Pernambuco, Brz.	CE82	1	Santiago, Chl. (825)	JUANI	10.	Tokyo, J. M. Toma becio, EST Daily
	10.	Urdjonikidze, USR. (752)	LV7 RW68	.5 .2	Tucuman, Arg. Tcheliabinsk, U.S.R.	LR6	16.	a.m7:30 a.m. Buenos Aires. Arg
XGOK		Canton, Chn.	DW7-		(824)			La Nacion, Florida
ZTD ZYB	1.5 .1	Durban, S. Af. New Plymouth, N. Z.	RW78 27H	4. .065	ljevsk, U.S.R. (825)			347.
NT		New Plymouth, N. Z. N. Tasmania, Ausl.	7HO	.05	Napier, N. Z. Hobart, Ausl.	XGBL		Suchow, Chn.
		Katowice, Pol. (758)		12.	Bucharest, Ru. (823)	2GB	1.	Sydney, Ausl. "The Nation's Station"
	/30/	1.5)	830	(36	1.2)			Adyar House, 29 Bligh St., Daily EST
760	(33-	/						
		Valparaiso, Chl. (765)	JOIK	10.	Sapporo, J. T. Okada,		50.	2130-830; Sun. 22-730 London, G.B. (877)

880	(34	0.7)	940	(31	19)	990	(30	2.8)
CE88	.1	Valpariso, Chl. Osvaldo Barra D., Edificio "El Mer- curio", Casilla 57D.	CE94 JONK	5. .5	Santiago, Chl. (945) Nagano, J. K. Yana- da, Dir. EST Daily 4-1930	JOFG PFBI	.5 20.	Fukui, J. Hilversum, Hol. (995 Helr Radio Hilver sum, Ouden, Eng
HS7PJ	41	Bangkok, Siam (882)	PRE4 SBB	.25 10.	Sao Paule, Brz. (941)	XGCK	.03	weg, 4. Shanghai, Chn.
LV2 PRB2	7. .25	Cordoba, Arg. Curityba, Brz. (882)	XHHE		Goteborg, Swe. (941) Shanghai, Chn.			Central NSW, Ausl.
RW61	1.	tochar-Ola, USR.	3ZR	.4	Greymouth, N. Z.	100	. /00	000
V/111		(888) Lahore, In. (882)	*****	12.	Algiers Alg. (941) Radio PTT du Govt.	1000)(29	9.8)
VUL XHHV	.1	Shanghai, Chn.			Gen., Rue Berthe-	CE100		Santiago, Chl. (1005
YV2RC		Caracas, Venz. (882)			Gen., Rue Berthe- zene, Alger, Algeria,	CW23	.25	Saito, Uru.
6PR	.5	Perth, Ausl.			N. Af.	HJ3AB	H .05	Bogota, Col. (1005)
1YX	.5 7.	Auckland, N. Z. Graz, Aust. (886)	950	(31	5.6)			"La Voz de La Vic tor", Aptdo 565. Sun. 12-14; 16-21; Week
890	(32)	6.9)	LR3	12.		HJ4AB	J .05	days 1130-14; 18-23. Armenia, Col.
CX18	.05	Montevideo, Uru.	PP	60.	Paris, F. (959) Poste Parisien, 4 Rue	OKR PRB4		Bratislava, Cz. (1004 Santos, Brz.
LR4	12.	Buenos Aires, Arg.,	DWG		du General-Foy.	PRB8	.05	Sao Paulo, Brz.
		Radio Splendid, Cal- tao 1526, Daily 11-24.	RW40 RW55	1.2	Gomel, U.S.R. (959) Engels, U.S.R. (959)	XGOW		Hangkow, Chn.
мтву	2.	Mukden, Chn.	XGOP	.1	Peiping, Chn.	XKRI	1	Canton, Chn.
OFA	10.	Helsinki, Fin. (895)	XOPP	.1	Peiping, Chn. (952.8)	XOTY 4GR	.05	Shang-si, Chn. Toowoomba, Ausl.
PRF3 XGKA	5.	Sao Paulo, Brz. (895)	ZTP 2UE	.5 1.	Pretoria, S. Af. (952)			
ZP9	.015 1.5 .5	Kashing, Chn. (895) Asuncion, Par. (898) Limoges, F. (895)	20E	1.	Sydney, Ausl. Rex Shaw, 296 Pitt St., EST Mon., to Fri.,	1010)(29	6.9)
		, , , ,			2230-8; Sat. to 9; Sun., 2230-8.	CE101 CX24	1. 10.	Valparaiso, Chl. Montevideo, Uru.
900	•	-	******	100.	Breslau, G. Ereslau No. 18, Funkhaus.	PRB9 RW86	.5 5.	Sao Paulo, Brz. (1017 Tchernigov, USR. (1013)
CE90 Jodki		Santiago, Chl. (905) Keijo, Ko.	960	<i>(</i> 31	2.3)	3HA	.3	Hamilton, Ausl. 3
KZIB LV9	1. .5	Manila, P. I.		-	-			Gray St., "The Ag Brdcstg. Service"
Z1LY	2.	Salta, Arg. Hoten, Mnch.	JOOK RW67	.3	Kyoto, J.			EST. Dally 245-730
2ZP	.105	Wairoa, N. Z.	RW69	10.	Oukhta, USR (968) Odessa USR (968)			Sun., 345-8.
3MA	.05	Mildura, Ausl.	XHHF	.1	Shanghai, Chn.		50.	Daventry, G.B. (1013 Midland Regional.
4WK	.05	Warwick, Ausl. Hamburg, G. (904)	YV1RC		Caracas, Venz.			Milalana Regional.
	100.	Radio Reichssender Hamburg	2ZF 5DN	.15 3.	Palmerston, N. Z. Adelaide, Ausl.	1020	-	
910	(32	0.6)	970	(30	9)	CE102 EAJ15	.1 3.	Santiago, Chl. (1025 Barcelona, Sp. (1022
910	(32	3.0/	C X 22	.25	Montevideo, Uru.	EAJ19	.7	Oviedo, Sp. (1022)
LR2	6.	Buenos Aires, Arg.	JOBG	.5	Maebashi, J.	XHHG 2KY	.1 1.	Shanghai, Ch. Sydney, Ausí.
		Radio Prieto, Bolivar	3 BO	.2	Bendigo, Ausl.	281	2.	Cracow, Pol. (1022)
RW30	10.	1356 Dneprepetrovsk,	7	1.	Belfast, IFS (977)		/00	
		USR. (913)	980	/30	3.9)	1030)(Z9	1.1)
XENT	60.	Neubo Laredo, Tams.		(30		CE103	.1	Valdiva, Chl. (1035)
4RK	2. 60.	Rockhamton, Ausi. Toulouse, F. (913)	CE98	5.	Santiago, Chi. (985)	CT1GL		Parede, Por. (1031) Radio Club Portu-
	٠٠.	Villa Schmidt, Rue	CNO	.025	Casa Blanca, Mor. (983)			Radio Club Portu-
		Monie	I1GE	10.	Genoa, I. (986) EIAR	LR9	5.	Buenos Aires, Arg.
	.5	Limoges, F. (913)		_	Stazione di Genoua.	YV11B		Maracaibo, Venz.
920	(32	5.9)	JOXK	.5	Tokushima, J. T. Tsutsumi, Chf. Engr. EST Daily 2205-730;	3DB	.6 60.	(1034) Meibourne, Ausl. Konigsberg, G. (1031
CW1	.1	Rocha, Uru.	A. V		Sun., 2230-730.			• • •
Jook	.5	Nligata, J.	OAX4E	.05	Lima, Peru, Juan P. Goincochea, Jiron	1040)(28	8.3)
OKB	32.	Brno, Cz. (922)			Ocona No. 158		•	
PRC3 PRF4	.25 10.	Pelotas, Brz. R'de Janeiro, Brz.	PRC6	1.	R'de Janeiro, Brz.	CE104 CP4	.1 10.	Magailanes, Chl. La Paz, Bol.
		(923)	XMBH ZTP	.5 .5	Shanghai, Chn. Pretoria, S. Af. (985)	CW25	.5	Durazno, Uru.
хннх	.1	Shanghal, Chn.	2ZJ	.25	Gisborne, N. Z.	PRC8	.25	R' de Janeiro, Brz.
930	(32	2.4)	4AY	.03	Ayr, Ausl. Norman	RW70 XHHH SPI	10. .1 2.	Lenigrad, USR. Shanghai, Chn. Port Pirie, Ausl.
CX20	2.	Montevideo, Uru.			Rd., "The Voice of the Cane Fields"	əri	40.	Rennes-Bretagne, F
~~~	.5	Nagasaki, J.			EST Daily 2-8; Sun.			
JOAG					330-730.	1050	1728	5 5 1
	1	R'de Janeiro, Brz.	6BY	.05	Bunbury, Ausl.	1000	/(=0	0.07
JOAG PRD2 3UZ	1 .6	(932) Melbourne, Ausi. Brussels, Belg. (932)	6BY	.05 24.	Bunbury, Ausl. Torun, Pol. (986) (Testing)	CE105 CX26	•	Valparaiso, Chl. Montevideo, Uru.

Stazione di Bari Kriasnodar, 1987. 108. 118. 118. 118. 118. 118. 118. 118	I1BA 20				EQUEN	
XHKA .05 Tien-tsin, Chn2CA .5 .2 Canberra, Ausl42B .07 Dunedin, N. Z42B .07 Dunedin, N. Z42B .07 Dunedin, N. Z42C .50 .50 .Falkitik, G. B5cot50 .50 .Falkitik, G. B5cot50 .50 .Falkitik, G. B5cot50 .50 .50 .50 .50 .50 .50 .50 .50 .5		Stazione di Bari	10.	Normandie, F. (1113) Fecamp		Strats Radio Fonle
1128 .97 Dunedin, N. Z. C. C. 20 .95 Dunedin, N. Z. C. C. C. 20 Dunedin, N. Z. C.	XHKA .0		1120/2	C7 7\		Helbergsgrade No. /
1.   Durnedin, N. Z.   Common   Commo	2CA .5	Canberra, Ausl.	1120(2	01.17	1100	/95/ 1\
1.   Dunedin, N. Z.   Common		7 Dunedin, N. Z.	CW29 .05	Mercedes, Uru.	1100	(434.1)
1060(282.8)    1060(282.8)		Dunedin, N. Z.	HAE 6.2	Nyiregyhaza, Hung.	CE118	1. Santiago, Chl. (1185
1060(282.8)		Dunedin, N. Z.				.25 Salto, Uru.
1060(282.8)			,	San Juan, Arg.		
		tian ivational		Shanghai, Chn.		
Santispo, Chi.   Santispo, Chi.   Santispo, Chi.   Santispo, Chi.   Santispo, Chi.   Santispo, USR. (1068)   Santispo, USR. (1068)   Santispo, Chi.   Santisp	ነስሬስ/ኅ	282 81				
Santiago, Chi.   Santiago, Chi.   Santiago, Chi.   Santiago, Chi.   Santiago, Chi.   Santiago, USR.   (1958)   Santiago, USR. (1958)   Santiago, USR. (1958)   Santiago, USR. (1958)   Santiago, USR. (1958)   Santiago, USR. (1958)   Santiago, USR. (1958)   Santiago, USR. (1958)   Santiago, USR. (1958)   Santiago, Chi.   Santiag	τοσοίν	202.0)	400 .03	Roberts, 43 Adelaide	3 N.Z	Morgan 64 Elizabeth
2. Santa Fe, Arg. 1. Shanshai, Chn. 2. Sharba Fe, Arg. 2. Santa Fe, Arg. 2. Sharba Fe, Arg. 3. Shanshai, Chn. 3. Shanshai, Chn. 4. Shansha	E106 1.			St., EST. Daily 2130-		St., "The Brighton
1190(252)		Santa Fe, Arg.		830; Sun., 3-7:30.		
YB .025 Melbourne, Ausl.  MB .05 Meryborough, Ausl.  1070(280.2)		Tiraspol, USR. (1068)		Alexandria, Eg. (1122)		
MB		Shanghal, Chn.	1, 1	Newcastle, G.B. (1122)	1190	(252)
CX30   SBH   10   Nontevideo, Uru.   Horby, Swe. (1131)   SAPPA   1356   She in Speling, Chn. (1360   1.5   Kwangati, Chn.   Shanghai, Chn.   Shanghai, Chn.   Santiago, Chl. (1145)   Santiago, Chl		5 Maryborough, Ausl.	1130/26	55.3)		` '
135   136   137   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138   138	0700	280 2)	•	·	LS2	25. Buenos Aires, Arg.
State   Stat	•		SBH 10.	Horby, Swe. (1131)		1356
(GOX 1   Kwangsti, Chn. (GOX 2   Honan, Chn. (All 2)   Sydney, Ausl. (GOX 1   Katoomba, Ausl. (All 2)   Sydney, Ausl. (All 2)   Sydney, Ausl. (All 2)   Sydney, Ausl. (COX 2)   Salto, Uru. (COX 2)   Salto, Uru. (COX 2)   Shanghai, Chn. (COX 2)   S			XGOC .5	Nan-chang, Chn.		.03 Peiping, Chn. (1194)
Montan, Chn.   Katoomba, Ausl.   AM   .5   Northam, Ausl.   Northam, Ausl.   140 (263)			Cast	(1132)		<ol> <li>Sydney, Ausi.</li> </ol>
AM5 Northam. Ausl			6ML .3	rerth, Ausl.		<ol> <li>Frankfurt, G. (1195)</li> </ol>
Bordeaux - Lafayette Hotel des PTT		Northam Ausl.	11/0 /	062\		
Bordeaux - Lafayette Hotel des PTT		. Bordeaux. F. (1077)	1140 (2	(63)		5. Freiburg G (1195)
Hotel des PTT		Bordeaux - Lafayette	CE114 .1	Santiago Chi (1145)		.5 Kaiserslautern (1195)
110		Hotel des PTT	CW30			2. Trier, G. (1195)
1	000/6	ARR 4)	I1TO 7.	Turin, I.		
1	1080(2	277.6)				2. Coblenz, G. (1195)
100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100   100	•	, C		Newcastle, Ausl.	1200	(240.0)
CE120   .1   Curico, Chl. (1205)	E108 .1			London National.	12000	(249.9)
08K2 10. Osaka, J. (1085) T3 3.5 Rosario, Arg. CC 2. Falun, Swe. (1086) HHJ .08 Shanghal, Chn. P7 .7 Asuncion, Par. (1083) SH .05 Swan Hill, Ausl. Los Cattagena, Clo, (1153) Los Cattagena, Clo, (1153) Los Cattagena, Clo, (1153) Los Cattagen		5 Salto, Uru.		G.B. (1149)		
CC 2. Falun, Swe. (1086) CHHJ .08 Shanghai, Chn. P. 7. Asuncion, Par. (1083) SH .05 Swan Hill, Ausl. CE115 .1 Talca, Chl. (1155) CE115 .1 Talca, Chl. (1153) CE115 .1 Talca, Chl. (1154) CE115 .1 Talca, Chl. (1155) CE115 .1 Talca, Chl. (1154) CE115 .1 Talca, Chl. (1155) CE115 .1 Talca, Chl. (1154) CE115 .1 Talca, Chl. (1155) CE115 .1 Talca, Chl. (1154) CE115 .1 Talca, Chl. (1155) CE115 .1 Talca, Chl. (1154) CE115 .1 Talca, Chl. (1155) CE115 .1 Talca, Chl. (1154) CE115 .1 Talca, Chl. (1155) CE115 .1 Talca, Chl. (1154) CE115 .1 Talca, Chl. (1155) CE115 .1 Talca, Chl. (1154) CE115 .1 Talca, Chl. (1154) CE115 .1 Talca, Chl. (1155) CE115 .1 Talca, Chl. (1154) CE15 .1 Talca, Chl. (1154) CE15 .1 Talca, Chl. (1154) CE16 .1 Talca,		. Osaka, J. (1085)	20.	North National, G.B.		.075 Florida, Uru.
HHJ			20		HIZABE	1. Bogota, Clb., Uribe
PRD		Falun, Swe. (1086)				
1150(260.7)   XHM						.25 Taubate, Brz.
CE115 .1 Talca, Chl. (1155) Guyaquil, Ec. (1153) HJJABM.05 Cartagena, Chl. (1165) SKA .3 No. 2 5. Prague, Cz. (1204) No. 2		Swan Hill, Ausl.	1150/26	0.7)		.1 Shanghai, Chn.
HCZET 3   Guyaquil, Ec. (2153)   SKA 3   Adelaide, Ausl.			•	·		3. Caracas, Vnz.
HJJABM.05 Cartagena, Clb. (1154)   SAC Ausl.   SAC A	000/6		CE115 .1	Talca, Chl. (1155)		Asuncion, Par.
E109 .1 Valparaiso, Chl.  X28 2. Montevideo, Uru.  A17 7. Madrid, Sp. (1095)	.090(2	(75.1)	HUZEI .3	Guyaquil, Ec. (1153)		
PRA7   .05   Ribeirae   Preto,   Brz   .1210(247.8)	•	,	LR8 5.	Buenos Aires Ara		
1210(247.8)				Ribeirao Preto, Brz.		
Union Radio Station EAJ7, Aptde 745.  RC2 3. Porto Alegre, Brz. Porto Alegre, Brz. 2WG .05 Wargaa, Aus. 2EM .017 Gisborne, N. Z. 2EM .017 Gisborne, N. Z. 2EM .017 Gisborne, N. Z. 4uckland, N. Z. 4uckland, N. Z. 2EM .017 Gisborne, N. Z. 4uckland, N. Z. 5uckland, N. Z. 4uckland, N. Z. 5uckland, N. Z. 4uckland, N. Z. 4ucklan				(1153)	-12100	(247.8)
RC2 3. Porto Alegre, Brz. 2WG .05 Wagga, Aus. C26F .05 Grafton, Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin South Queensland Ausl. Lille, F. (1213) Rac PTT Nord (testin Mackay, Ausl. Lille, F. (1213) Rac PTT Nord (testin Mackay, Ausl. Lille, F. (1213) Rac PTT Nord (testin Mack	~~ · · ·		XGGW .05	Tsin-tao, Chn.		`
RC2 3. Porto Alegre, Brz. RC7 .25 Bello Horozonte, Brz. 2WG .05 Wagga, Aus. 2GF .05 Grafton, Ausl. Kalgoorlie, Ausl. Kosice, Cz. (1158)  100(272.6)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1160(258.5)  1170(256.3)  1170(270.1)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)  1170(256.3)		EAJ7, Aptdo 745.	1 A118MO '2	Maracaibo, Venz.		
1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0   1.0		Porto Alegre, Brz.	2WG .05	Wagga, Aus.		
100 (272.6)		Bello Horozonte, Brz.		Gisborne, N. Z.		
100(272.6)   1160(258.5)   Salto, Uru.   155						Lille, F. (1213) Radjo
100(272.6)  E110 1. Santiago, Chl. (1105) J3ABD .05 Bogota, Col. NA 1.5 Naples, I. (1104) RA9 1. R' de Janelro, Brz. HHS .15 Shanghai, Chn. VARC . Sabana Grande, Venz. A. 3 Lanceston, Ausl 50. Madona, Lat. (1104)  110(270.1)  E111 .1 Osorno, Chl. (1115) LST 25 Valparaiso, Chl. CX31 .25 Salto, Uru. LT5 .5 Salto, Uru. LT67) Report to PTT Berne. Speighergrasse No. 6  1170(256.3)  1170(256.3)  110(270.1)  E111 .1 Osorno, Chl. (1115) LST 25 Valparaiso, Chl. CX32 .5 V	2	Auchianu, N. Z.	4465/2-			PTT Nord (testing)
E110 1. Santiago, Chl. (1105) 13ABD .05 Bogota, Col. NA 1.5 Naples, I. (1104) RA9 1. Shanghai, Chn. SABAna Grande, Venz. A .3 Lanceston, Ausl5 Madona, Lat. (1104)  110(270.1)  110(270.1)  CE112 .25 Santiago, Chl. (12: Mackay, Ausl5 Meke. Ceneri, Sw. (1167) .5 Report to PTT Berne, Speighergrasse No. 6  1170(256.3)  1170(256.3)  1184 BV. 3 Medellin, Clb5 Valparaiso, Chl5 CX32 .5 Morevideo, Uru5 CX32 .5 Morevideo, Uru5 CX32 .5 Morevideo, Uru5 Moravska, Cz. (1115) .5 4.5 Buenos Aires, Arg5 PRE6 .25 Cruzeiro do Sul, Brz .7 Newcastle, Ausl7 Newcas	100(2	72.6)		8.5)	******	. South Queensland,
13ABD .05   Bogota, Col.   XHHU .1   Shanghai, Chn.   Mackay, Ausl.   CE122 .25   Santiago, Chl. (123   MK .1   Mackay, Ausl.   CE122 .25   Santiago, Chl. (123   MK .25   Salto, Uru.   Salto, Uru.   Salto, Uru.   Salto, Uru.   Salto, Uru.   Salto, Uru.   Shanghai, Chn.   Salto, Uru.   Salto, Uru.   Shanghai, Chn.   Shanghai, Chn.   MK .1   Mackay, Ausl.   CE122 .25   Santiago, Chl. (123   CH34 .25   Salto, Uru.   CH34 .25   CH34	E110 1.	Santiago, Chl. (1105)			1220/	245 8
Marker   M	J3ABD .0	5 Bogota, Col.	XHHU .1		1220(	443.0)
1. R' de Janeiro, Brz. HMS . 15. Mte. Ceneri, Sw. (1167) Shanghai, Chn. Sabana Grande, Venz. A 3 Lanceston, Ausl	NA 1.5	Naples, I. (1104)			CE122 .2	25 Santiago, Chl. (1225)
11		K' de Janeiro, Brz.		Mte. Ceneri, Sw.	CW34 .2	
Venz. Lanceston, Ausl.  110(270.1)    110(270.1)	UARC .15			(1167)	11TR 1	0. Trieste, I. (1222)
A 50. Madona, Lat. (1104)  110(270.1)  CE117 .25 Valparaiso, Chi. Montevideo, Uru. Jocks 10. Nagoya, J. (1175)  St. Moravska, Cz. (113)  W75 Sydney, Ausl., J. M. Prentice, Box 241D, GPO. "At the Cross Cross Const. Chyp. Const. Chyp. Const. Chyp. Chyp						
110(270.1) CE117 .25 Valparaiso, Chi. CX32 .5 Montevideo, Uru. JOCK2 10. Nagoya, J. (1175) KK 11.2 Moravska, Cz. (1113) FPR6 .25 Cruzeiro do Sul, Brz. Sydney, Ausl., J. M. Prentice, Box 241D, GPO. "At the Cross XLIF .015 Wusih, Chn.  SUM SUM SIM SUM SIM SUM SIM SUM SIM SUM SUM SUM SUM SIM SUM SUM SUM SIM SUM SUM SIM SUM SIM SUM SIM SUM SIM SUM SIM SUM SIM SUM SUM SUM SUM SUM SUM SUM SUM SUM SU	.A .3			Speighergrasse No. 6	4ZL .1	L Dunedin, N. Z.
110(270.1)   CE117 .25 Valparaiso, Chi. CX32 .5 Montevideo, Uru. Jock 210 Nagoya, J. (1175)   5 4.5 Buenos Aires, Arg. PR86 .25 Cruzeiro do Sul, Brz 2NC 2. (Annual Carlotte)   W .75 Sydney, Ausl., J. M. Prentice, Box 241D, GP0. "4t the Cross XLIF .015 Wusih, Chn. XLIF .015 Wusih, Chn.	50.	Madona, Lat. (1104)	1170(256	5.3)	12300	243 8)
CX32 .5 Montevideo, Uru. LS8 20. Buenos Aires, Arg. JOCK2 10. Nagoya, J. (175) . CGLS .1 Suchow, Chn. LS8 20. Buenos Aires, Arg. PRB6 .25 Cruzeiro do Sul, Brz .2NC 2. Newcastle, Ausl. W .75 Sydney, Ausl., J. M. Prentice, Box 241D, YGSM .025 Suchow, Chn. XGSM .025 Suchow, Chn. XLIF .015 Wuslh, Chn	110/2	70 1)				
111	110(2	••••		vaiparaiso, Chi.		
4.5 Buenos Aires, Arg. PRB6 .25 Cruzeiro do Sul, Brz .2NC 2. Newcastle, Ausl. 11.2 Moravska, Cz. (1113) PRC9 .25 Campinas, Brz. 5. Gleiwitz, G. (1231) Prentice, Box 241D, CPO. "At the Cross XLIF .015 Wusih, Chn. T240(241.8)	E111 .1	Osorno, Chl. (1115)		Nagova, J. (1175)		
11.2 Moravska, Cz. (1113) PRC9 .25 Campinas, Brz. 5. Gleiwitz, G. (1231) 11.2 Moravska, Cz. (1113) PRC9 .25 Campinas, Brz. 5. Gleiwitz, G. (1231) 1240(241.8) 1240(241.8)	5 4.5	Buenos Aires, Arg.		Cruzeiro do Sul, Brz		Newcastle, Ausl
NW .75 Sydney, Ausl., J. M. XGDZ .01 Changchow, Chn. Prentice, Box 241D, XGSM .025 Suchow, Chn. GPO. "At the Cross XLIF .015 Wusih, Chn.  1240(241.8)		2 Moravska, Cz. (1113)	PRC9 .25	Campinas, Brz.		. Gleiwitz, G. (1231)
GPO. "At the Cross XLIF .015 Wusih, Chn.	W .75	Sydney, Ausl., J. M.	XGDZ .01	Changchow, Chn.	1010/	
GI O. At the Closs AEIF 1013 Wasin, Chn.		Prentice, Box 241D,	XGSM .025	Suchow, Chn.	1240(2	241.8)
		Roads of Sydney".			CE124 .1	,
24 hrs. daily. 4TO .2 Townsville, Aus. (1245)		24 hrs. daily.		Townsville, Aus.	VE124 .1	

	_	FOREIGN	3. C.	JIA	HONG DI HE	QUEIT	0.2	
CW35	.25 .2	Paysandu, Uru. La Rioja, Arg.	1300	(230	0.6)	LKN LS6	.15 3.5	Notodden, Nor. (1357) Buenos Aires, Arg.
XGKT	.01	Suchow, Chn.	CPX	5.	La Paz, Bol.	OA6E	.03	Arequipa, Peru
XHHY	.1	Shanghai, Chn.	CW38	.03	Saito, Uru.	3GL No. 2	.05 .2	Geelong, Ausl. Turin, I. (1357)
2ZL	.05	Hastings, N. Z.	LT10	.1	Santa Fe, Arg.	NO. 2	.2	Turin, 1. (1337)
3TR	.25	Sale, Ausl. A. Gil- christ, Raymond St.,	OAX4C		Lima, Peru, Estaction Radiodifusora DUSA.	1360	(22	0.4)
		"Gippsland's Radio Station."			Calle de Plumeros.	CW41	.05	San Jose, Uru.
6CK	1	Cork, I. F. S.	PRC4	.05	San Paulo, Brz. (1304)	OA4K	.15	Lima, Peru
	2.	Juan-les-Pins, F.	XQHC 2TM	50.	Shanghai, Chn. Tamworth, Ausl.	PRC5	.15	Belem, Brz. (1364)
		(1249). Radio Cote	3ZE	.05	Greymouth, N. Z.	PRD4	.25	Arrarraguara, Brs.
		d' Azur.	32 E	.5	Danzig, Dan. (1303)			(1364)
	.2	Swedish Relay Sta-		••		XQHD		Shanghai, Chn.
		tions.	1310	1/22	8 0)	2BH	.1	Broken Hill, Ausl.
1050	/92	0.0\	1010	,(22	0.0/	2ZR 4PM	.05	Nelson, N. Z. Port Moresby, Ausl.
1250	<b>リ(</b>	9.9)	CE131	.1	Santiago, Chl. (1315)	7BU		Burnie, Ausl.
			LS7	3.	Buenos Aires, Arg.	No. 2	.1	Turin, I. (1366)
CE125	.1	Valparaiso, Chl.	PRE9	.5	Fortaleza, Brz. (1315)	140. 1		14111, 11 (2001)
CX36 EAJ8	.25	Montevideo, Uru. Sn. Sebastian, Sp.	SBC	1.25	Malmo, Swe. (1312)	1270	7/91	8.8)
EAJ8	3.	(1258)	SCK	.25	Karistad, Swe. (1312)	1970	J(21	(0.0)
нс2ЈВ	U3	Guyaquil, Ec.	SCO	.25	Norrkoping, Swe.	CX42		Mantavidos Ileu
XLWU		Wusih, Chn.			1312)	CX42 XHHA	1.	Montevideo, Uru. Hangchow, Chn.
	1.	Rome, I. (1258)	scq	.25	Trollhattan, Swe. (1312)	ZP5	.03	Asuncion, Par. (1376)
	10.	Kuldiga, Lat. (1258)	XLIJ	.05	(1312) Wusi, Chn.	3HS	.05	Horsham, Ausl.
			1ZJ	.05	Auckland, N. Z.		.5	Basie, Swi. (1375)
1260	1/99	/0	SAD	.3	Adelaide, Ausl.		.5	Berne, Swi. (1375)
1200	7(20	ю)						
05120	1.	Santiago, Chl. (1265)	1320	n/22	7 1)	1380	N(21	17.3)
CE126 CW36	.03	Salto, Uru.	1020	0(22	14.1/	100	0(22	
XHHP	.1	Shanghai, Chn.	CW39	1.	Paysandu, Uru.	CE138	1.	Santiago, Chi. (1385
1ZM	.05	Manurewa, N. Z.	HAE2	1.25	Magyarovar, Hun.	CW42	.02	Artigas, Uru.
3WR	.06	Shepparton, Aus.			(1321)	LU6	.05	Mar del Plata, Arg
	2.	Nurnberg, G. (1267)			Bogota, Col.	PRF7	.5	Campoos, Brz.
			XLIA 3RA	.015	Ningpo, Chn.	XLHE		Shanghai, Chn.
1270	1/99	36.1)	3BA	.05	Ballarat, Ausl.	XLHF		Shanghai, Chn.
12/	7(2,	JU.1/	122	A/00	F 4\	4BH	.6 2.	Brisbane, Ausl. Warsaw, Pol. (1384)
	-	Christiansand, Nor.	133	U( ZZ	25.4)	No. 2		Motala, Sw. (1389
LKK	.5	(1276)	CE133		Osorno, Chi. (1335)		130.	(testing)
LKS	.5	Stavanger, Nor. (1276)	CX40	.5	Montevideo, Uru.			,
LS9	5.	Buenos Aires, Arg.	HJ1AE		Barranquilla, Clb., E.	1 20	$\Omega/21$	15.7)
OHA40	H .1	Lima, Peru (1277)			J. Pellet B., P.O.	109	0(2	13.1/
TUA	.5	Tunis, Tun. (1275)			Box 751.	CE139	.1	Rancaqua, Chl.
XDYF		Wu-hu, Chn.	PRE2	.5	R' de Janeiro, Brz.	LR11	1.	La Plata, Arg.
XGUT	1.	Suchow, Chn. Sydney, Ausl. 46	XLIK		Changchow, Chn.	2GN	.1	Goulburn, Ausl.
2SM	1.	Carrington St.,	XSRC 4RO	.01	Suchow, Chn. Rockhampton, Ausl.		5.	Radio-Lyons, F.
		"Double D Eucalyp-		_	Montpellier, F. (1339)			(1393)
		tus" EST Daily 22-8.			Bremen, G.			
					Hanover, G.	140	0(2	14.2)
120	0/2	24 2		2.	Madgeburg, G.	_ 10	- \ <b>-</b>	
179	ᇇ᠘	34.2)		2.	Stettin, G.	CW43		
				2.	Flensburg, G.	OA6D		Areguipa, Peru
CE128	.5	Temuco, Chi. (1285) 5 Colonia, Uru.		1.7	Lodz, Pol. (1339)	PRD5		R' de Janeiro, Brz.
CW37	.02	Bahia Blanca, Arg.		0/0	00 7	XLHO		Shanghai, Chn.
PRF6	10.	R' de Janeiro, Brz.	134	U(2)	23.7)	2ZO 6LX	.1 .3	Paimerston, N. Z. Perth, Ausi.
3	10.	(1282)						Common Wave (140)
XLKE	.05	Tien-tsin, Chn.	CE134		Santiago, Chi. (1345) Paysandu, Uru.	See Si	C in I	ndex by Calls
3AW	.6	Meibourne, Ausl.	LKR	.03	Rjukan, Nor. (1348)			-
4ZC	.00	7 Cromwell, N. Z.	XGE			1/11	0/2	12.6)
	1.	Aberdeen, G. B. (1285)	хнн	R .05	Shanghai, Chn.		0(4	12.0/
	.25	Dresden, G. (1285)	2RN	.5	Dublin, I. F. S. (1348	CE141	.1	Concepcion, Chl.
			2XN	.05	Lismore, Aus.	CX44		Montevideo, Uru.
129	M(2	32.4)	4ZR	.00		PRB5		Franca, Brz. (1415)
12)	J (2		No. 2		Milan, I. (1348) Ille de F., F. (1348)	PRE5	.25	Uberaba, Brz.
CX38	.5	Montevideo, Uru.			Salzburg, Aust. (1348)	2KO	.5	Newcastle, Ausl.
PRA5	5.	San Paulo, Brz. (1295)			Konigsberg, G. (1348	Portu	guese	Common Wave (141
4BK	.3	Brisbane, Aust.			Bordeaux, F. (1348)			
18		Linz, Aust. (1294)		5	Cairo, Eg. (1348)	147	20/2	11.1)
	5	Dornbirn, Aust.				114	. J ( =	/
						1		0 (440
		(1294)	125	こへくつ	99 <i>/</i> 11	CE142	2.1	Santiago, Chl. (142)
		Klagenfurt, Aust.	135	50(2	22.4)	CE142		Paysandu, Uru.
	4.2	(1294) : Klagenfurt, Aust. (1294) Vorarlberg, Aus.	135 CE131	•	22.4) San Antonio, Chi.		.1	

### FOREIGN B. C. STATIONS BY FREQUENCIES

LS11 OFE 12S 3XY 143( CE143 HAE3 LP9 RW10 2WL	.1	Wollongong, Ausl. (1435)	1450(2 CE145 .1 CX46 .1 XLIB .01 4ZW .06 SMU .05 .05 .05 1460(2 CW46 .1 4CA .1 7UV .3 .1.5	Rancagua, Chl. Montevideo, Uru. Suchow, Chn. Dunedin, N. Z. Murray Bridge, Ausl. Paris, F. (1456) Eiffel Tower  05.4) Tucuarembo, Uru. Pecs, Hun. (1465) Antwerp, Belg. (1465) Cairns, Ausl. Ulverstone, Ausl. Dresden, G. (1465) Courtrai, Belg. (1465)	See EAJ in I	Montevideo, Uru. Chatelineau, Blg. (1492) Kashing, Chn. Wallonia, Belg. (1492) South N.S.W., Ausi Binche, Blg. (1492) Nimes, F. (1492) Courtrai, Belg. ommon Wave (1492) Index by Calls
		Russell Yeldon, Woo- longong Brdcstg. Co., "Ferranti Products"	1470(2	Bega, Ausl. 04)		5 Tsinan, Chn.
1440	)( <b>2</b> 0	8.2)	XOMO .25 3ZM .14		3AK .05	Melbourne, Ausl. Hobart, Ausl. Pietersaari, Fin. Radio Alcala, Sp.
CW45	.03	Durazno, Uru.		(1474)		s several 100 watt sta
OA6U	.05	Arequipa, Peru (1443)	1.	Bournemouth, G. B.	tions on 150	
PRG4	.25	Jaboticabal, Brz. (1442)		(1474)		
XLHQ	.03	Shanghai, Chn.	1480(2	02 6)	1530(19	/b.U)
2MO	.05	Gunnedah, Ausl.	1 100(2	01.07	`	, L
Spanish	1 Con	nmon Wave (1447)	CW47 .1	Canelones, Uru.	SCJ .2	Karlskrona, Swe.

	OUTH		Mar o LU6	lei Plata 1380	500	Campo PRF7	1380	500	Sao Pa PRA5	iulo 1295	5000
Al	MERIC	:A	Mend		300		ro do Su		PRAG	815	1000
			LT4	760	200	PRB6	1170	250	PRB8	1000	50
	RGENTIN	. 1	LV10	860	500	Curity		230	PRB9	1017	5000
	KGENTIN	'A'	Resist		300	PRB2	882	250	PRC4	1304	50
Dahia	Blanca		LT5	1160	500	Fortale		2.70	PRE4	941	250
LU2	800	500	Rosar		300	PRE9	1315	500	PRE7	788	1000
LŬ7	1280	200	LT1	780	5000	Franca		000	PRF3	895	5006
	s Aires	200	ĽT3	1080	3500	PRB5	1415	50	Sогоса		,,,,,,,,
LRI	1070	500	LT8	840	350	Jabotic		50	PRD7	1430	250
LR2	910	6000	Salta	040	330	PRG4	1442	250	PRD9	769	250
LR3	950	12000	LV9	900	500	Juiz de		230	Tauba		2,,,,
LR4	890	12000	San J		300	PRB3	857	250	PRD3	1201	250
LR5	830	16000	LV1	620	1500	Pelotas		2.70	Uberal		2.11
LR6	870	16000	LV5	1120	700	PRC3	920	250	PRE5	1410	250
LR7	750	1000	Santa		700	Pernan		230	PRE6	740	1500
LR8	1150	5000	LT9	1060	200	PRA8	750	3000	FKE	740	1300
LR9	1030	5000	LT10	1300	100	Porto		3000		CHILE	
LR10	790	8000			100	PRC2	1090	3000		CHILE	
LSI	710	5000	LV7	nan 820	500	Recife	1090	.5000	Conce		
LS1 LS2	1190	25000	1.77	820	200	PRA8	750	300	CE108	1085	100
	630	4500							CE124	1245	100
LS3 LS4				BOLIVIA		PRA7	ao Preto 1153	50	CE141	1410	100
	670	6000	-					90			100
LS5	1110	4500	La Pa			Rio Cla		250	Curico		100
LS6	1350	3500	CPX	1300	5000	PRF2	725	250	CE120	1205	100
LS7	1310	3000	CP4	1040	10000		Janeiro	4.500	Magall		100
LS8	1230	20000				PRA2	750	1500	CE104	1040	100
LS9	1270	5000		BRAZIL	i	PRA3	860	2500	CE119	1190	100
LS10	590	2870				PRA9	1100	1000	CE143	1430	100
Cordo	ba			aquara		PRB7	800	500	Оѕоги		
.V2	880	7000 l	PRD4	1364	250	PRC6	980	1000	CE111	1115	100
ĹŸ3	620	2000	Bahia			PRC8	1040	250	CE133	1335	100
			PRA4	857	500	PRD2	932	1000	Ranca	gua	
La Pia		1500	Belem			PRD5	1400	500	CE139	1390	100
LP9	1430	1500	PRC5	1360	100	PRE2	1330	500	CE145	1450	100
LRII	1390	1000		Horizonte		PRF4	923	10000		ntonio	
LS11	1430	700	PRC7	1090	250	PRF6	1282	10000	CE135	1355	100
La Ri	oja		Camp			Santos			Santia		
V14	1240	200	PRC9	1175	250	PRB4	1000	1000	CE58	585	1000

CE62	625	1000	OA6E	1350	30	Maracaibo		DENMAR	ĸ
CE66 CE70	665 705	1000 1000	OA6U	1443	50	YV11BMO 1034 YV17BMO	4	Copenhagen	
ČE78	785	1000	Lima OAV4A	750	1500	1153	500	1176	10000
CE82	825	1000	OAX4A OAX4B	1200	1500	Sabana Grand			
CE86	865	1000	OAX4C	1300	1111	YV4RC 1100		ESTONI	A
CE90	905	1000	OAX4E	980	50				
CE94 CE98	945 985	5000 500 <del>0</del>	OA4K	1360	150	FUDAD	_	Tallinn 731	20000
CE100	1005	500	OA4O	1277	100	EUROP		731 Tartu	20000
CE102	1025	100	OA4D	1210	25			517	500
CE106	1065	1000	115	RUGUA	/	AUSTRIA	۱ ا		
CE110	1105	1000		TOGOA				FINLAN	D
CE114	1145	100	Artigas			Dornbirn			
CE118	1185	1000	CW42	1380	20	1294	500	Helsinki OFA 895	1000
CE122 CE126	1225 1265	250 100	Canelo		400	Graz 886	7000	OFA 895 Pietersaari	10000
ČE 131	1315	100	CW47	1480	100 -	Innsbruck	7000	1500	250
CE134	1345	150	Cerro I CW43	Largo 1400	20	519	1000	Pori	
E138	1385	1000	Colonia		20	Klangenfurt		OFD 749	1000
E142	1425	100	CW37	1280	25	1294	4200	Sortavala	
Talcah		100	Duranz	10		Linz	500	<u>.</u> 749	20
CE87	875	100	CW25	1040	500	1294	500	Tampere OFE 1420	700
Talça E115	1155	100	CW45	1440	30	Salzburg 1348	500	Turku	700
Temuc		100	Florida	1300	75	Vienna	300	1429	500
E128	1285	500	CW33	1200	75	592	120000	Viipuri	000
Valdivi	a	-	Merced CW29	1120	50	Vorariberg		OFH 527	1000
E103	1035	100	Monte		30	1294	5000		
Valpara		40000	CX2	570				FRANCI	Ε
CE76	765	10000	CX4	610	1000	BELGIUN	π I	Bustons	
E81 E88	810 885	1000 1000	CX6 CX8 CX10	650	10000	A 4		Beziers	1500
E101	1015	1000	CX8	690	1000	Antwerp ON4EB 1465	100	Bordeaux	130
E105	1050	1000	CX10 CX12	730 770	1000 1000	Binche	100	1077	30000
E109	1090	105	CX12	810	5000	1492	100	1348	1000
E117	1170	250	CX16	850	2500	Brusseis		Grenoble	
CE125	1250	100	CX18 CX20 CX22	890	50	No. 1 620	15000	583	15000
Vina d			CX20	930	2000	No. 2 932	15000	Lille	
CE73	730	1000	CX 22	970	250	Chattelineau	100	1213	60000
	LOMBI		CX24	1010	10000	ON4CE 1492 Courtrai	100	Limoges 913	500
	LOWIDI	^	CX26 CX28	1050 1090	2000 2000	1465	100	Lyons	500
Armen	ia		CX30	1130	500	Liege		YN 648	100000
HJ4ABJ	1000	50	CX32	1170	500	ON4RW 1500	100	RL 1393	5000
Barran	quilla		CX34	1210	500	Radio Comte	400	Marseilles	500
HJ1ABA	1 1330	100	CX36 CX38	1250	250	1500	100	749	500
Bogota HJN	681	500	CX38	1290	500	Seraing	100	Montpellier	500
HJ3ABI	D 1100	50	CX40	1330	500	Verviers	100	Nice	500
НЈЗАВІ		1000	CX42 CX44	1370 1410	1000 1000	No. 1 1500	100	1249	200
HJ3ABI	I 1005	2000	CX46	1450	100	No. 2 1500	100	Nimes	
HJ3AB1		50	CX48	1490	1500	Walionia		1492	200
Cartag	ena		Paysan			No. 1 1492	100	Paris	
HJ1AB		50	CW35	1240	250	No. 2 1500	100	AGEN 868 FPTT 695	600 7000
Medell HJ4ABI		300	CW39	1320	100	BULGARI	Α.	ILLE 1348	2000
IGARDI	1230	300	CW40	1340	30	BULGARI		LL 1424	80
E	CUADO	R	CW44	1420	100	Sofia		PP 959	6000
			Rocha	020	100	850	1000	Eiffel 1456	500
Guyaq	uil		CW19	920	100			Radio-Norma	ndie
IC2ET	1153	300	Salto CW23	1000	250	CZECHOSLOV	/AKIA	1113	1000
HC2JB	1250	30	CW27	1080	250	Bratislava		Rennes 1040	4000
D.4	RAGUA	v	CW31	1160	250	OKR 1004	13500	Strasburg	4000
	GUA	•	CW32	1180	250	JIII 1004	10000	SPTT 859	4000
Asunci	on		CW34 CW36	1220	250	Brno		Toulouse	
ZP1	770	500	CW36	1260	30	OKB 922	32000	776	200
ZP3	1000	300	CW38	1300	30	Kosice	3/00	913	6000
P4	1200	100	San Jo			1158	2600	GERMAN	
P5 P7	1376 1083	100 700	CW41	1360	50	Moravska OKK 1113	11200	GERMAN	41
.P7 2P9	1083 898	1500	CW30	1140		Praha	11200	Berlin	
Villarr	ica	1300	CW46	1460	30	OKP 633	120000	841	10000
ZP15	700		225			No. 2 1204	5000	Bremen	
			VE	NEZUEI	-A	-		1330	150
	PERU			_		DANZIG	i	Breslau	10000
A			Caraca		5000	Dana'-		950	10000
Arequi DA6D	рра 1400	150	YV1RC YV3RC	960 1200	3000 3000	Danzig 1303	500	Cassel 1195	150
					.2000	1303	200	1195	1.70

Coblenz 1195 2000	IRISH FREE STATE	Lodz 1339 1700	SWITZERLAND
Cologne 658 100000	Athlone	Lwow	Baste
Dresden	Belfast	Poznan 795 16000	Berne 1375 500
Flensburg	977 1000	868 16000	1375 500
1330 1500	Cork 1240 1000	Porun 986 24000	Beremunster 556 100000
Frankfurt 1195 17000	6CK 1240 1000 Dublin	Warsaw No. 2 1384 2000	Monte Ceneri
Freiburg 1195 5000	2RN 1348 500	Wilne	Sottens 1167 15000
Gleiwitz	ITALY	536 16000	677 25000
1231 5000 Hamburg	Bari	PORTUGAL	U. S. S. R.
904 100000	I1BA 1059 20000	Lisbon	Alexandrovsk
Hanover 1330 1500	Bolzano IIBZ 536 1000	CT1AA 629 20000   Parede	RW38 580 1200 Archangel
Kaiserslautern	Firenze I1FI 610 20000	CT1GL 1031 5000	RW36 662 10000
Konigsberg	Genoa	ROUMANIA	Astrakhan RW35 589 10000
1031 60000 1348 1500	IIGE 986 10000 Milan	Bucharest	Dnepropetrovsk
Leipsig 785 120000	I1MI 814 50000 No. 2 1348 4000	823 12000	Elista
Magdeburg	Naples	SPAIN	RW32 671 2000
1330 1500 Munich	I1NA 1104 1500 Palermo	Alcala	RW55 959 1000
740 100000 Nurnberg	I1PA 565 4000	1500 200	Frounze RW82 608 4000
1267 2000	Rome I1RO 713 50000	Barcelona EAJ1 795 7500	Gomel RW40 959 1200
Stettin 1330 1500	No. 3 1258 1600 Trieste	EAJ15 1022 3000	Gorki
Stuttgart 574 100000	I1TR 1222 10000	Madrid EAJ2 731 3000	Groznyi
Trier	Turin I1TO 1140 7000	EAJ7 1095 7000	RW23 676 1200
1195 2000	No. 2 1357 200	Oviedo EAJ19 1022 700	RW85 635 2000
GREAT BRITAIN	LATVIA	San Sebastian	ljevsk RW78 825 4000
Aberdeen	Kuldiga	EAJ8 1258 3000	Lochar-Oia RW61 888 1000
Bournemouth		Seville EAJ5 731 1500	Ivanovo
1474 1000 Cardiff	1104 50000	Valencia	RW31 625 10000 Karaganda
WR 804 50000	Riga YLZ 583 15000	EAJ3 850 1500	RW46 653 10000 RW46 686.5 1200
WN 1149 20000 Daventry	NORWAY	Spain has many sta- tions of 100 watts or	Kazan
MR 1013 50000 Falkirk		less on 1492 and 1500	RW17 644 10000 Kharkov
SN 1050 50000	Aalesund LKA 850 350	kcs. For complete list see Index by Calls.	RW20 1185 10000 Kiev
SR 767 50000 London	Bergen LKB 850 1000	SWEDEN	RW9 722 36000
LN 1149 20000 LR 877 50000	Bodo		Krasnodar RW33 1050 10000
Manchester	Fredrikstad	Faiun SCC 1086 2000	Leningrad RW70 1040 10000
NN 1149 20000 NR 668 50000	LKF 776 700 Hamar	Goteborg SBB 941 10000	Magnitogorsk
Newcastle	LKH 519 700	Horby	571 10000 Makhatch
Plymouth	Kristianssand LKK 1276 500	SBH 1131 19000 Karlskrona	RW 27 689 4000 Minsk
1474 300	Nobodden LKN 1357 150	SCJ 1530 200 Karlstad	RW10 1438 100000
HOLLAND	Porsgrund	SCK 1312 250	Moscow RW39 832 100000
Hilversum	Rjukan	Malmo SBC 1312 1250	Mourmansk RW79 610 10000
PFBI 995 20000	LKR 1348 150 Stavanger	Motala 1389 15000	Naltchik
HUNGARY	LKS 1276 500	Norrkoping	Odessa
Budapest HAL 546 120000	Tromsoe LKM 1186 100	SCO 1312 250 Stockholm	RW69 968 3000 Oufa
Magyarovar	Trondelag LKT 629 20000	SBA 704 55000 Sundsvall	RW22 617 10000 Oukhta
HAE-2 1321 1250 Miskolc	POLAND	SBD 601 10000	RW67 968 10000
HAE-3 1438 1250		Trollhattan SCQ 1312 250	Oust-Abakansk RW84 635 1200
Nyiregyhaza HAE 1122 6200	Cracow 1022 2000	Swedish Common	Penza
Pecs HAE-4 1465 1250	Katowice	Wave 1402. See Index	Petropaviovsk
	758 12000	by Calls.	RW71 689 1200

Petrozavodsk RW 29 648 Saransk	10000	Kwangsti XGOE 1070 Nan-chang	1000	XLIJ 1310 XLWU 1250 Yuen-nan	50 50	Tokyo JOAK-1 870 JOAK-2 590	10000
RW65 734	1000	XGOC 1132 Nanking	500	XGOY 698	500	KOREA	
RW52 859	10000	XGOA 660	75000	FORMOSA	١	Maile	
RW73 725	10000	Ningpo XLIA 1320	15	Taihoku		Keijo JODK-1 900	10000
Stalingrad RW34 554	10000	Peiping	13	JFAK 670	10000	JODK-2 610	10000
Stalino	10000	XGOP 950	100	Talnan			
RW26 776	10000	XGOT 1220 XHPA 1194	500 30	JFBK 720	1000	MANCHUOK	·UO
Syktyvkar RW41 563	1 200	XHPA 1194 XOMO 1470	250	INDIA		Dairen	
RW41 563 Tcheboksary	1 200	XOPP 952.8	100			JQAK 652	500
₹W74 680	1200	Shanghai		Bombay VUB 830	3000	Harbin MOHB 674	1000
Tchebabinsk	200	XHHA 840 XHHB 740	150 50	Calcutta	3000	MTFY 674	1000
₹W68 824 Tchernigov	200	XHHC 780	100	VUC 810	3000	Hoten	
₹W86 1013	10000	XHHD 860	50	Lahore		Z1LY 900	2000
Tiraspol		XHHE 940	1000	VUL 882 Madras	100	Hsinking MTCY 560	100000
W57 1068	10000	XHHF 960 XHHG 1020	100 100	VUM 770	200	Mukden	100000
Tomsk RW48 645	1200	XHHH 1040	100			MTBY 897	1000
Vinnetza		XHIII 1060	100	INDO-CHI	NA	Shinkyo	******
W75 1095	10000	XIIHJ 1080	200	Calana		MTAY 560	100000
Urdjonikidze	10000	XHHL 1140 XHHM 1180	100 100	Salgon F31CD 840	12000	PHILIPPIN	ES
tW64 752 Vladivostok	10000	XHHN 1200	100				
W28 635	700	XIIIIP 1260	100	JAPAN		Manila KZEG 780	1000
tW28 725	10000	XHHR 1340	50 100	Akita		KZIB 900	1000
YUGOSLAV	1 A	XHHS 1100 XHHU 1160	100	JOUK 645	300	KZRM 618.5	50000
TUGUSLAV	-	XHHV 880	100	Asahikawa			
Belgrade		XHHX 920	100	JOCG 655	300	SIAM	
686	2500	XHHY 1240 XLHB 560	100 45	Fukut JOFG 990	500	Bangkok	
Ljubijana 527	5000	XLHB 560 XLHD 720	100	Fukuoka	,,,,,,	HSPI 857	2500
Zagreb	.5000	XLHE 1380	75	JOLK 680	500	HS7PJ 882	
1086	700	XLHF 1380	50	Hakodate	500	AFRICA	١.
		XLHI 760 XLHJ 760	7.5 100	JOVK 680 Hamamatsu	500	ALGERIA	
ASIA		XLHJ 760 XLHL 800	100	JODG 635	300	ALGERIA	
7017		XLHM 1120	50	Hiroshima		Algiers	
CEYLON		XLHN 1120	200	JOFK 850	10000	941	12000
		XLHO 1400 XLHO 1440	100 30	Kanazawa JOJK 710	3000	EGYPT	
Colombo /PB 700	1750	XLHQ 1440   XMHA 600	1000	Kochi			
(FB 700		XMHB 980	500	JORK 720	500	Alexandria	35.
CHINA		XMHC 700	500	Kokura JOSK 735	1000	1122	250 500
		XOHC 1300 XOHD 1360	50000 200	JOSK 735 Kumamoto	1000	Cairo	500
Canton KGOK 750	1000	XOHF 1480	200	JOGK 790	10000	620	20000
KRI 1000	100	Shang-si		Kyeto	200	1348	500
Chang-Chow	10	XOTY 1000	50	JOOK 960 Maebashi	300	KENYA	
KGDZ 1174 KLIK 1330	10 50	Suchow XGBL 870	25	JOBG 970	500	ME-NIA	
Chang-sha		XGED 1340	15	Matsuye		Nairobi	
KGOH 570	1000	XGKT 1240	10	JOTK 625	500	VQ7LO 858	60
	15	XGLS 1230 XGRC 1330	100 10	Nagano JONK 940	500	MOROCC	0
Che-tsang XGCK 990	7.5	XGRC 1330 XGSM 1170	25	Nagasaki			
Foo-chow		XGUT 1270	10	JOAG 930	500	Casabianca	-
XGOF 675	1000	XLIB 1450	10	Nagoya JOCK-1 810	10000	GNO 983 Rabat	2
Hangchow XGOD 977.5	1000	Taiyan XTOY 625	500	JOCK-1 810 JOCK-2 1175	10000	CNR 601	2500
XGOD 977.5 XGOW 1000	5000	Tientsin	.700	Niigata			
XHHA 1376	50	XLKB 1280	50	JOQK 920	500	SOUTH RHO	DESIA
Honan	200	XHKA 1050	.50	Okayama JOKK 700	500	Salisbury	
XGOX 1070	200	Tsinan XOCL 1500	7.5	Osaka 700		681.8	150
Hongkong ZBW 845	2000	XOST 855	500	JOBK-1 750	10000		
ZEK 640	500	Tsin-tao		JOBK-2 1085	10000	TUNISIA	
Hsing-shih		XGGW 1150	50	Sapporo JOIK 830	10000	Tunis	
XGSS 610	15	T'ung Hsien LUHO 750	20	Sendal	10000	TUA 1275	50
Huchow XHGS 730	50	Wu-hu		JOHK 770	10000		
Kashung		XDYF 1270	15	Shizuoka	500	UNION S. AF	RICA
XGKA 895	15	XGWH 830	30	JOPK 780 Tokushima	500	Bloemfontaine	
XGML 714.3	7.5	Wusih XLIF 1170	15	JOXK 980	500	ZTB 790	506
XLKS 1490							

	_					2NG	1230	2000	1YX	880	500
Cape		10000	Geelon		50	North		2000	iZB	1090	200
ZTC	600	10000	3GL	1350	50	6AM	arn 1070	500	1ŽJ	1310	65
Durba		4500	Gippsla		5000						0.5
ZTD	750	1500	3GI	830	7000		era Rive 700		Balclu		
	mstown	40000	Goulbu		400	2NR	700		4ZR	1340	5
ZTG	560	10000	2GN	1390	100	Perth		300	Christ	church	
	nesburg		Grafto			6IX	1400		3 Y A	720	2500
ZTJ	645	10000	2GF	1210	50	6ML	1130	300	3 Y L	1200	500
Pretor				660	7000	6PR	880	500	3ZM	1470	140
ZTP	952	500	Gunne			6WF	690	3500			
			2MO	1440	50		Vioresby		Crom		-
0	CEANI	Α	Hamilt			4PM	1360	()	4ZC	1280	- /
_			3HA	1010	300	Renm			Dune		
A	JSTRALI	A	Hobart			5RM	850	500	4 Y A	790	500
			7HO	820	50	Rockh	ampton		4YO	1140	200
Adelai	de		7ZL	590	1000	4RK	910	2000	4ZB	1050	70
5AD	1310	300		1500	1	4RO	1330	50	4ZL	1220	100
5CL	730	2000	Horsha	m	-	Sate			4ZM	1050	100
5DN	960	300	3HS	1370	50	3TR	1240	250	4ZO	1050	25
5KA	1200	300	Kalgoo			Shepp	arton		4ZW	1450	60
Albur		00	6GF	720		3WR	1260	60	Gisbo	rne	
2AY	1480	50	6KG	1210	500	Swan	Hill		2ZJ	980	250
Ауг	1100	00	Katoon			3SH	1080	50	2ZM	1150	17
4A Y	980	30	2KB	1070	- 1	Sydne		- 1	Greyn	iouth	
Ballar		00	Launce			2BL	740	3000	3ZE	1300	50
3BA	1320	50	7LA	1100	300	2CH	1180	1000	3ZR	940	400
Bega	1020	50	7.031	630	7000	2FC	610	3500	Hamil	ton	
	1470		Lismor		,,,,,	2GB	870	1000	1211	770	40
Bendi			2XN	1340	50	2K Y	1020	1000	Hastir	105	
3B()	970	200	Macka			2SM	1270	1000	2Z.L	1240	50
Brisba		200	4MK	1160	100	2UE	950	1000	Inverc		
4BC	1120	850	Marybo		100	2ŬW	1110	750	4ZP	620	500
4BH	1380	600	4MB	1060	50	Tamw		7.70	Magu		• • • • •
4BK	1290	300	Melbou		30	2TM	1300		1ZM	1260	50
10G	800	2500	3AK	1500	50	Toowo			Maste	rton	
Broke		2000	3AR	630	4500	4GR	1000	300	27.0	1170	- 8
2BH	1360	100	3AW	1280	600	Towns		300	Naple		
Bunb		100	3DB	1030	600	4TO	1170	200	2Z1I	820	65
6BY	980	50	3KZ	1180	000	Ulvers		200	Nelsor		
Burni.		30	310	770	3500	7UV	1460	300	2ZR	1360	50
- Burno 7BU	1360		3UZ	930	600	Wagga		300		lymouth	
			3XY	1420	600	2WG	1150	50	2YB	750	100
Cairn					35	Warwi		30		rston N.	100
4CA	1470	111.1	3YB	1060	25	4WK	900	50	2ZF	960	150
Canbe		500		Bridge	50			30	220	1400	100
2CA	1050	500	5MU	1450	อบ		ngong	50	Wairo		100
Corow			Mildura			2WL	1430	30	2Z.P	900	150
2CO	670	7500	3MA	900	50	NEW	/ ZEAL	IND	Weltin		130
	l Brook	ac	Newcas		-00		-		2 Y A	570	5000
5CK	640	7500	2HD	1140	500	Auckla		10000	2YC	840	200
5 <b>P</b> 1	1040	2000	2KO	1410	500	1 Y A	650	10000	210.	0.40	200

### FOREIGN B. C. STATIONS BY CALLS

CE58	585	CE 111	1115	CPX	1300	C W46	1460	CX48	1490	EAJ27	1492	EAJ55	1492
CE62	625	CE114	1145	CP4	1040	CW47	1480	EAJ1	795	EAJ29	1500	F8GC	810
C E 66	665	CE115	1155	CT1AA	629	CX2	570	EAJ2	731	EAJ30	1500	F31CD	840
CE70	705	CE117	1170	CT1GL	1031	CX4	610	EAJ3	850	EAJ31	1492	HAE	1122
CE73	730	CE118	1185	CW19	920	CX6	650	EAJ4	1492	EAJ32	1500	HAE2	1438
CE76	765	CE119	1190	CW23	1000	CX8	690	EAJ5	731	EAJ33	1492	HAE3	1438
CE78	785	CE120	1205	CW25	1040	CX10	730	EAJ6	1492	EAJ34	1492	HAE4	1465
CE81	805	CE122	1220	CW27	1080	CX12	770	EAJ7	1095	EAJ35	1500	HAL	546
CE82	825	CE124	1245	CW29	1120	CX14	810	EAJ8	1258	EAJ36	1500	HAL2	1321
C E86	865		1255	CW30	1140		850	EAJ9	1492	EAJ37	1500	HC2ET	1153
CE87	875		1265	CW31	1160		890	EAJ10	1492	EAJ38	1500	HC2JB	1250
CE88	885		1285	CW32	1180	C X 20	930	EAJ11	1500	EAJ39	1492	HJN	681
CE90	905	CE131	1315	CW33	1200	C X 22	970	EAJ12	1492	EAJ40	1500	HJ1ABA	1330
CE94	945	CE133	1335	CW34	1220	CX24	1010	EAJ13	1492	EAJ41	1492	HJ1ABM	1154
CE98	985	CE134	1345	CW35	1240	CX26	1050	EAJ14	1500	EAJ42	1492		1100
CE100	1005	CE135	1355	CW36	1260	CX28	1090	EAJ15	1022	EAJ43	1492	HJ3ABE	1200
CE101	1015	CE138	1380	CW37	1280	CX30	1130	EAJ16	1492	EAJ44	1492	HJ3ABH	1005
CE102	1020	CE139	1390	CW38	1300	CX32	1170	EAJ17	1492	EAJ45	1500	HJ4ABJ	1000
CE103	1035	CE141	1410	CW39	1320	CX34	1210	EAJ19	1022	EAJ46	1492		1230
CE104	1040	CE142	1425	CW40	1340	CX36	1250	EAJ20	1492	EAJ47	1492	HSPI	857
CE105	1050	CE 143	1430	CW41	1360	CX38	1290	EAJ21	1492	EAJ48	1492	H57PJ	882
CE106	1065	CE145	1450	CW42	1380	CX40	1330	EAJ23	1492	EAJ49	1500	I1BA	1059
CE108	1085	CNO	983	CW43	1400	CX42	1370	EAJ24	1492	EAJ51	1492	#1BZ	536
CE109	1090	CNR	601	CW44	1420	CX44	1410	EAJ25	1502	EAJ52	1492	I1FI	610
CE110	1105	COA	1175	CW45	1440	CX46	1450	EAJ26	1502	EAJ53	1492	11GE	986

IIMI	814	LT4	760	PRE9	1315	scv	1402	XLKS	1490	3AK	1500
I1NA	1104	LT5	1160	PRF2	725	scw	1402	XLWU	1250	3AR	630
I1PA	565	LT8	840	PRF3	895	SPTT	859	XMHA	600	3AW	1280
I1R0	713	LT9	1060	PRF4	923	TUA	1275	ХМНВ	980	3 <b>B</b> A	1320
I1TO	1140	LT10	1300	PRF6	1282	VPB	700	XMHC	700	3 <b>BO</b>	970
I1TR	1222	LUHO	750	PRF7	1380	VQ7L0	858	XOCL	1500	3 D B	1030
JFAK	670	LU2	800	PRG4	1442	VUB	855	XOMO	1470	3GI	830
JFBK	720	LU6	1380	RW9	722	VUC	810	XOPP	952.8	3GL	1350
JOAG	930	LU7	1280	RW10	722	VUL	1200	XOST	855	3HA	1010
JOAK-1	870	Lvi	620	RW17	644	VUM	770	XOTY	1000	3HS	1370
JOAK-2	590	LV2	880	RW20	1185	XDYF	1270	XQHC	1300	3HS 3KZ	1180
JOBG	970	LV3	620	RW22	617	XGBL		XQHD	1360	3LO	770
JOBK-1	750	LVS	1120	RW23	676	XGCK	870 990	XQHF	1480	3MA	900
JOBK-2	1085	LV7	820	RW26	776	XGED					
JOCG	655	LV9	900	RW27	689	XGKA	1340 1140	XSRC	1330	3SH	1080
JOCK-1	810	LV10	860	RW28					625	3TR	1240
JOCK-2	1175	LV14	1240	RW28	635	XGDZ	1470	YLZ	583	3UZ	930
JODG	635	МОНВ	674	RW29	725	XGGW	1150	YN	648	3WR	1260
JODK-1	900	MTAY	560	RW30	648	XGKA	895	YNCRG		3WV	580
JODK-2	610	MTBY			913	XGKT	1240	YNOP	1230	3XY	1420
JOFG	990	MTCY	890	RW31	625	XGLS	1230	YVIRC	960	3YA	720
JOFK		MICY	560	RW32	671	XGML	714.3	YV3RC	1200	3YB	1060
JOGK	850	MTFY	674	RW33	1050	XGOA	660	YV4RC	1100	3YL	1200
	790	OAX4A	750	RW34	554	XGOC	1132	YV11BN		3ZE	1300
JOHK	770	OAX4B	1200	RW35	589	XGOD	977.5	YV17BN	AO1153	3ZM	1470
JOIK	830	OAX4C	1300	RW36	662	XGOE	1070	ZBW	845	3ZR	940
101K	710	OAX4E	980	RW38	580	WGOF	675	ZEK	640	4AY	980
JOKK	700	OA4AR	1210	RW39	832	XGOH	570	Z1LY	900	4BC	1120
JOLK	680	OA4K	1360	RW40	959	XGOK	750	ZP1	770	4BH	1380
JONK	940	OA40	1277	RW41	563	XGOP	950	ZP4	1200	4BK	1290
JOOK	960	OA6D	1400	RW42	598	XGOS	711	ZP5	1376	4CA	1470
JOPK	780	OA6E	1350	RW46	653	XGOT	1220	ZP9	898	4GR	1000
JOOK	920	OAGU	1443	RW46	686.5	XGOW	1000	ZTB	790	4MB	1060
JORK	720	OFA	895	RW48	645	XGOX	1070	ZTC	600	4MK	1160
JOSK	735	OFD	749	RW51	748.1	XGOY	698	ZTD	750	4PM	1360
JOTK	625	OFE	1450	RW52	859	XGSM	1170	ZTG	560	4QG	800
JOUK	645	OFH .	527	RW55	959	XGSS	610	ZTJ	645	4QN	600
JOVK	680	OKB	922	RW56	640	XGTM	840	ZTP	952	4RK	910
JOXK	980	OKK	1113	RW57	1068	XGUT	1276	1YA	650	4RO	1330
JQAK	650	OKP	633	RW61	888	XGWH	830	1YX	880	4TO	1170
KZEG	780	OKR	1004	RW64	752	XGWT	1330	1ZB	1090	4WK	900
KZIB	900	ON4CE	1492	RW65	734	XHGS	730	1ZH	770	4YA	790
KZRM	618.5	ON4CE	1500	RW67	968	XHHA	840	1ZJ	1310	440	1140
LKA	850	ON4EB	1492	RW68	824	XHHA	1370	1ZM	1260	4ZB	1050
LKB	850	ON4RW	1500	RW69	968	хннв	740	2AY	1480	4ZC	1280
LKD	850	PFBI	995	RW70	1040	хннс	780	2BH	1360	4ZL	1220
LKF	776	PP	959	RW71	689	XHHD	880	2BL	740	4ZM	1050
LKH	519	PRA2	750	RW73	725	XHHE	940	2CA	1050		1050
LKI	845	PRA3	860	RW74	680	XHHF	960	2CH	1190	4Z0	
LKK	1276	PRA4	857	RW75	1095	XHHG	1020	2CO	670	4ZP 4ZR	620 1340
LKM	1186	PRA5	1295	RW78	825	XHHH			550	4ZR	
LKN	1357	PRA6	815	RW79	610	XHHI	1040 900	2CR 2FC		4ZW	1450
LKO	1181	PRA7	1154	RW82	608				610	5AD	1310
LKP	850	PRA8	750	RW84	635	XHHJ	1080	2GB	870	5CK	640
LKR	1348	PRA9	1100	RW85		XHHL	1140	2GF	1210	5CL	730
LKS	1276	PRB2	882	RW86	635	XHHM	1180	2GN	1390	5DN	960
LKT	629	PRB3	857		1013	XHHN	1200	2HD	1140	5KA	1200
LP9	1430	PRB4		SBA	704	XHHP	1260	2KB	1070		
LR1	1070	PRB5	1000	SBB	941	XHHS	1100	2KO	1410	5MU	1450
LR2	910	PRB6	1415 1170	SBC	1312	XHHU	1160	2KY	1020	5PI	1.040
LR3	950				601	XHHV	880	2MO	1440	5RM	850
LR4	890	PRB7	800	SBH	1131	XHHX	920	2NC	1230	l .	
LR5			1000	SCA	1402	XHHY	1240	2NR	700	6AM	1070
LR6	830 870	PRB9	1017	SCB	1402	XHKA	1050	2RN	1348	6BY	980
LR7	750	PRC2	1090	SCC	1086	XHPA	1194	2SM	1270	6CK	1240
LR8		PRC3	920	SCD	1402	XKRI	1071.4	2TM	1300	1	
LR9	1150	PRC4	1304	SCE	1402	XLHB	560	2UE	950	6GF	720
	1030	PRC5	1364	SCF	1402	XLHD	720	2UW	1118	61 X	1400
LR10	790	PRC6	980	SCG	1402	XLHE	1380	2WG	1150	1	
LR11	1390	PRC7	1090	SCH	1402	XLHF	1380	2WL	1430	6KG	1210
LS1	710	PRC8	1040	SCI	1402	XLHI	760	2XN	1340	6ML	1130
LS2	1190	PRC9	1175	SC1	1530	XLHJ	760	2YA	570	6PR	880
LS3	630	PRD2	932	SCK	1312	XLHL	800	2YB	750	1	
LS4	670	PRD3	1201	SCL	1402	XLHM	1120	2YC	840	6WA	560
LS5	1110	PRD4	1364	SCM	1402	XLHN	1200	2ZD	1170	6WF	690
LS6	1350	PRD5	1400	SCN	1402	XLHO	1280	2ZF	960	7BU	1360
LS7	1310	PRD7	1430	sco	1312	XLHQ	1440	2ZH	820		
LS8	1230	PRD9	769	SCP	1402	XLIA	1320	2ZJ	980	7H0	820
LS9	1270	PRE2	1330	SCQ	1312	XLIB	1450	2ZL	1240	7LA	1100
LS10	590	PRE4	941	SCR	1402	XLIF	1170	2ZM	1150	1	
LS11	1430	PRE5	1410	SCS	1402	XLIJ	1310	2ZO	1400	7NT	750
LT1	780	PRE6	740	SCT	1402	XLIK	1330	2ZP	900	7UV	1460
LT3	1080	PRE7	788	SCU	1240	XLKB	1230	2ZR	1360	7ZL	590
						~-NB			2300	~	330

### The Frequency Checks

NGINEERS of the Federal Communications Commission have arranged a schedule of programs for the purpose of checking the frequency of a great number of small-powered stations. ing stations are silenced for these tests which continue for twenty minutes with frequent announcements of call and location. These checks provide an excellent opportunity for logging many stations which might otherwise never be heard. special programs are repeated on the first seven days of each month. The present schedule is given below:

### The First Sunday

	The	First	Sunda	ıy
3:00-3:20	KLCN	1290	100	Blytheville
3:30-3:50	KXYZ	1440	500	Houston
3:50-4:10	KTUL	1400	500	Tuisa
4:00-4:20	KPAC	1260	500	Port Arthur
4:10-4:30	KGDY	1340	250	Huron
4:20-4:40	KRGV	1260	500	Weslaco
4:50-5:10	KARK	890	250	Little Rock
5:00-5:20	KGKO	1240	500	Wichita Falls
5:20-5:40	WNAD	1010	1000	Norman
5:40-6:00	KUOA	1260	1000	Fayetteville
0.40-0.00			Monda	
A 110 A 10	The		100	Brooklyn
2:00-2:20	WCNW	1500		Johnstown
2:00-2:20	WJAC	1310	100	White Plains
2:10-2:30	WFAS	1210	100	
2:10-2:30	WRAK	1370	100	Williamsport
2:20-2:40	WNBF	1500	100	Binghamton
2:20-2:40	WCHS	580	500	Charleston
2:30-2:50	WAGM	1420	100	Presque Isle
2:30-2:50	WBTM	1370	100	Danville
2:40-3:00	WMFF	1310	100	Plattsburg
2:40-3:00	WLVA	1200	100	Lynchburg
2:50-3:10	WHDL	1420	100	Olean
3:00-3:20	WCAX	1200	100	Burlington
3:10-3:30	WSYB	1500	100	Rutland
3:10-3:30	WTEL	1310	100	Philadelphia
3:20-3:40	WIBX	1200	100	Utica
3:30-3:50	WQDM	1370	100	St. Albans
3:30-3:50	WKOK	1210	100	Sunbury
3:40-4:00	WMBO	1310	100	Auburn
3:40-4:00	WLEU	1420	3100	Erie
3:50-4:10	WABY	170	100	Albany
3:50-4:10	WBAX	1210	100	Wilkes-Barre
4:00-4:20	WCAD	1220	500	Canton
4:00-4:20	WHAT	1310	100	Philadelphia
4:00-4:20	KOOS	1200	100	Marshfield
4:10-4:30	WRDO	1370	100	Augusta
4:10-4:30	WBBL	1210	100	Richmond
4:10-4:30	KGBU	900	500	Ketchikan
4:20-4:40	WNBZ	1290	100	Saranac Lake
4:20-4:40	WBRE	1310	100	Wilkes-Barre
4:20-4:40	KGVO	1260	1000	Missoula
4:30-4:50	WMAS	1420	100	Springfield
4:30-4:50	KPQ	1500	100	Wenatchee
4:40-5:00	WRAW	1310	100	Reading
4:40-5:00	KGY	1210	100	Olympia
4:50-5:10	WAAT	940	500	Jersey City
4:50-5:10	KRKO	1370	100	Everett
5:00-5:20	WSYR	570	250	Syracuse
5:00-5:20	KFXD	1200	100	Nampa
5:10-5:30	KVL	1370	100	Seattle
5:20-5:40	KGEZ	1310	100	Kalispell
5:30-5:50	KUJ	1370	100	Walla Walla
5:40-6:00	KGCX	1310	100	Wolf Point

# USE HEAD PHONES FOR DISTANCE

Phones cut out the room noises and permit a lower volume thus increasing the signalto-noise ratio. Then, too, they permit the use of the radio when others in the house are asleep or ill.

We can furnish an excellent set of Head Phones—manufactured by Trimm — for only \$2.75. These are 2000 ohm and are one of the best of the lower priced instruments.

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

(In Ohio add 3% for state sales tax)

### The Radex Press Inc.

Conneaut, Ohio

```
5:50-6:10
           KFQD
                      780
                            250
                                  Anchorage
                                                         4:10-4:30
                                                                     WOSII
                                                                               570
                                                                                     750
                                                                                           Columbus
                                                         4:10-4:30
6:00-6:20
           KSEI
                      900
                            250
                                  Pocatello
                                                                     KGFL
                                                                              1370
                                                                                     100
                                                                                           Roswell
6:10-6:30
            KVOS
                     1900
                            100
                                  Rellingham
                                                         4:20-4:40
                                                                     WSAZ
                                                                              1190
                                                                                    1000
                                                                                           Huntington
6:20-6:40
            KIT
                     1310
                            100
                                  Vakima
                                                         4:20-4:40
                                                                     WBEO
                                                                              1310
                                                                                     100
                                                                                           Marquette
6 30-6 56
            KRSC
                     1120
                            100
                                  Seattle
                                                         4:20-4:40
                                                                     KADA
                                                                              1200
                                                                                     100
                                                                                           Ada
6:40-7:00
            KXRO
                     1310
                            100
                                  Aberdeen
                                                         4:30-4:50
                                                                     WGAL
                                                                              1500
                                                                                     100
                                                                                           Lancaster
6:50-7:10
            KFIO
                     1120
                                                         4:30-4:50
                            100
                                  Spokane
                                                                     WKBN
                                                                               570
                                                                                     500
                                                                                           Voungetown
7:00-7:20
            KFJI
                     1210
                            100
                                  Klamath Falls
                                                         4:30-4:50
                                                                     WCAL
                                                                              1250
                                                                                    1000
                                                                                           Northfield
7:10-7:30
                                                         4:40-5:00
            KMED
                     1310
                            100
                                  Medford
                                                                     WCAZ
                                                                              1070
                                                                                     100
                                                                                           Carthage
7:20-7:40
            KORE
                     1420
                            100
                                  Eugene
                                                         4:40-5:00
                                                                     KEJB
                                                                              1200
                                                                                     100
                                                                                           Marshalltown
7:30-7:50
            KAST
                     1370
                            100
                                  Astoria
                                                         4:50-5:10
                                                                     WIRE
                                                                              1400
                                                                                     500
                                                                                           Indianapolis
7:40-8:00
                     1420
            KRLC
                            100
                                  Lewiston
                                                         4:50-5:10
                                                                     WACO
                                                                              1420
                                                                                     100
                                                                                           Waco
7:50-8:10
            KINY
                     1310
                            100
                                  Juneau
                                                         5:00-5:20
                                                                     WDZ
                                                                              1070
                                                                                     100
                                                                                           Tuscala
                                                         5:00-5:20
                                                                     KGDE
                                                                              1200
                                                                                     100
                                                                                           Fergus Falls
                 The First Tuesday
                                                         5:10-5:30
                                                                     WLBL
                                                                               900
                                                                                    2500
                                                                                           Stevens Point
2:00-2:20
            WPAX
                     1210
                            100
                                  Thomasville
                                                         5:10-5:30
                                                                     WLB
                                                                              1250
                                                                                    1000
                                                                                           Minneapolis
2:10-2:30
            WBHS
                     1200
                            100
                                  Huntsville
                                                         5:20-5:40
                                                                     WBAA
                                                                               890
                                                                                    1000
                                                                                           West Lafayette
2:20-2:40
            WHBQ
                     1370
                            100
                                  Memphis
                                                         5:20-5:40
                                                                     WIL
                                                                              1200
                                                                                           St. Louis
                                                                                     100
2:30-2:50
            WEED
                     1420
                            100
                                  Rocky Mount
                                                         5:30-5:50
                                                                     WTAD
                                                                               oon
                                                                                     500
                                                                                           Quincy
2:40-3:00
            WOPI
                     1500
                            100
                                  Bristol
                                                         5:30-5:50
                                                                     KGHF
                                                                              1320
                                                                                     500
                                                                                           Pueblo
2:50-3:10
                                  New Orleans
            WSMB
                     1320
                            500
                                                         5:40-6:00
                                                                     WXYZ
                                                                              1940
                                                                                    1000
                                                                                           Detroit
3:00-3:20
            WMBR.
                     1370
                            100
                                  Jacksonville
                                                         5:40-6:00
                                                                     KFRO
                                                                              1370
                                                                                     100
                                                                                           Longview
3:10-3:30
            WNRA
                     1420
                                                                     WTMV
                            100
                                  Muscle Shoals
                                                         5:50-6:10
                                                                              1500
                                                                                     100
                                                                                           East St. Louis
3:20-3:40
            WSIS
                     1310
                            100
                                  Winston-Salem
                                                                         The
3:30-3:50
                                                                             First Thursday
            WHEE
                     1500
                            100
                                  Kosciusko
3:40-4:00
            KMLB
                     1200
                            100
                                  Monroe
                                                         2:00-2:20
                                                                     WSOC
                                                                              1210
                                                                                     100
                                                                                           Charlotte
3:50-4:10
            WAGF
                     1370
                                                         2:20-2:40
                                                                     WMFD
                                                                                           Wilmington
                            100
                                  Dothan
                                                                              1370
                                                                                     100
4:00-4:20
            WNEL
                     1290
                            500
                                  San Juan
                                                         2:40-3:00
                                                                     WJBO
                                                                              1420
                                                                                           Baton Rouge
Mississippi City
                                                                                     100
4:00-4:20
            KWG
                     1200
                            100
                                  Stockton
                                                         2:50-3:10
                                                                     WGCM
                                                                              1210
                                                                                     100
4:10-4:30
            WTJS
                     1310
                            100
                                  Inckson
                                                         3:00-3:20
                                                                     WRDW
                                                                                           Augusta
                                                                              1500
                                                                                     100
4:10-4:30
           KPJM
                                                         3:00-3:20
                     1500
                            100
                                  Prescott
                                                                     WHRY
                                                                              1200
                                                                                     100
                                                                                           Green Bay
4:20-4:40
            WPFB
                                                         3:00-3:20
                     1370
                            100
                                  Hattieshurg
                                                                     WDAH
                                                                              1310
                                                                                     100
                                                                                           El Pado
4:20-4:40
           KERN
                     1370
                            100
                                                         3:10-3:30
                                  Bakersfield
                                                                     WKAQ
                                                                              1240
                                                                                    1000
                                                                                           San Juan
4:30-4:50
                                                         3:10-3:30
            WGPC
                                  Albany
                     1420
                            100
                                                                     WIMS
                                                                              1420
                                                                                     100
                                                                                           Ironwood
4:30-4:50
           KXO
                    1500
                            100
                                  El Centro
                                                         3:10-3:30
                                                                     KLUF
                                                                              1370
                                                                                     100
                                                                                           Galveston
4:40-5:00
            WBNO
                    1200
                            100
                                  New Orleans
                                                         3:20-3:40
                                                                     WCSC
                                                                              1360
                                                                                     500
                                                                                           Charleston
4 -40-5 -00
           KIEM
                     1210
                            100
                                                         3:20-3:40
                                                                     WEDC
                                  Eureka
                                                                              1210
                                                                                     100
                                                                                           Chicago
4:50-5:10
            WROL
                     1310
                            100
                                  Knoxville
                                                         3:20-3:40
                                                                     KTSM
                                                                              1310
                                                                                     100
                                                                                           El Paso
4:50-5:10
           KLS
                                                         3:30-3:50
                     1440
                            250
                                  Oakland
                                                                     WBIG
                                                                                     500
                                                                                           Greensboro
                                                                              1440
5:00-5:20
            WDNC
                                                         3:30-3:50
                     1500
                            100
                                  Durham
                                                                     WKRC
                                                                               550
                                                                                    1000
                                                                                           Cincinnati
            KHSL
5:00-5:20
                     950
                            250
                                                         3:30-3:50
                                                                              1370
                                  Chico
                                                                     KGKL
                                                                                     100
                                                                                           San Angelo
5:10-5:30
            WJBW
                     1200
                                  New Orleans
                                                         3:40-4:00
                            100
                                                                     WAIFO
                                                                              1370
                                                                                     100
                                                                                           Decatur
5:10-5:30
           KGMR
                    1320
                            250
                                                         3:40-4:00
                                                                     WIIM
                                  Honolulu
                                                                              1210
                                                                                     100
                                                                                           Lansing
            WAML
5:20-5:40
                                                         3:40-4:00
                    1310
                            100
                                  Laurel
                                                                     KFPM
                                                                              1310
                                                                                      15
                                                                                           Greenville
5:20-5:40
           KRE
                    1370
                            100
                                  Berkeley
                                                         3:50-4:10
                                                                     WQBC
                                                                              1360
                                                                                    1000
                                                                                           Vicksburg
5:30-5:50
           WSIX
                    1210
                            100
                                  Springfield
                                                         3:50-4:10
                                                                    KFIZ
                                                                              1420
                                                                                     100
                                                                                           Fond du Lac
5:30-5:50
           KGU
                     750
                          2500
                                  Honolulu
                                                         3:50-4:10
                                                                     KMAC
                                                                              1370
                                                                                     100
                                                                                           San Antonio
5:40-6:00
           KGAR
                    1370
                            100
                                  Tueson
                                                         4:00-4:20
4:00-4:20
                                                                     WDBO
                                                                              580
                                                                                    1000
                                                                                           Orlando
5:50-6:10
           KCRJ
                                                                     WEBO
                     1310
                            100
                                  Jerome
                                                                              1210
                                                                                     100
                                                                                           Harrisburg
6:00-6:20
           KGDM
                                                         4:00-4:20
                    1100
                           1000
                                  Stockton
                                                                    KFYO
                                                                              1310
                                                                                     100
                                                                                           Lubbock
6:10-6:30
           KSUN
                    1200
                            100
                                                         4:10-4:30
                                                                     WNBR
                                                                                           Memphis
                                  Lowell
                                                                              1430
                                                                                     500
6:20-6:40
           KTRB
                     740
                                                         4:10-4:30
                                                                     WMPC
                            250
                                  Modesto
                                                                              1200
                                                                                     100
                                                                                           Labeer
6:30-6:50
                                                         4:10-4:30
           KUMA
                    1420
                            100
                                                                    KONO
                                                                                     100
                                  Vuma
                                                                              1370
                                                                                           San Antonio
6:40-7:00
           KFBK
                    1310
                            100
                                                         4 .20-4 .40
                                  Sacramento
                                                                     WOAM
                                                                              560
                                                                                    1000
                                                                                           Miami
                                                         4:20-4:40
                                                                    WHBF
                                                                              1210
                                                                                     100
                                                                                           Rock Island
               The First Wednesday
                                                         4:20-4:40
                                                                    KABR
                                                                              1420
                                                                                     100
                                                                                           Aberdeen
2:00-2:20
           WERR
                    1310
                            100
                                  Buffalo
                                                         4:30-4:50
                                                                    WDAE
                                                                              1220
                                                                                    1000
                                                                                           Tampa
2:10-2:30
           WPEN
                     920
                           250
                                  Philadelphia
                                                         4:30-4:50
                                                                    WKRZ
                                                                              1500
                                                                                     100
                                                                                           Muskegon
2:20-2:40
           WSAI
                    1310
                            100
                                  Grove City
                                                         4:30-4:50
                                                                    KFJM
                                                                              1370
                                                                                     100
                                                                                           Grand Forks
2:30-2:50
           WHIS
                    1410
                           250
                                  Bluefield
                                                         4:40-5:00
                                                                    WMFN
                                                                              1210
                                                                                     100
                                                                                           Clarksdale
2:40-3:00
           WFBG
                    1310
                            100
                                  Altoona
                                                         4:40-5:00
                                                                    WCBS
                                                                              1420
                                                                                     100
                                                                                           Springfield
2:50-3:10
           WPHR
                     880
                            500
                                  Petersburg
                                                         4:40-5:00
                                                                    KIUJ
                                                                                     100
                                                                              1310
                                                                                           Santa Fe
                    1370
3:00-3:20
           WDAS
                            100
                                  Philadelphia
                                                         4:50-5:10
                                                                    KVOL
                                                                              1310
                                                                                     100
                                                                                           Lafavette
3:00-3:20
           WKBB
                    1500
                            100
                                  East Dubuque
                                                         4:50-5:10
                                                                    WKRY
                                                                              1500
                                                                                     100
                                                                                           Richmond
3:00-3:20
           KIUL
                    1210
                                  Garden Clty
                            100
                                                         4:50-5:10
                                                                    KEGO
                                                                              1370
                                                                                     100
                                                                                           Boone
3:10-3:30
           WRBX
                    1410
                           250
                                  Roanoke
                                                         5:00-5:20
                                                                    WIOD
                                                                              1300
                                                                                    1000
                                                                                           Miami
3:10-3:30
           WHEC
                    1200
                            100
                                  Canton
                                                         5:00-5:20
                                                                    WTAX
                                                                              1210
                                                                                    100
                                                                                           Springfield
3:10-3:30
                                  Alamosa
           KGIW
                    1420
                            100
                                                         5:00-5:20
                                                                    KGBX
                                                                              1310
                                                                                     100
                                                                                           Springfield
3:20-3:40
           WMBG
                    1210
                            100
                                  Richmond
                                                         5:10-5:30
                                                                    WFLA
                                                                              620
                                                                                    1000
                                                                                           Clearwater
3:20-3:40
           WTRC
                    1310
                            100
                                  Elkhart
                                                         5:10-5:30
                                                                    WPAY
                                                                              1370
                                                                                     100
                                                                                           Portsmouth
3:20-3:40
           KICA
                    1370
                            100
                                  Clovis
                                                         5:10-5:30
                                                                    KCMC
                                                                             1420
                                                                                     100
                                                                                           Texarkana
3:30-3:50
           WSVS
                    1370
                           100
                                  Buffalo
                                                         5:20-5:40
                                                                    KPLC
                                                                              1500
                                                                                     100
                                                                                           Lake Charles
           WBCM
3:30-3:50
                    1410
                           500
                                  Bay City
                                                         5:20-5:40
                                                                    WHBU
                                                                             1210
                                                                                     100
                                                                                           Anderson
3:30-3:50
           KGHI
                    1200
                           100
                                  Little Rock
                                                         5:20-5:40
                                                                    WRRZ
                                                                             1200
                                                                                     100
                                                                                           Ponca City
3:40-4:00
           WGH
                    1310
                                  Newport News
                           100
                                                         5:30-5:50
                                                                    WAIM
                                                                             1200
                                                                                     100
                                                                                           Anderson
3:40-4:00
           WGBF
                     630
                           500
                                  Evansville
                                                                    WIBM
                                                         5:30-5:50
                                                                             1370
                                                                                    100
                                                                                           Jackson
3:40-4:00
                    1420
           KIDW
                           100
                                  Lamar
                                                         5:30-5:50
                                                                    KGFF
                                                                             1420
                                                                                    100
                                                                                          Shawnee
3:50-4:10
           WOCI
                    1210
                           100
                                  Jamestown
                                                         5:40-6:00
                                                                    WMFJ
                                                                             1420
                                                                                    100
                                                                                           Daytona Beach
3:50-4:10
           WROK
                    1410
                           500
                                 Rockford
                                                         5:40-6:00
                                                                    WOMT
                                                                             1210
                                                                                    100
                                                                                           Manitowoc
3:50-4:10
           KBTM
                    1200
                           100
                                 Paragould
                                                         5:40-6:00
                                                                    KNOW
                                                                             1500
                                                                                     100
                                                                                           Austin
4:00-4:20
           WQAN
                     880
                           250
                                 Scranton
                                                                         The First
                                                                                    Friday
                    1310
4:00-4:20
           WBOW
                           100
                                  Terre Haute
4:00-4:20
           KFBB
                    1280
                          1000
                                 Great Falls
                                                         3:00-3:20
                                                                    w.i.w
                                                                             1210
                                                                                     100
                                                                                           Akron
4:10-4:30
           WHEC
                    1430
                           500
                                 Rochester
                                                        3:00-3:20
                                                                    KRMD
                                                                             1310
                                                                                     100
                                                                                          Shreveport
```

3:10-3:30	WPAD	1420	100	Paducah
3:10-3:30	KOTN	1500	100	Pine Bluff
3:20-3:40	WCOL	1210	100	Columbus
3:20-3:40	KFXR	1310	100	Oklahoma City
3:30-3:50	WELL	1420	100	Battle Creek
3:30-3:50	KGEK	1200	100	Sterling
3:40-4:00	WALR	1210	100	Zanesville
3:40-4:00	KFPL	1310	100	Dublin
3:50-4:10	WMBC	1420	100	Detroit
3:50-4:10	WCAT	1200	100	Rapid City
4:00-4:20	WFDF	1310	100	Flint
4:00-4:20	KGCU	1240	250	Mandan
4:10-4:30	WFBE	1200	100	Cincinnati
4:10-4:30	KWYO	1370	100	Sheridan
4:20-4:40	WGAR	1450	500	Cleveland
4:20-4:40	KLPM	1240	250	Minot
4:30-4:50	WCLO	1200	100	Janesville
4:30-4:50	KGFG	1370	100	Oklahoma City
4:40-5:00	WCLS	1310	100	Joliet
4:40-5:00	KABC	1420	100	San Antonio
4:50-5:10	WJBL	1200	100	Decatur
4:50-5:10	KFJZ	1370	100	Fort Worth
5:00-5:20	WJBK	1500	100	Detroit
5:00-5:20	KSO	1430	250	Des Moines
5:10-5:30	WIBU	1210	100	Poynette
5:10-5:30	KGFI	1500	100	Corpus Christi
5:20-5:40	WHDF	1370	100	Calumet
5:20-5:40	WLBF	1420	100	Kansas City
5:30-5:50	WCRW	1210	100	Chicago
5: <b>3</b> 0 <b>-5</b> :50	KGKB	1500	100	Tyler
5:40-6:00	WTAQ	1330	1000	Eau Claire
5:40-6:00	WMBH	1420	100	Joplin

#### The First Saturday

2:10-2:30	WBRB	1210	100	Red Bank
2:20-2:40	WWRL	1500	100	Woodside
2:30-2:50	WGNY	1210	100	Chester
2:40-3:00	WMBQ	1500	100	Brooklyn
2:50-3:10	WGBB	1210	100	Freeport
3:00-3:20	WOKO	1430	500	Albany
3:00-3:20	WJBC	1200	100	Bloomington
3:00-3:20	KTRH	1330	500	Houston
3:10-3:30	WDEV	550	500	Waterbury
3:10-3:30	WGL	1370	100	Fort Wayne
3:10-3:50	KFPW	1210	100	Fort Smith
3:20-3:40	WNYC	810	1000	New York
3:20-3:40	WWAE	1200	100	Hammond
3:20-3:40	WTAW	1120	500	College Station
3:30-3:50	wov	1130	1000	New York
3:30-3:50	WLBC	1310	100	Muncie
3:30-3:50	KASA	1210	100	Elk City
3:40-4:00	WINS	1180	1000	New York
3:40-4:00	WFAM	1200	100	South Bend
3:40-4:00	KWLC	1270	100	Decorah
3:50-4:10	WCAP	1280	500	Asbury Park
3:50-4:10	WEXL	1310	100	Royal Oak
4:00-4:20	WNBC	1380	250	New Britain
4:00-4:20	WJAY	610	500	Cleveland
4:00-4:20	KGCA	1270	100	Decorah
4:10-4:30	WTNJ	1280	500	Trenton
4:10-4:30	WBNS	1430		
4:10-4:30	KFVS	1210	500	Columbus
		1310	100	Cape Girardeau
4:20-4:40 4:20-4:40	WLNH WWJ		100	Laconia
4:20-4:40		920	1000	Detroit
	KGHL	780	1000	Billings
4:30-4:50	KQV	1380	500	Pittsburgh
4:30-4:50	KDLR	1210	100	Devil's Lake
4:40-5:00	WLAP	1420	100	Lexington
4:40-5:00	WOC	1370	100	Davenport
4:50-5:10	WSMK	1380	200	Dayton
4:50-5:10	KFXJ	1200	100	Grand Junction
5:00-5:20	WAVE	940	1000	Louisville
5:00-5:20	KFDM	560	500	Beaumont
5:10-5:30	WADC	1320	1000	Akron
5:10-5:30	KWTN	1210	100	Watertown
5:20-5:40	WSPD	1340	1000	Toledo
5:20-5:40	WEW	760	1000	St. Louis
5:30-5:50	WHK	1390	1000	Cleveland
5:30-5:50	KWEA	1210	100	Shreveport
5:40-6:00	WCMI	1310	100	Ashland
5:40-6:00	WSUI	880	500	Iowa City
5:50-6:10	KGGM	1230	250	Albuquerque

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### Metal Tubes in New 1936 Receivers

• • • by B. FRANCIS DASHIELL

HE radio tube situation has been further complicated by the recent appearance of tubes made entirely of metal. The familiar glass bulb at last has given way to a thin shell of steel. Without doubt metal tubes are the most important and practical development in recent years. New receivers are being designed exclusively for these tubes, and it is quite likely that this radical change initiates a new standardization of circuits, tubes and sockets.

Metal tubes were invented and perfected in the Schenectady laboratories of the General Electric Company, but are now being manufactured by the RCA Manufacturing Company, at Harrison, N. J. All tube makers will eventually offer the metal tubes to the public. The new General Electric radio receivers, made at Bridgeport, Conn., designed around the characteristics of the metal tubes, embrace a line of eight entirely new sets that are completely equipped with these metal tubes. Most of the set manufacturers have accepted metal tubes as essential to many of their new 1936 receivers now in production.

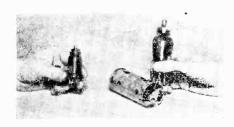
### Using Metal Tubes

The reader will wish to know whether metal tubes are interchangeable with glass tubes. Actually, these tubes are not directly suitable for Although substitution in old sets. their characteristics are similar to certain of the glass tubes, the base, socket and wiring arrangements do not admit of a ready substitution of metal tubes for glass tubes. However, radio sets using equivalent glass tubes may be changed over to metal Such alterations demand the tubes. replacement of old sockets by the new "universal" sockets, and several changes in the wiring and voltages of the circuit may be required in some instances.

While metal tubes use the same internal grid, plate, filament and cathode elements as the glass tubes, and are essentially similar. characteristics are not exactly the same. This is due to changes in the internal capacity caused by the metal envelope. The tubes give the same type of service as equivalent glass tubes, but with improved results: Due to their compact construction metal tubes have very low internal capacities, and will prove highly acceptable for short-wave work. In fact, so phenomenal were the results obtained during the testing of metal tubes that new receivers were designed by the General Electric Company and this example is being followed by other manufacturers. any case the metal tubes will show much better operating characteristics than any of the equivalent glass tubes.

### The Shell That Shields

The metal tubes are considerably smaller and more rugged than the conventional glass tubes. Averaging about one-half the size of an equivalent glass tube, the metal tube provides its own shielding. This fact alone eliminates the neecssity for the tincan coverings that have shielded glass tubes for many years. the annoying crackling noise that so frequently appears in poorly shielded sets and tubes will be silenced for-The microphonic ring that also comes with the shaking or tapping of a tube or the receiver can never be created in a metal tube. These tubes are unbreakable, and should give



Contrast between the new metal radio tubes developed but he General Electric Company and glass-enveloped tubes is shown by these two triple-grid super-control amplifiers. The external shield recaired by the glass-bath tube is climinated by the new metal tubes.

constant performance during a very long life. Greater stability of operation is possible in the radio-frequency and oscillator circuits of allwave sets that use the new metal tubes.

The steel shell of the new tube is cylindrical in shape, quency amplifiers have the conventional control-grid contacts on the The outstanding development that made metal tubes possible is the fact that the lead-in connections between the pins of the base and the internal elements pass through tiny glass beads that are fused into eyelets of a special alloy. These eyelets, in turn, are fused into holes through the base of the shell. The evelets have the same rate of expansion as glass, and the fusing operation is accomplished in one-twentieth of a second with a current of 75,000 amperes. This provides a lasting and rugged vacuum seal. All other seams and connections are similarly welded.

### The Improved Base

The metal shell of the tube acts as its shield. The conventional, loosely fitted shields, at best only makeshifts in most receivers, have been entirely eliminated in the 1936 receivers. And, because closer proximity of the enveloping shell to the internal elements can be realized, the shielding is more effective. Provision

is made for the grounding of the steel shell by means of an additional pin placed in the base of the tube.

All the pins of the base of the new tube have the same diameter and length. But from the center of the ring of pins extends a longer, insulated and keyed pin. By simply fitting this pin in the hole that is centered in the socket, and then rotating the tube until the key slips into its groove, the contact pins of the tube can be quickly and easily inserted in their proper holes. This act can be accomplished in the dark, for it is necessary only to fit the long, center pin in the center hole of the socket. It is absolutely impossible to insert the tube improperly or in the wrong socket.

### New "Universal" Socket

The eight pins of the new tubes make possible a new "Universal" socket. Each pin is given an arbitrary number and will automatically slip down into its proper socket contact. Not all of the metal tubes have eight A six-pin tube, such as the new 6D5, which is equivalent to the old type 45, has six pins instead of four. These pins are: Pin 1 grounds the shell and shield of the tube; Pin 2 is one of the heater terminals; Pin 3 is the plate; Pin 4 will be found missing; Pin 5 is the control-grid; Pin 6 also is missing; Pin 7 is the other heater terminal; and Pin 8 is the cathode. The missing pins, 4 and 6, are utilized for screen-grid and suppressor-grid contacts in eight-pin tubes. At present, the only tube of this type is No. 6A8, the counterpart of type 6A7.

### Types Of Metal Tubes

In the following list of new metal tubes, ten in all, the reader will observe that the equivalent in glass tubes is indicated in parenthesis. The new tubes are: 5Z4 (80); 6A8 (6A7); 6C5 (76); 6D5 (45); 6F7 (75); 6F6 (42); 6H6 (75); 6J7 (77);

and 6K7 (78). Type 6L7 has no glass equivalent. Types 6F7 and 6H6 are both similar to the 75, but each has slightly different internal triode and diode connections. A11 tubes use six volts on the heater with the exception of the 5Z4 recti-The plate, screen and grid voltages are approximately the same as The superiority of for glass tubes. glass tubes is tubes over demonstrated when it is pointed out that one tube, the 6C5, has an amplification factor alone of 20 as compared to 14 for the type 76 tube.

There also has just appeared a new series of Arcturus tubes, but having conventional glass bulbs which are identical in electrical characteristics and pin arrangement to the new allmetal tubes. These Arcturus tubes carry the same type numbers as the RCA-GE metal tubes, but the letter "G" is added after each type number. These glass tubes are directly interchangeable with identical types of metal tubes in the new sets which are appearing this Fall.

### General Electric Sets For 1936

The development of these metal tubes by the General Electric scientists opened up new possibilities in the short-wave field. It was soon determined that the design of a completely new line of receivers was therefore necessary. Because of the more effective shielding and short leads there is a higher intermediatefrequency gain with greater stability, less audio amplification is required, and little or no harmonic distortion Tubes of this kind observed. would work best with new circuits built around their characteristics.

This Fall the General Electric Company offers its line of eight superheterodyne all-wave receivers utilizing the metal tubes. Other than the features of these tubes, as already explained, the new G-E sets offer several new ideas. There is the new air-trimmer Permaliner which

insures accurate calibration and alignment settings being maintained Thus indefinitely. the works at its maximum performance at all times The new tuning scale is read like a ruler and only one wave band is visible at a time. The drive for the tuning or sliding-rule dial is made with two speeds. Also, there a radio-frequency "Sentry Box" tuning circuit which provides maximum selectivity. The intermediatefrequency transformers operate at a new high efficiency due to the high gain and shielding of the metal tubes. Compensation operation emphasizes the low notes: there is noise control and shadow-band tuning. There is a five-tube table model; a six-tube table and a console model; a seven-tube table and a console model: an eight-tube table and a console model; and a twelvetube console model. Models A-63 (six tubes) and A-82 (eight tubes). as well as A-125 (12 tubes), are popular receivers.

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## DX Recording for Verifications

• • • by F. WISEMAN

POR some time, my principal hobby has been the recording of DX programs from stations in various parts of the world. As a means of spending money, this phase of DXing has few equals, and yet it has more than justified every penny I have invested.

While there may be questions about some verifications, who is to deny the recorded voice of an annuncer giving the call (if any) and location of his station? Then, too, to be able to play back a record of some good catch is a most satisfying incident from every angle.

During the time I have played with DX recording, I have been able to transform signals from many fardistant stations into a permanent form. In my albums are records of programs from stations in every portion of the world.

About the most interesting record I have is that of a program from KVOO, Tulsa, Okla. The station notified me that they would send a message of greeting on December 30, 1933 during a local item. By great good luck, KVOO was coming in extraordinarily well and I was able to record their words of salutation without a miss. As far as I know, this is the first time a medium-wave schedule has been kept and recorded.

Usually, I send at least one record to the station heard as a form of report requesting verification. In most cases, the response is almost immediate. Often, the station plays the record on one of its local programs and, occasionally, there is a newspaper write-up about the event. I have quite a few clippings from different corners of the globe.

As a means of securing verifications, records have no equal. When a station can hear a recording of part of their own program, perhaps recognizing an announcer's voice or a particular musical item, there is no question about issuing the confirmation.

Furthermore, one great advantage of recording is that it overcomes the language difficulty. While few of us may be able to understand an announcement in Spanish, Italian or German, the station will soon know whether they put on the program recorded.

While most stations make a great deal of a record of one of their programs, there are a few unfortunate exceptions. One New York station in particular got under my skin. I sent them an unusually fine recording of one of their programs and asked for a verification. they re-played the record as a special feature, they never verified my reception, much less acknowledged the record. It just happened that a fellow-townsman of mine, then residing in New York, heard the broadcast of my record. He made a note of my name and address and wrote That was over a year ago to me. and, despite several reminders, I have yet to hear from the station.

In striking contrast, I sent a record of a speech by President Roosevelt to the White House and received a most cordial acknowledgement from the Secretary of State on behalf of the President.

Until I started recording, I had been able to verify only LR3, LR5 and LR6 of the South Americans. Last winter, I sent records to over a dozen Argentine stations and have recently received a verie from LR9, accompanied by a press clipping from Buenos Aires paper ULTIMA

HORA. By means of a constant stream of records, I have hopes of yet breaking down the unwillingness of the other Argentine stations to verify. Anyhow, you can never say that I haven't submitted definite proof of reception.

In addition to being a means of reporting for verification, these records are also of technical value to the stations conducting tests. Ι have recorded various stations on tests and have received replies that the records were of inestimable value to the engineers. Not so long ago. I sent W8XO a recording of nearly eighty minutes program. There was no need to record at such length, but they were asking for reports and I sent them a good one.

In addition to sending records away to stations, I sent a parcel of records chain-system to a number of I.D.A. members. Thus, they were able to hear stations which they probably have not been able to tune direct.

Some day. I hope to re-record one of my own records. Many stations have played by recordings and, if I should happen to be tuned to them on such an occasion. I would be able to record the playback. In this case, the signal would have crossed the Atlantic twice.

The nearest I ever came to this was recording a Christmas program from Germany which was being relayed by NBC. I don't know how it was sent to America from the German monastery, but the signal did cross the Atlantic twice before I got it recorded. This particular program was heard best from CHNS, Halifax. N. S., although it could be heard from various NBC stations.

As mentioned previously, the expense is usually terrific. The biggest item is the wastage of records. You may be tuned to some station perfectly, getting good volume and quality. Then, just as you start recording, the signal fades to zero and another record is ruined. I hate to

think of the pile of wasted disks I have around the house.

In order to identify the station being received, it is necessary to start recording just before the call is given. Of course, it is necessary to wait until the signal is good. Unsually, I start the recording five seconds before the call and take my chances that the signal will hold up.

While chain programs are of no value to the average DXer, they are always best for my purposes. independent stations. you never know when to expect a call and, when it comes, you usually aren't ready for it. However, chain calls always come at a regular interval and there isn't much difficulty in getting them. Besides, there can be ne question about a call recorded on a chain program, even though the other DNers are forced to pass up such a station.

A verification can be obtained for as little as 30 seconds of program if you can get the call. Every DXer knows those weak signals which just won't come in loud enough for you to take down enough details for a decent report. In my case, I have only to wait until I hear a call, which is all that is necessary, for you can wait until the signal picks up and then record part of the program.

As no pre-grooved records are obtainable over here, I use a recording machine with a tracking device. As a matter of fact, this system is much more conomical, since blank records can be made of commercial sheet aluminum. Just as long as the wife doesn't know how you use her best seissors, you are in for a lot of interesting DX.

In conclusion, I have found it necessary to warn all DXers against recording a station in the interval between calls. I have often found a station coming in fine at. say, 1:55 AM and started by record, only to have the signal fade out completely by 2:00 when the call should be heard.

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Sav   2576   3040   3580   60   3585   60   3050   60   3585   60   3050   60   3585   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   60   3050   6		3030 Res 3035	
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4210 to	Ľ	4745 4750		5400 V 5405
4230 860v& 4235		to 4775		5410
AND ALCOHOLD		-	-	

## Short Wave Stations By Frequencies

1.510 megs. 198.56 m.

CJD, Campbell River, B. C. 300 W. Minister of Lands for B. C.

CJK, Knight Inlet, B. C. 100 W. Anglo British Columbia Packing Co., Ltd.

VAC, Cape Lazo, B. C. 50 W. Dominion Gov. Sun., 0610-0640; 1010-1040; 1710-1740. Other days. 0500-1945.

VAF, Alert Bay, B. C. 50 watts. Dominion Gov. YDA8, Tandjongpriok, N. E. I. 500 W. N. V. Nederlandsch Indische-Radio Omroep Moats-chapij, Konigsplein W. 5, Batavia-Centrum, Java, N. E. I. Daily. 0538-1100; 1745-1845; 2230-0130

> 1.530 meas. 195.96 m.

YDB7, Soerabaja, N. E. I. 75 watts. Address, see YDA8 above. Daily, 0530-1100; 1745-1845; 2230-0130.

> 1.540 megs. 194.69 m.

CJD, Campbell River, B. C. 300 watts. Minister of Lands for B. C.

VBY, Lunenburg, N. S. 100 watts. Lunenburg Sea Products, Ltd. (Station operated by Canadian Marconi)

1.550 megs.

193.43 m

YDA4, Soekaboemi, N. E. I. 25 watts. For address and schedule see YDA8, 1,510 megs.

1.566 megs.

191.46 m.

WIED, Broadcast pickup. 50 watts. National Broadcasting Co., 30 Rockefeller Plaza, N. Y. City. WIEX, Broadcast pickup. 50 watts. A dress, see WIED above.

1.570 megs.

193.96 m.

WPEQ, Baton Rouge, La. Police. YDB6, Malang, N. E. I. 100 watts. For address and schedule see YDA8, 1.510 megs.

1.574 megs. 190.48 m. KGPY, Shreveport, La. Police

1.580 megs.

189.76 m.

CJM, Borden, P. E. I. 100 watts. Works ships. Canadian National Railway.

1.585 megs. 189.16 m. YDD3, Batavia (C), Java, N. E. I. 50 watts. N. V. Nederlandsch Indische Radio Omroep Moatschapij, Koningsplein West 5, Batavia-Centrum, Java, N. E. I. 0530-1100; 1745-1845; 2230-0130.

1.595 megs. 187.98 m. YDB5, Solo, N. E. I. 25 watts. For address and schedule see YDD3, 1.585 megs,

1.596 meas 187.84 m

CFC, Cub Lake, Sask. 100 watts. Dept. of Natural Resources, Govt. of the Province of Sask. CGQ, Lac la Ronge, Sask. 100 watts. Address, see

CFC above. CGV, Emma Lake, Sask. 100 watts. Address CFC

above. CZJ, Isle-a-la-Crosse, Sask. 100 watts. Address CFC. VYP, Prince Albert, Sask. Address, CFC above. WPGG, Findlay, Ohio. 500 W. State of O., Highway Police

WPGQ, Columbus, Ohio. 400 W. Municipal Police. WPHC, Massillon, Ohio. 400 W. State of Ohio, Dept.

of Highways. WPHK, Wilmington. Ohio. Municipal Police.

> 1.606 megs. 186.69 m

KIGA. Broadcast pickup. (KSTP, St. Paul, Minn.) WHER, Broadcast pickup. (KDKA, Hotel Wm. Penn, Pittsburgh)

WIEO, Broadcast pickup. 50 watts. NBC, 30 Rockefeller Plaza, N. Y. City.

WIEW, Broadcast pickup. National Broadcasting Co. WIEX, Broadcast pickup. National Broadcasting Co. WJER, Broadcast pickup. WTMJ, The Milwaukee

Journal, 333 W. State St., Milwaukee, Wisc. WMEF, Broadcast pickup. 150 W. National Broadcasting Co.

> 1 615 meas 185.65 m

YDB4, Tjepoe, N.E.I. 25 W. N. V. Nederlandsche Indische Radio Omroep Moatschapij, Koningsplein W. 5. Batavia-Centrum, Java. Moatschapij 0530-1100; 1745-1845; 2230-0130. N.F.I

1.620 meas

185 07 m

CFD, Kenora, Ont. 150 W. Ontario Dept. of Lands and Forests

CFJ, Red Lake, Ont. Address CFD above.

CFL, Tabouret, P. Q. 100 W. Laurentian Forest Protective Association, Ltd., 126 St. Peter St., Quebec, P. Q.

CFM, Manicouagan River Estuary, P. Q. Address CFL above. CZB, Bellevue, P. Q. 100 W. Address CFL above.

CZY, Riviere du Chef, P. Q. 100 W. Address CFL above

CZZ, St. Felecien, P. Q. 100 W. Address CFL above.

1.622 mens

184.85 m.

KIED, Broadcast pickup. (KFWB, Warner Bros., Hollywood, Calif.)

KIEF, Broadcast pickup. (WIL, Melbourne Hotel,

St. Louis, Mo.) KIEL, Broadcast pickup. (KJR, Fishers Blend

Station, Seattle Wash.) KIFI, Broadcast pickup. (WDGY, Dr. Young, 909

W. Broadway, Minneapolls, Minn.) KILU, Broadcast pickup. (KARK, N.S.L. Bldg.,

Little Rock, Ark.) WIEH, Broadcast pickup. (WMCA, 1697 Broadway,

N. Y. City) (WINS, Hearst Radio.

WKEM, Broadcast pickup. (WINS 110 E. 58th St., N. Y. City) WNEI, Broadcast pickup. (WFBM, Indianapolis

Power & Light Co., 48 Monument Circle, ind.)

..... , Red Bluff, Alaska. 50 W. Richmond Fisheries, Inc.

1 630 megs.

183 94 mm

WEY, Boston, Mass. Marine Fire Station. WKOT, Detroit, Mich. Marine Fire Station. YDD2, Bandoeng, Java, N.E.I. 25 watts. N. V. Nederlandsche Indische Radio Omroep Moats-chappij, Tegallegah O. 23, Bandoeng. 0530-1100: 1745-1845: 2230-0130.

1 634 mens

183.48 m.

WPHE, Marion County, Ind. 1 kW. Indiana State Police.

WPHS, Culver, Ind. 1 kW. Municipal police.

WPHU, Jasper, Ind. 1 kW. State of Ind., Dept. of Safety

WQFE, Seymour, Ind. 1 kW. State of Ind., Dept. of Pub. Safety. W9XBU, Portable in Indiana, 50 watts. (Expired ??)

, Columbia City, Ind. 1 kW. State police. Indianapolis. Ind. 100 watts. State police.

1.640 megs.

182.82 m.

YDA3. Buitenszorg, N.E.I. 25 watts. N. V. Nederlandsche Indische Radio Omroep Moats-chappil, Koningsplein W. 5, Batavia-Cen-trum, Java, N.E.I. 0530-1100; 1745-1845; trum, Java, N.E.I. 2230-0130.

1.642 meas.

182.59 m.

WRDS, E. Lansing, Mich. 1 kW. night; 5 kW. day. State police.

1.646 meas.

182.15 m.

WIEK, Broadcast pickup. Columbia Broadcasting System, 485 Madison Ave. at 52nd St., N. Y. City

WIEL, Broadcast pickup. Address WIEK above. WLEB, Broadcast pickup. WOKO Inc., Hotel Ten Eyck, Albany, N. Y.

1.650 megs.

181.71 m.

VBY, Lunenburg, N. S. Works ships. Lunenburg Sea Products Ltd. Operated by Canadian Marconi

1.658 megs.

180.83 m.

KSW. Berkeley, Calif. Municipal police. WPGC, S. Schenectady, N. Y. 1 kW night; 5 kW day. State police.

1.660 megs.

180.62 m.

YDB3, Djokja, N.E.I. 100 watts. N. V. Nederlandsch Indische Radio Omroep Moatschappil. Koningsplein W. 5, Batavia-Centrum, Java, N.E.I. 0530-1100: 1745-1845: 2230-0130.

1.666 megs.

179.96 m.

WMP, Framingham, Mass. 1 kW. State police. WPEL, W. Bridgeport, Mass. 1kW. State police. WPEV. Portable in Mass. 50 watts. State police. WPEW, Northampton, Mass. 1 kW. State police. , Nashville, Tenn. Municipal police.

1.668 megs. 179 75 m.

CFC, Cub Lake, Sask. Dept. of Natural Resources, Govt. of the Province of Saskatchewan. CGQ, Lac la Ronge, Sask. Address CFC above.

CGV, Emma Lake, Sask. Address CFC above. CZJ, Isle-a-la-Crosse, Sask. Address CFC above. VYP, Prince Albert, Sask. Address CFC above.

> 179.10 m. 1.674 meas.

KGHK, Palo Alto, Calif. 20 watts. Municipal police. KGZT, Santa Cruz, Calif. 100 watts. (Santa Cruz

KIUK, Jefferson City, Mo. State police. WPSP, Harrisburg, Pa. 1 kW. State police.

1.682 megs.

178.25 m. KGHO, Des Moines, la. State of Iowa, Bureau of Investigation.

KNFN, Waterloo, Iowa. 400 watts. Municipal police. KNFO, Storm Lake, Iowa. 400 watts. City of S. L. W&XA. Portable in Ohio. 50 watts. Dept. of Highways. Div. of State Highway Patrol.

176.57 m. 1.698 megs. KNGG, Phoenix, Ariz. 1 kW. Arizona State Highway Dept.

175.74 m. 1.706 megs. KGPC. St. Louis, Mo. City of S. L.

WKDU, Cincinnati, Ohio. City of C. WPET, Lexington, Ky. City of L.

> 1.712 meas. 175.13 m.

CZG, Prince Rupert, B. C., 150 watts. B. C. Provincial police.

KGHY, Whittier, Calif. 30 watts. City of W. KGJX, Pasadena, Calif. 400 watts. City of P.

KGPJ, Beaumont, Tex. City of B.

KGPL, Los Angeles, Calif. City of L

KGPQ, Honolulu, T. H. 100 watts. City and County of H.

KGPR, Fort Worth, Tex. City of F. W.

KGZB, Houston, Tex. City of H.

KGZL, Shreveport, La. City of S. KGZQ, Waco, Texas. City of W.

KGZY, San Bernardino, Calif. 50 watts. City of S. B.

KNFJ, Pomona, Calif. 50 watts. City of P.

KNGE, Cleburne, Tex. 50 watts. City of C.

KNGL, Galveston, Tex. 50 watts. City of G.

KVP, Dallas, Tex. 500 watts. City of D. VYR, Montreal, P. Q. 400 watts. Police calls in French and English. City of M. Police Dept.

WPDB, Chicago, III. City of C.

WPDC, Chicago, III. City of C. WPDD, Chicago, III. City of C.

WPDU, Pittsburgh, Pa. City of P. WPDD, Arlington, Mass. Town of A. WPEH, Somerville, Mass. City of S.

WPEI, E. Providence, R. I. E. Prov. Police Dept.

WPEJ, Brookline, Mass. City of B. WPFA, Newton, Mass. City of N.

WPFN, Fairhaven, Mass. Address: City of New

Bedford Police. WPGV, Boston, Mass. 500 watts. City of B.

WPHG, Medford, Mass. 50 watts. City of M.

1.715 megs to 2.000 megs. 174.82 m. to 149.91 meters Amateur Band. Phones in following countries work between 1.875 and 2.000 megs. (149.91 m to

159.90 meters). Australia, Argentina, Canada, Ecuador, Estonia, Union of South Africa, United States of America.

1.840 megs.

162 95 m

YDJ4, Cheribon, N.E.I. Batavia Radio Vereeniging

1 850 mage

162 06 m

"Eureka."

YDU5, BandJermasin, Borneo, N.E.I. Owner:

161.19 m.

YDK6, Semarang, N.E.I. Radio Vereeniging Midden Java.

1.880 megs.

1.860 meas.

159.47 m.

YDO9, Soerabaja, N.E.I. Owner: Holvast.

1.900 megs.

157.80 m

YDG6, Batavia, N.E.I. Batavia Radio Vereeniging.

1.920 megs.

156.16 m.

YDH9, Buitenzorg, N.E.I. Batavia Radio Vereeniging.

1.940 mens

154.55 m.

YDN2, Kediri, N.E.I. Owner: Goldberg.

1.960 megs. 152.97 m. YDH8, Bandoeng, N.E.I. Owner: v. d. Heyden.

1.980 megs. YDO8, Socrabaja, N.E.I. Owner: Gazellehuis.

2.020 meas.

148.43 m

WIEO, Broadcast pickup. 50 watts. N. B. C., 30 Rockefeller Plaza, N. Y. City.

WMEF, Broadcast pickup. 150 watts. Address WIEO above.

2.050 megs.

146.25 m. W9XAK, Manhattan, Kans. Television. Mon., 1945-2030. Wed. 2100-2200.

2.060 megs.

145.54 m.

WNER, Broadcast pickup. 100 watts. WAIU, Deshler-Wallick Hotel, Columbus, Ohio.

2.070 meas.

144.84 m.

YDO7, Soerabaja, N.E.I. Owner: v. Wingen.

2.090 megs. 143.45 m. YDG5, Batavia, Java, N.E.I. Batavia Radio Vereenloina.

2.102 megs.

142.64 m.

KIGA, Broadcast pickup. KSTP, St. Paul Hotel, S. P. Minn.

KIGW, Broadcast pickup.

WHER, Broadcast pickup. KDKA, Hotel Wm. Penn,

Pittsburgh, Pa.

WIEO, Broadcast pickup. 50 watts. Address WIEO. 2.020 megs.

WIEW, Broadcast pickup. Address WIEO, 2.020 megs. WIEX, Broadcast pickup. Address WIEO, 2.020 megs. WJER, Broadcast pickup. WTMJ, The Journal Co.,

333 W. State St., Milwaukee, Wisc. WMEF, Broadcast pickup. 150 watts. Address WIEO, 2.020 megs.

2.110 mags

142.09 m.

W1XH, Boston, Mass.

YD12, Soekaboemi, N.E.I., Batavia Radio Vereeniging.

2.150 megs. 139.45 m.

KIED, Broadcast pickup. KFWB, Warner Bros., Hollywood, Calif.

KIEF, Broadcast pickup. WIL. Melbourne Hotel, St. Louis, Mo.

KIEL, Broadcast pickup. KJR, Fishers Blend Station, Skinner Bldg., Seattle, Wash.

KIEO, Broadcast pickup. KFSD, U. S. Grant Hotel, San Diego, Calif.

KIFI, Broadcast pickup. WDGY, Dr. Young, 909 W. Broadway, Minneapolis, Minn.

KIFT, Broadcast pickup. KJBS, 1380 Bush St., San Francisco, Calif.

KIIQ, Broadcast pickup. KMTR Radio C N. Formosa Ave., Hollywood, Calif. KMTR Radio Corp., 915

KILB, Broadcast pickup. 50 watts. KWKH, Spring and Fannin Sts., Shreveport, La.

KILU, Broadcast pickup. 5 watts. KARK, N.S.L. Bldg., Little Rock, Ark

WIEG, Broadcast pickup. WMCA, 1697 Broadway, N. Y. City. WKEM, Broadcast pickup. Hearst Radio, 110 E. 58th

St., N. Y. C. WLEX, Broadcast pickup. News, Norfolk, Nebr. WJAG, Norfolk Daily

WNEI, Broadcast pickup. WFBM, I. Power & Light Co., 48 Monument Circle, Indianapolis, Ind.

> 2.190 megs. 136.90 m

KIIH, Broadcast pickup. KFAB, Cornhusker Hotel. Lincoln, Nebr.

WIEK, Broadcast pickup. Columbia Broadcasting System, 485 Madison Ave. at 52nd St., New York City.

WIEL, Broadcast pickup. Address WIEK above.

2.212 megs. 135.54 m.

VYZ, High Falls, P. Q. 50 watts. James McLaren Co., Ltd.

2.284 megs. 131.22 m.

CFT, Learnington, Ont. 14 watts. Dept. of Public Works.

CFX, Pelee Island, Ont. 22 watts. Dept. of Public Works.

CKB, Pictou, N. S. 15 watts. Dept. of Public Works. CKO, Crane Island, P. Q. 15 watts. Dept. of Public Works.

CKP, Montmagny, P. Q. 15 watts. Dept. of Public Works.

CKU, Pictou Island, N. S. 15 watts. Dept. of Public

2.290 megs. 1,30.93 m.

CFV, Namu, B. C. 100 watts. British Columbia Packers, Ltd.

CFW, Bones Bay, B. C. 100 watts. Canadian Fishing

Co., Ltd. CJE, Ceepeecee, B. C. 10 watts. Canadian Packing

Corp. CJX, Margaret Bay, B. C. Canadian Fishing Co., Ltd.

CZL, Humpback Bay, B. C. Canadian Fishing Co., Ltd. CZL, Humpback Bay, B. C. 100 watts. Chatham Sound Fishing & Packing Co., Ltd. VFJ, Homalko, B. C. 100 watts. Homalko Logging Co., Ltd.

2.350 megs. 127.58 m. VBQ, Halifax, N. S. 25 watts. Works ships in harbor.

2.382 meas. 125.87 m KGHT, Brownsville, Tex. 25 watts. City of B. KGHV, Corpus Christi, Texas. 50 watts. City of C. C. KNFE, Duluth, Minn. City of D. Police, WPDN, Auburn, N. Y. Police. WPEA, Syracuse, N. Y. City of S. Police. WPFM, Birmingham, Ala. 400 watts. City of B. Police. WPGW, Mobile, Ala. 400 watts. City of M. Police. 2.385 megs. 125.71 m. YDA2. Batavia (C), Java, N. E. B. 150 watts. N. V. Nederlandsch Indische Radio Omroep Moatschappij, Koningsplein W. 5, Batavia-Centrum, Java, N. E. I. 0530-1100; 1745-1845; 2230-0130. 2.390 megs. 125.45 m. WIED, Broadcast pickup. 50 watts. N. B. C., 30 Rockefeller Plaza, N. Y. City. WIEX, Broadcast pickup. 50 watts. Address WIED above. 2.406 megs. 124.61 m. KGHZ, Little Rock, Ark. City of L. R. Police. KGPW, Salt Lake City, Utah. City of S. L. C. Police. 2.414 megs. 124,20 m. KGHW, Centralia, Wash. 15 watts. City of C. Police. KGPA, Seattle, Wash. Seattle Police Dept. RGPA, Seattle, Wash. Seattle Folice Dept.
KGPF, Santa Fe, N. Mex. 25 watts. Police.
KGPS, Bakersfield, Calif. City of B. Police.
KGZA, Fresno, Calif. 500 watts. City of F. Police. KGZM, El Paso, Texas. City of E. P. Police. KGZN, Tacoma, Wash. City of T. Police. KGZO, Santa Barbara, Calif. City of S. B. Police. KGZV, Aberdeen, Wash. 150 watts. City of A. Police. KGZX, Albuquerque, N. Mex. City of A. Police. KNFA, Clovis, N. Mex. 50 watts. City of C. Police. KNFI, Mt. Vernon, Wash. 50 watts. Skagit County Police. KNFP, Everett, Wash. 50 watts. City of E. Police. KNGU, Yakima, Wash. 100 watts. WCK, Detroit, Mich. D. City Police. WMO, Highland Park, Mich. City of H. P. Police. WPDA, Tulare, Calif. 150 watts. WPDJ, Passaic, N. J. WPDX, Detroit, Mich. City of D. Police. WPDY, Atlanta, Ga. City of D. Police.
WPDY, Atlanta, Ga. City of A. Police.
WPFH, Baltimore, Md. City of B. Police.
WPFI, Columbus, Ga. City of C. Police.
WPGH, Albany, N. Y. 300 watts. City of A. Police. WPGJ, Utica, N. Y. 100 watts. City of U. Police.

WQFB, Macon, Ga. 50 watts. WRDR, Grosse Pointe, Mich. Township of G. P. Police. , Lodi, Calif. 50 watts. , Oneonta, N. Y. 50 watts.

WPGM, La Grange. Ga. 50 watts.

2.415 megs. 124.15 m

YDE4, Soerabaja, N. E. I. 75 watts. N. V. Nederlandsche Indische Radio Omroep Moats-chappij, Koningsplein West 5, Batavia-Batavia-Centrum, Java, N. E. I. 0530-1100; 1745-1845; 2230-0130.

2.416 megs. 124.09 m. CJW, Saint John, N. B. 15 watts. Dept. of Public Safety. CZG, Prince Rupert, B. C. 150 watts. B. C. Provincial

Police. VYW, Winnipeg, Man. 60 watts. Board of Police Commissioners.

2.422 megs. 123.79 m. KGPE, Kansas City, Mo. City of K. C. Police. KGPG, Vallejo, Calif. City of V. Police. KGZC, Topeka, Kans. City of T. Police.

Police KNGF, Sacramento, Calif. 500 watts. KSW, Berkeley, Calif. WMJ, Buffalo, N. Y. City of B. Police, 757 E. Perry St. WNFP, Niagara Falls, N. Y. 135 watts. City of N. F. Police WPDR, Rochester, N. Y. City of R. Police. WPDW, Washington, D. C. Municipal Police.

KNFF, Leavenworth, Kans. 100 watts. City of L.

WPFU, Portland, Me. City of P. Police. WPHB, Nashua, N. H. 50 watts. City of N. Police.

, Salina, Kans. 50 watts.

2.430 meas. 123.38 m. KGHX, Santa Ana, Calif. 400 watts. Orange county

Police. KGPB, Minneapolis, Minn. 500 watts. City of M. Police. KGZJ, Phoenix, Ariz. Municipal Police.

KNGP, Shreveport. La. 100 watts. WPDI, Columbus, Ohio. Franklin County Police. WPDM, Dayton, Ohio. City of D. Police. WPDS, St. Paul, Minn. City of S. P. Police.

WPEK, New Orleans, La. 250 watts. City of N. O. Police.

WPFD, Highland Park, III. WPFK, Hackensack, N. J. Bergen County Police Dent

WPGI, Portsmouth, Ohio. 50 watts. City of P. Police. WPHO, Zanesville, Ohio. 50 watts. WQFO, Lancaster, Ohio. 50 watts. City of L. Police.

2.442 meas. 122.77 m KGHU, Austin, Texas. 100 watts. City of A. Police. KGPP, Portland, Ore. City of P. Police.
KGPX, Dnever, Coto. City and County of D. Police.
KGPX, Dnever, Coto. City and County of D. Police.
KGZH, Klamath Falls. Ore. City of K. F. Police.

KGZR, Salem, Ore. 50 watts. City of S. Police. WMDZ, Indianapolis, Ind. Municipal Police. WPDE, Louisville, Ky. City of L. Police. WPDF, Flint, Mich. City of F. Police.

WPDH, Richmond, Ind. City of R. Police. WPDL, Lansing, Mich. City of L. Police. WPEB, Grand Rapids, Mich. 500 watts. City of G. R. Police.

WPES, Saginaw, Mich. City of S. Police. WPFC, Muskegon, Mich. City of M. Police. WPFE, Reading, Pa. City of R. Police.

WPFG, Jacksonville, Fla. City of J. Police. WPFT, Lakeland, Fla. 50 watts. City of L. Police. WPFX, Palm Beach, Fla. 50 watts. Town of P. B. Police.

WPFY, Yonkers, N. Y. 400 watts. City of Y. Police. WPFZ, Miami, Fla. 100 watts. City of M. Police. WPGL, Binghamton, N. Y. 400 watts. City of B.

Police. WPGP, Muncie, Ind. 100 watts. City of M. Police. WPHM, Orlando, Fla. 50 watts. City of O. Police.

> 2.450 megs. 122.38 m.

KGHN, Hutchinson, Kans. 50 watts. City of Ha Police.

KGPH, Oklahoma City, Okla. KGPO, Tuisa, Okla. City of Tulsa Police.

KGPZ, Wichita, Kans. 250 watts. City of W. Police. KGZF, Chanute, Kans. 25 watts. City of C. Police. KGZP, Coffeyille, Kans. City of C. Police. KNGK, Duncan, Okla. 50 watts.

KNGM, Rapid City, S. Dak. 50 watts. City of R. C. Police.

KNGO, Mobile in Airplane, Oklahoma State Police. 50 watts.

KNGT, Muskogee, Okla. 50 watts. WPDK, Milwaukee, Wisc. City of M. Police.
WPEE, Brooklyn, N. Y. City of New York Police.
WPEF, Bronx, N. Y. City of New York Police.
WPEG, New York, N. Y. City of N. Y. Police.
WPEP, Kenosha, Wisc. 100 watts. City and County of K. Police

WPHF, Richmond, Va. 150 watts. City of R. Police...

120.41 m.

YDB2, Semarang, N. E. I. 150 watts. N. V. Neder-2.490 megs. KGHA, Snowplow No. A232, 10 watts. State of Wash. landsch Indische Radio Omroep Moats-chappij, Koningsplein West 5, Batavia-KGHB, Snowplow No. A227. 10 watts. State of Wash. KGHC, Portable in Washington. 10 watts. State of W. Centrum, Java, N. E. I. 0530-1100; 1745-1845; KGHD, Seattle, Wash. 50 watts. State of Wash. KGHE, Snoqualmie Pass Wash. State of W., High-2230-0130. , Lynchburg, Va. 50 watts. City of L. Police. , Petersburg, Va. 50 watts. City of P. Police. , Roanoke, Va. 100 watts. City of R. Police. way & Police Dept. KGHQ, Chinook Pass, Wash. 10 watts. State of W. Highway & Police. KGHR, Portable in Wash. 10 watts. State of Wash. 122,27 m. 2.452 megs. KGZD, San Diego, Calif. City of S. D. Police. Two CGZ, Vancouver, B. C. 400 watts. Corp. of the City transmitters, one 50 watts and another of V. 100 watts. CJZ, Verdun, P. Q. 20 watts. City of V. Police. KGZU, Lincoln, Nebr. City of L. Police. KNFG, Olympia, Wash. 50 watts. State of W. Police. KNFK, Bellingham, Wash. 50 watts. State of Wash. 2.458 megs. KGHS, Spokane, Wash. 100 watts. City of S. Police. Police. KGZI, Wichita Falls, Tex. City of W. F. Police. KNFL, Shuksan Camp, Wash. 10 watts. State of KGZW, Lubbock, Texas. 150 watts. City of L. Police. Wash, Highways. KNFM, Compton, Calif. 25 watts. KNFB, Idaho Falls, Ida. 500 watts. WPDG, Youngstown, Ohio. 250 watts. City of Y. KNFR, Rotary Snow Plow. 10 watts. State of Wash., Highway and Police Dept. Police. WPDO, Akron, Ohio. 250 watts. City of A. Police. KNFS, Rotary Snow Plow. 10 watts. State of Wash., WPDV, Charlotte, N. C. City of C. Police. Highway and Police Dept. WPF5, Asheville, N. C. 200 watts. Buncombe County KNFU, Skykomish, Wash. 10 watts. State of W. Police. Police. WPGD, Rockford, III. City of R. Police. KNFX, Ellenburg, Wash. 10 watts. Address KNFS WPHD, Steubenville, Ohio. 100 watts. above WRBH, Cleveland, Ohio. City of C. Police. KNFY, Bear River Camp, Wash. Brownwood, Texas. 50 watts. KNFZ, Hells Crossing Camp, Wash. 10 watts. KNGA, Satus Pass Camp, Wash. 10 watts. KNGB, Yakima, Wash. 50 watts. 2.466 megs. KNGC, Vancouver, Wash. 50 watts. KNGD, Walla Walla, Wash. 10 watts. KGHP, Lawton, Okla. 50 watts. City of L. Police. KGOZ, Cedar Rapids, Iowa. 50 watts. City of C. R. KNGJ, El Centro, Calif. 50 watts. Police. KNGN, Norfolk, Nebr. 25 watts. WPDT, Kokomo, Ind. City of K. Police. KGPD, San Francisco, Calif. City and County of S. F. Police. WPDZ, Fort Wayne, Ind. City of F. W. Police.
WPFP, Clarksburg, W. Va. City of C. Police.
WPGN, South Bend, Ind. 100 watts. City of S. B. KGPI, Omaha, Nebr. City of O. Police. KGPK, Sioux City, Iowa. City of S. C. Police. KGPM, San Jose, Calif. Police. KGPN, Davenport, Iowa. City of D. Police. KGZG, Des Moines, Iowa. City of D. M. Police. WPEC, Memphis, Tenn. City of M. Police. WPGO, Huntington, N. Y. 25 watts. Town of H Police. WPGS, Mineola, N. Y. County of Nassau Police. WPEM, Woonsocket, R. I. City of W. Police. WPHI, Charleston, W. Va. 50 watts. City of C. Police WPFV, Pawtucket, R. I. City of P. Police. WPHJ, Fairmont, W. Va. 100 watts. WPFW, Bridgeport, Conn. 50 watts. City of B. WPHQ, Parkersburg, W. Va. 50 watts. City of P. Police. WPGA, Bay City, Mich. City of B. C. Police.
WPGB, Port Huron, Mich. City of P. H. Police.
WPGK, Cranston, R. I. 50 watts. City of C. Police. Police , Ephrata, Wash. 10 watts. State of Wash., Highway & Police. WPGX, Worcester, Mass. 100 watts. City of W. Police. , Spokane, Wash. 50 watts. , Wenatchee, Wash. 50 watts. WPHA, Fitchburg, Mass. 50 watts. City of F. Police. WPHN, Tampa, Fla. 100 watts. City of T. Police. WPHP, Jackson, Mich. 50 watts. City of J. Police.
WQFA, New Haven, Conn. 100 watts.
Clearwater, Fla. 50 watts. City of C. Police.
Gainsville, Fla. 50 watts. 2.506 megs. 119.64 m. KLH. San Rafael, Calif. Pacific Telephone & Telegraph Co. WOU, Marshfield, Mass. Phones fishing vessels. 119.36 m. 2.512 megs. 121.19 m. 2.474 meas. KIAQ, Rose Inlet, Alaska. 100 watts. Alaska Pacific KGHG, Las Vegas. 50 watts. KGHM, Reno, Nev. 50 watts. City of R. Police. Salmon Corp. KIJN, Todd, Alaska. Peril Stralts Packing Co. KNFH, Garden City, Kans. 50 watts. City of G. C. Police. 2.522 megs. 118.88 m. KNGH, Dodge City, Kans. 50 watts. WPDP, Philadelphia, Pa. City of P. Police. WPFO, Knoxville, Tenn. City of K. Police. KOW, Edmonds, Wash. Pacific Telephone & Telegraph Co. WPFQ, Swarthmore, Pa. Borough of S. Police. 2.550 megs. 117.58 m. WMES, Lorain, Ohio. 500 watts. Public Coastal Station. Lorain County Radio Corp. WPFS, Asheville, N. C. 200 watts. Buncombe County Police. WPGZ, Johnson City, Tenn. 50 watts. City of J. C. Police. WRDQ, Toledo, Ohio. 400 watts. City of T. Police. ....., Elizabethton, Tenn. 100 watts. Carter 2,566 megs. 116.84 m. KOU, Wilmington, Calif. Southern Calif. Telephone Co. County Police. 115.76 m. 120.80 m. 2.590 megs. 2.482 megs. KGZE, San Antonio, Tex. City of S. A. and State of WOX, St. George, Staten Island, N. Y. Harbor phone,

Texas Police.

...., Monessen, Pa. 50 watts.

WPGT, New Castle, Pa. 50 watts. City of N. C. Police.

WPHZ, Oil City, Pa. 50 watts. City of O. C. Police.

New York Telephone Co.

WVD, Seattle, Wash. 500 watts. Alaskan Telephone

115.14 m.

2.604 meas.

Co., 517 Federal Office Bldg., Seattle. WYBF, Napoleon, Mo. 500 watts. United States Army.

> 2.616 meas. 114.61 m.

....., Tin City, Alaska. 200 watts. American Tin Fields, Inc.

> 2.632 megs. 113.91 m.

........, Iron Creek (Raspberry Straits) Alaska. 50 watts. Southwestern Herring, Inc.

, Juan, Alaska. 50 watts. Phones Anchorage and ships. Copper River Packing Co.

2.670 meas. 112 29 22

NMC, Point Bonita, Calif. 200 watts. United States Coast Guard.

NMD, Cleveland, Ohio. 200 watts.

NMF, Winthrop, Mass. 200 watts. U. S. Coast Guard.

NMG, Mobile, Ala. U. S. Coast Guard.

NMN, Cape Henry, Va. 200 watts. U. S. Coast Guard. NMP, Wilmette, III. 200 watts.

NMV. Fort Lauderdale, Fla. 200 watts. U. S. Coast

Guard. NMW, Grays Harbor, Wash. 200 watts.

NMY, Rockaway Point, N. Y. 200 watts. U. S. Coast Guard NOB, Buffalo, N. Y. 200 watts. U. S. Coast Guard.

NOF, St. Petersburg, Fla. 200 watts. U. S. Coast Guard. NOG, Gloucester, Mass. 50 watts. U. S. Coast

Guard Base 7 NOJ, San Pedro, Calif. 200 watts. U.S. Coast Guard

Base 17. NOM, Miami, Fla.

NOP, Woods Hole, Mass. 50 watts. U. S. Coast

Guard, Section Base 18.

NOR, Sault Ste. Marie, Mich. 200 watts. NOU, New London, Conn. 200 watts. U. S. Coast

Guard. NOV, Cape May, N. J. 200 watts. U. S. Coast Guard.

NOY, Galveston, Texas. 200 watts.

NOZ, Port Townsend, Wash. 200 watts.

2.698 megs. 111,13 m.

NMD, Cleveland, Ohio. 200 watts.

NMP, Wilmette, III. 200 watts. NOB, Buffalo, N. Y. 200 watts. U. S. Coast Guard. NOR, Sault Ste. Marie, Mich. 200 watts.

2.710 megs.

YDK5, Semarang, N. E. I. Radio Vereniging Midden-Java.

> 2.726 meas. 109.98 m.

KIIW, San Gabriel Dam No. 2, Calif. 200 watts. Los Angeles County Flood Centrol District. KIIX, Tujunga Dam No. 1, Calif. Address KIIW

above. KIIY, Los Angeles, Calif. 400 watts. Address KIIW above

KINT, Portable, Los Angeles County, Calif. 50 watts. Address above.

> 2.728 megs. 109.90 m.

KIJY, Hood River, Ore. 100 watts. Special emergency station owned by Crag Rats, Inc., a mountain-climbing organization.

KIJZ, Portable in Oregon, See above.

2.738 megs. 109.50 m.

WIF1, S. S. Cadrew, in Seattle Harbor, Wash. Works ships in harbor. Owner, A. E. Griswold.

> 2.750 megs. 109.03 m.

YDES, Djokjakarta, N. E. I. 25 watts. N. V. Neder-landsche Indische Radio Omroep Moats-chappij, Koningsplein W. 5, Batavia-Cent-

rum, Java, N. E. J. 0530-1100; 1745-1845; 2230-0130.

YDL6, Djokjakarta, N. E. I. Owner: v. Wingen.

2.760 megs. 108.63 m.

WIEO, Broadcast pickup. 50 watts. N. B. C., 30 Rockefeller Plaza, N. Y. City. WMEF, Broadcast pickup. 150 watts. Address WIEO

above.

2.770 megs. 108.24 22

YDO6, Soerabaja, N. E. I. Owner: Eureka.

2.790 megs.

107,46 m.

YDN3, Madioen, N. E. I. Owner: v. Wingen.

2.810 megs.

106.70 m.

YDQ6, Malang, N. E. I. Owner: v. Wingen.

2,830 meas.

105.94 m

YDU4, Medan, Sumatra, N. E. I. Owner: Avrom.

2.850 megs.

105.20 m

104.47 m.

YDG4, Batavia, Java, N. E. I. Owner: Lindeteves Stokvis.

2.870 megs.

YDA6, Cheribon, N. E. I. 15 watts.

YDJ3, Tegal, N. E. I. Owner: v. Wingen,

2.890 megs.

103.74 m

YDJ2, Pekaiongan, N. E. I. Owner: v. Wingen.

2.910 megs.

YDE3, Semarang, N. E. I. 15 watts.

YDK3, Semarang, N. E. I. Owner: v. Wingen.

2.912 megs.

102.96 ***

....., Iron Creek (Raspherry Straits) Alaska. 50 watts. Southwestern Herring, Inc.

2.930 megs.

WMEP, Suffield, Ohio. 200 watts.

WMEU, St. Petersburg, Fla. 400 watts. WMEV, Opa Locka, Fla. (Goodyear Zeppelin Base). 400 watts.

YDO5, Soerabaja, N. E. I. Owner: Goldberg.

2.950 megs.

101.63 m.

YDQ5, Malang, N. E. I. Owner: Vis.

2.980 megs.

100.61 m.

CZA, Drummondville, P. Q. 4 kW. Phones ships-Canadian Marconi Co., Box 1690, Montreal, P. Q.

2.986 megs.

100,41 m.

KIGF, M. S. LeMerced (vessel moored in vicinity of False Pass, Alaska). 50 watts. Alaska Southern Packing Co.

> 2.994 megs. 100.14 m.

KIEJ, Poorman, Alaska. 50 watts. Owner: W. N. Growden.

KIIK, Circle, Alaska. 50 watts. Phones Fairbanks, Anchorage, etc. Northern Commercial Co.

KIIL, Fort Yukon, Alaska. 50 watts. Phones WXP Fairbanks, and WXE Anchorage. Northern Commercial Co.

KIIM, Hot Springs, Alaska. 50 watts. See KIIL above.

KIIN, Eagle, Alaska. 50 watts. See KIIL above.

Kilo, McGrath, Alaska. 50 watts. See Kill above. Kijb, Cape Pole, Alaska. 50 watts. A. R. Brueger.

KILY, Excursion Inlet, Alaska. 50 watts. Astoria & Puget Sound Canning Co.

3.040 megs. 98 62 m.

CFQ, Edmonton, Alta. Edmonton Journal, Ltd. CGE, Calgary, Alta. 100 watts. Calgary Herald Ltd.,

Southam Bldg.

CKS, Portable. 100 watts. Calgary Herald; see above. YDA, Tandjongpriok, N. E. I. 10 kW. N. V. Nederlandsche Indische Radio Omroep Moatschappil, Koningsplein West 5, Batavia-Centrum, Java, N. E. I. 0530-1100; 1745-1845; 2230-0130.

> 97.66 m. 3.070 megs.

CJU, Winnipeg, Man. Canadian Airways, Lt. (Western Lines), 60 Brock St., Winnipeg. Canadian Airways, Ltd.

KGM, Ketchikan, Alaska. Alaska Pacific Salmon Co. KIAP, Rose Inlet, Alaska. 100 watts. Address KGM above.

KIAX, Ketchikan, Alaska. Address KGM above.

KIAY, Ketchikan, Alaska. Address KGM above. KICI, View Cove, Dall Island, Alaska. 50 watts.

Superior Portland Cement Co. KIIP, Willow Creek Mines, Luckyshot, Alaska.

watts. Phones Anchorage. Owner: W. E. Dunkle.

KIKN, Eyak River, Alaska. 50 watts. Pioneer Sea Foods Co.

3.125 megs. 95.94 m. SHIPS work between 3.125 and 3.147 megs. (95.27 to 95.94 meters).

A number of SHIPS are listed on 4.413 megs. and 4.430 megs. We do not know definitely which of these ships work also on 3.125-3.147 megs. Reports of actual reception from listeners are invited.

3.130 megs. 95.79 m. YDH6, Bandoeng, N. E. I. Owner: Prot. Kerk.

95.18 m. 3.150 megs. YDG3. Batavia, Java, N. E. I. Owner: Luyks.

3.152 megs. 95.12 m. CGM, Montreal, P. Q. Canadian Marconi Co., Box

1690, M. Phones CGY. CGY, Yamachiche, P. Q. Phones CGM. Address CGM above.

94.58 m. 3.170 megs. YDO4, Soerabaja, N. E. I. Owner: Jarico.

93.99 m. 3.190 megs. 4 watts. Phones ships.

KIGP, Egushik, Alaska. Libby, McNeill & Libby.

KIIK, Circle, Alaska. 50 watts. Phones Fairbanks and Anchorage. Northern Commercial Co.
KIIL, Fort Yukon, Alaska. 50 watts. See KIIK above.
KIIM, Hot Springs, Alaska. 50 watts. See KIIK

above. KIIN, Eagle, Alaska. 50 watts. See KIIK above.

KIIO, McGrath, Alaska. 50 watts. See KIIK above. KIJN, Todd, Alaska. 50 watts. Peril Straits Packing Co.

YDK2, Semarang, N. E. I. Owner: Wels.

93.40 m. 3.210 megs. YDL5, Djokjakarta, N. E. I. Owner: Helant Muller.

3.230 megs. 92.82 m. YDQ4, Malang, N. E. I. Owner: Radinova.

92.25 m. 3.250 megs. YDH5, Garoet, Java, N. E. I. Bandoeng Radio Vereeniging.

91.83 m. 3.265 megs. 50 watts. Territorial KIIT, St. Michael, Alaska. Govt. of A.

91.74 m. 3 268 meas.

CGP, Prince Rupert, B. C. North-West Telephone Co., Cor. 2nd Ave. and Wylie St., Vancouver, B. C.

3 270 mens.

YDA7, Pekalongan, N. E. I. 15 watts. YDK4, Magelang, N. E. I. Owner: v. Wingen.

3.290 megs.

YDO3, Soerabaja, N. E. I. Owner: Radio Electric-

90.85 m.

CZV, Waterloo Mine, B. C. Waterloo Gold Mines, Ltd. YDG7, Batavia, Java, N. E. I. Owner: Pianohandel Kok.

> 3.310 meas. 90 58 ms.

YDH4, Bandoeng, Java, N. E. I. Owner: Luyks.

3 320 meas.

YDM2, Tjepoe, N. E. I. Radio Vereeniging.

90.04 m. 3.330 megs.

YDV2, Bandjermasin, Borneo, N. E. I. Owner: Fureka.

> 89.77 m. 3 340 meas.

CGD, Drummondville, P. Q. Private station of Canadian Marconi Co., P. O. Box 1690, Montreal, P. Q.

CGM, Drummondville, P. Q. Private CMC station. Address CGD above.

> 29 50 ms 3.350 megs.

YDQ3, Malang, N. E. I. Owner: Lammeree.

88.97 m. 3.370 megs. YDU2, Medan, Sumatra, N. E. I. Owner: Avrom.

88.57 m. 3.385 meas. KIIU, Marshall, Alaska. 50 watts. Territorial Govt.

88.50 m. 3.387 megs. KGYA, Longmire, Wash. Forestry station. Address Mr. R. D. Waterhouse, Mount Rainier

National Park, Longmire.

KGYB, Longmire, Wash. Address KGYA above. KGYC, Paradise, Wash. Address KGYA above. KGYD, Sunrise, Wash. Address KGYA above.

KGYE, White River, Wash. Address KGYA above.

KGYF, Carbon, Wash. Address KGYA above.

KGYG, Portable station of the Forestry Dept. of the State of Washington. KGYH, same as KGYG above.

KGYI, same as KGYG above.

of A.

88.44 m. 3.390 megs. 88.44 m. YDQ2, Djember, N. E. I. Owner: v. Wingen.

87.92 m. 3,410 megs.

KNIA, Glacier National Park, Montana. KNKS, Yosemite National Park, California.

KNKY, Devil's Post Pile National Monument, Calif. KNLO, Death Valley National Monument, Calif. WRJ, Poe Reef Lighthouse, Mich. Dept. of Com-

merce, Bureau of Lighthouses. WST, Dry Tortugas Lighthouse, Fla. Address WRJ

above. WWAJ, Manitou Island Lighthouse, Mich. Address WRJ above.

WWAL, Passage Island Lighthouse, Mich. Address WRJ above.

WWAM, Rock of Ages Lighthouse, Mich. Address WRJ above.

WWAO, Huron Island Lighthouse, Mich. Address WRJ above.

WWE, Fourteen Foot Shoals Lighthouse, Mich. Address WRJ. WWG, Cheboygan Range Lighthouse, Mich. Address WRJ above. WWH, Stannard Rock Lighthouse, Mich. Address WRI above. WWHJ, Delaware Breakwater Station, Philadelphia, Pa. Address WRJ. WWM, Marquette Lighthouse, Mich. Address same as WRJ above. WWN, Detroit River Lighthouse, Mich. WRJ above. WWR, Detroit, Michigan. Address WRJ. Lighthouse station. WWZ, Key West, Fla. Lighthouse. Address WRJ above. YDL4, Djokjakarta, N. E. I. Owner: Vadera. 3.423 megs. WOZ, New York, N. Y. American Telephone & Telegraph Co., 32 Sixth Ave., NYC. 3.430 meas. 87.41 m. YDO2, Soerabaja, N. E. I. Owner: Soekaradio. 3.450 megs. 86.99 m. YDL3, Solo, N. E. I. 3.452 mens. 86.85 m. CJU, Winnipeg, Mann. Canadian Airways Ltd. (Western Lines), 60 Brock St., Winnipeg. 3.470 meas. 86.40 m YDG2, Batavia, Java, N. E. I. Owner: Batavia Radio Vereeniging. 3.490 megs. 85.91 m. YDH3, Bandoeng, Java, N. E. I. Owner: de Kort. AMATEURS WORK BETWEEN 3.500 and 4.000 megs. (74.96 to 85.66 meters). Phones between 3.900 and 4.000 megs. 3.750 meas. 79.95 m. CTICT, Lisbon, Portugal. 500 watts. "Radio Eddystone". Sr. Oscar G. Lomelino, Rua Gomez Freire 79, 2-D, Lisbon. Daily, 0900-1100. 78.90 m. 3.800 meas. ZP11, Asuncion, Paraguay. 74.96 m. 4.000 megs. CT2AJ, Ponta Delgada, Azores. 50 watts. Mr. H. E. J. Smith, St. Michael, Ponta Delgada. Wed., Sat., 1700-1900. 73.16 m. 4.098 megs. WND, Hialeah, Fla. 400 watts. Phones ZFS Nassau. 71.76 m. 4.178 meas. WOO, Ocean Gate, N. J. 20 kW. Phones ships. American Telephone & Telegraph Co., Long Lines Dept., 32 Sixth Ave., N. Y. C. WOY, Lawrenceville, N. J. 20 kW. Address WOO above. 4.253 megs. 70.50 m. WKF, Lawrenceville, N. J. A. T. & T. Address WOO above. WOG, Ocean Gate, N. J.

4.273 megs.

4.276 megs.

RV15, Khabarovsk, USSR (Siberia). 20 kW. "Far

WIR, Rocky Point, N. Y. 40 kW. Works Port-au-

East Radio Station." Announcements in

Russian, Chinese, English. Never verifies; mailing address unknown. Daily, 0300-0900.

Prince, Santo Domingo. Address R. C. A.,

70.16 m.

70.11 m.

Central Frequency Bureau, 66 Broad St., N. Y. C. 70.00 m. HC2JSB, Guayaquil, Ecuador. Interval sig.: one stroke on gong. Daily exc. Monday, 2015-2315. WTDV, St. Thomas, Virgin Islands. 250 watts. Mr. H. M. McKenzie. WTDW, St. Croix, Virgin Islands. 250 watts. WTDX, St. John, Virgin Islands. 250 watts. 4.320 meas. DAF, Norden, Germany. Phones ships. Hauptfunkstelle Norddeich, Norden-Land, Germany. 4.320 megs. 69.40 m. GDB (G6RX), Rugby, England. 15 kW. Engineer-in-Chief, GPO (Radio Section). Armour House, St. Martins Le Grand, London EC1, England. 68.92 m. 4.348 megs. CGA9, Drummondville, P. Q. Canadian Marconi Co., Box 1690, Montreal, P. Q. 4.355 megs. IAC. Coltano, Italy. 56 kW. Phones ships. Radiomarittimo Coltano Radio IAC, Piza, Italy. 4.400 megs. RRZ, Moscow, USSR. 1 kW. 4.413 megs. 67.94 m. DDAS, S. S. Bremen. North German Lloyd, Pier 4, Foot of 58th St., Brooklyn, N. Y. DDBR, S. S. Berlin. North German Lloyd, Pier 42, North River. Foot of Morton St., N. Y. City. DDCG, S. S. Resolute. DDCP, S. S. Cap Polonio. DDDT, S. S. Deutschland. DDDX, S. S. Hamburg. Hamburg American Lines, Pier 86, North River, W. 46th St., N. Y. City. DDEA, S. S. Cap Ancona. DDED. S. S. New York. Address DDDX above. DDFF, S. S. Reliance. DDFT, S. S. Oceana. DDNY, S. S. Albert Ballin, Address DDDX above. DOAI, S. S. Europa, Address DDAS above. DOBX, S. S. Columbus. Address DDAS above. FNSM, S. S. Paris. French Lines, Pier 57, Hudson River, New York City. FTNQ, S. S. Ile de France. Address FNSM above. GBZW, S. S. Berengaria. International Marine GBZW, S. S. Berengaria. Radio Co., Ltd., Connaught House, 63 Aldwych, London WC2, England.
GFWV, S. S. Majestic. Address GBZW above.
GLSQ, S. S. Olympic. Address GBZW above. GMBJ, S. S. Empress of Britain. GMJQ, S. S. Belgenland. Address GBZW above. 4.415 megs. 67.91 m. GLRZ, S. S. Aquitania. Address GBZW, 4.413 megs. 4.439 megs. 67.68 m. 4.320 megs.

GBC, Rugby, England. Works ships. Address GDB, GDLJ, S. S. Homeric. Address GBZW, 4.413 megs. VQJM, S. S. Monarch of Bermuda. VQJP, S. S. Queen of Bermuda. 4.465 megs. 67.14 m. CFA2, Drummondville, P. Q. Canadian Marconi Co., Box 1690, Montreal, P. Q.

4.470 megs. YDB, Soerabaja, N. E. I. 1 kW. YID, Bagdad, Iraq.

SHORT WAVE STATIONS BY FREQUENCIES 59.67 m. 4.505 meas. 66 55 m 5.025 meas. CGO, Ocean Falls, B. C. North-West Telephone Co. ZFA, St. George (Hamilton) Bermuda.
Phones WOB nights. 1.5 kW-Corner 2nd Ave. and Wylie St., Vancouver, B. C. 5.040 megs. CZO, Prince George, B. C. Address CGO above. 59.49 m. RIR, Tiflis, USSR. 4 kW. CZP, Claydon Bay, B. C. Address CGO above. 5.140 meas. 58.33 m. 4.512 megs. 66.44 m. PMY, Bandoeng, N. E. I. 600 watts. Bandoeng Radio ZFS, Nassau, Bahamas. Works WNC Hialeah. Office of Supt. of Telegraphs, Central Bay St., Nassau N. P., Bahamas. Vereeniging, Nillmy Bldg., Bandoeng. 9040-0240: 0640-0940. 4.535 megs. 66.11 m. 5.260 megs. 57.00 m. WDG, Rocky Point, N. Y. 40 kW. R. C. A., Central YDU3, Medan, Sumatra, N. E. I. Owner: Meyer. Frequency Bureau, 66 Broad St., N. Y. C. 5.263 megs. 56.96 m. 4.540 meas. 66.04 m. WQN, Rocky Point, N. Y. Address WDG, 4.535 megs-WIR, Rocky Point, N. Y. 40 kW. Works Port-au-Prince, Santo Domingo. Address WDG, 5.300 meas. 4.535 megs. ZFO, Cat Cay, Bahamas. 50 watts. Address ZFS. 4.512 megs. 4.550 megs. 65.89 m. WDN (W2XBJ), Rocky Point, N. Y. Address WDG, 55.78 m. 5.375 megs. 4.535 megs. RSB, Stalinsk, USSR. 2 kW. 4.580 megs. 65.46 m. 5.400 megs. 55.52 m. DJG. Zeesen, Germany. Reichs-Rundfunk-Gesellschaft, Haus des Rundfunks, Masurenallee, HAT, Szekesfehervar, Hungary. 6 kW. "Justice for Hungary!" Announcements French, English, Berlin-Charlottenburg 9, Germany. Hungarian by lady. Address: Magyar Kiralyi Postakiserleti Allomas, IX Kerulet Gyali Ut 4.600 megs. 65.18 m. 22. Budapest, Hungary. HC2ET, Guayaquil, Ecuador. Interval sig.: 12 chimes. HJA7. Cucuta, Colombia. P. O. Box 249. Fri., Sat., 2130-2300. 5.405 megs. 55.47 m. 4.753 meas. 63.08 m. WOO, Ocean Gate, N. J. Phones ships. A. T. & T., CGP, Prince Rupert, B. C. Address CGT, 4.865 megs Long Lines Dept., 32 Sixth Ave., N. Y. C. CZQ, Anyox, B. C. Address CGT, 4.865 megs. VXX, Sage Creek, B. C. Address CGT, 4.865 megs. WOY, Lawrenceville, N. J. 20 kW. Address WOO above. 5.415 meas. 4.755 megs. 63.05 m. IAF, Fiumicino, Italy. 5 kW. CFU, Rossland, B. C. Consolidated Mining & Smelting Co. 5.440 megs. 55.11 m. RSN. Sverdlovsk, USSR, 10 kW. 62.66 m. 4.785 megs. CZA, Drummondville, P. Q. Phones ships. Canadian 5.490 megs. 54.61 m. Marconi, Box 1690, Montreal. ROI, Sverdlovsk, USSR. 15 kW. 4.810 megs. 62.33 m. 5.505 megs. 54.46 m. YDE2. Solo, N. E. I. 100 watts. WQN, Rocky Point, N. Y. Address WDG, 4.535 megs YDL2. Solo, N. E. I. Owner: Solosche Radio Vereeniging. 54.11 m. 5.540 megs. VXU, Regina, Sask. Dept. of Natural Resources. 4.820 megs. 62.20 m. GDW, Rugby, England. Phones N. Y. Engineer-in-Govt. of the Province of Sask. VXV, Hudson Bay Junction, Sask. Address VXU Chief, GPO, (Radio Section), Armour House, St. Martins Le Grand, London EC1. above. VXW. Portable. Address VXU above. 4.840 megs. 61.95 m. CZV. Waterloo Mines, B. C. Waterloo Gold Mines, 5.550 megs. 54.02 m. 12RO, Rome, Italy. Ente Italiano per le Audizioni Radiofoniche, Via Montello 5, Rome. Inc. 4.865 megs. 61.63 m. 5.660 megs. 52.97 m. CFD, Kenora. Ont. 150 watts. Ont. Dept. of Lands

CGT, Campbell River, B. C. North-West Telephone Co., Corner 2nd and Wylie St., Vancouver, B. C.

4.875 megs. 61.50 m. RKF, Moscow, USSR. 20 kW.

4.975 megs. 60.27 m. GBC, Rugby, England. 5 kW. Phones ships. Address GDW, 4.820 megs.

60.11 m. 4.988 megs. WWAD, S. S. Violet. Works Lighthouses on Great Lakes.

5.015 megs. 59.78 m. IS3, Bolling Field, Va. United States Army airport.

5.710 megs. 52.51 m. JDZ, Darien, Works JVU nazaki. 5.725 megs. 12RO, Rome, Italy. Address EIAR, 5.550 megs. 5.730 megs. 52.32 m. JVV, Nazaki, Japan. Works JIA, JIB, JIC at Taiwan. Address: Kokusai-Denwa Kaisha. Ltd., Osaka Bldg., Kojimachiku, Tokyo.

and Forests.
CFJ. Red Lake, Ont. Address CFD above.
CFU, Rossland, B. C. Consolidated Mining & Smelt-

ing Co. of Canada, Ltd.

5.765 megs. 52.00 m. KZGF, Manila, P. I. Inter-Island phone. Philippine Long Distance Telephone Co.

51.87 m. 5.780 megs. CMB, Havana, Cuba. Cuba Transatlantic Radio Corp. OAX4D, Lima, Peru. "Radio DUSA." Interval sig.:

2 cuckoos. "The Voice of Peru." Sign off: "A Perfect Day." All America Cables, Box 858. Wed., Sat., 2100-2330.

5.790 megs. 51.78 m. JVU, Nazaki, Japan. 10 kW. Works JDX, JDY, JDZ Darien. Address JVV, 5,730 megs.

5,795 megs. 51.74 m KZGH, Iloilo, P. I. (Iloilo Island). Inter-Island phone. Philippine Long Distance Tele. Co.

5.820 megs. 51.52 m. CEC. La Granja (Santiago) Chile. Compania Internacional de Radio, Casilla 16-D, Santiago de

TIGPH, San Jose, Costa Rica. "Alma Tica." 1900-2200

5.825 meas. 51.47 m. HJA2, Bogota, Colombia.

KZGG, Cebu, Isl. of Cebu, P. I. Inter-Island phone. Philippine Long Distance Telephone Co. WQN, Rocky Point, N. Y. R. C. A., Central Frequency Bureau, 66 Broad St., New York City.

5.830 megs. 51.43 m. CWD. Montevideo, (Cerrito), Uruguay. 1.5 kW. JZC. Harbin, Manchukuo. Works JVI, JVO, Nazaki.

5.845 megs. 51 36 m KRO. Kahuku, Oahu, T. H. (Off the air?)

5.850 megs. 5.850 megs. 51.25 m. WOB. Lawrenceville, N. J. A. T. & T., Long Lines

Dept., 32 Sixth Ave., N. Y. C. YV5RMO, Maracaibo, Venezuela. "Ecos del Caribe." (member Gadena Indo-Americana.) One grams close with Blue Danube March. Address: Sr. Santiago M. Vegas, Apartado 214. Daily exc. Sun., 1130-1300; 1730-2130.

5.890 megs. 50.90 m. JIC. Taiwan. Works JVG, JVL, JVV Nazaki.

5.900 megs. 50.82 m. CMB1, Havana, Cuba. 250 watts. Cuba Trans

atlantic Radio Corp. HJ4ABE, Medellin, Colombia. 1kW. (relays HJ4ABK) La voz de Antioquia." Daily, 1900-2300.
Owner: Jose M. Acevedo F.

5.937 megs. 50.50 m. TGX, Guatemala City, Guatemala. Sr. M. A. Meji-cano Novales, Sun., 0100-0300; other days, 2008-2400

5.940 megs. 50.47 m. TGW, Guatemala City, Guat.

5.970 megs. 50.22 m.

HJ3ABH, Bogota, Colombia. 1.6 kW. "La Voz de la Victor". Almacenes Victor de Manuel J. Gaitan, Apartado 565; daily, 1900-2200.

HVJ, Vatican City. 10 kW. Interval sig: clock tick-ing for 10 minutes preceding xmission: bells of St. Peters at 3 e'clock. Announce-ment "Laudatur Jesus Christus". Talks as follows: Mon., Italian; Tues., English; Wed., Spanish; Thurs., French; Fri., German; Sat., Dutch; Sun., Latin. Address: Stazione Radio-Vatican, Pontificia Accademia Della

Scienze, Roma-Castina Pio IV, Citta del Vaticano. Schedule: Sundays and holidays. 0500-0530. Daily, 1400-1415.

5.975 megs. 50.18 m. HJ2ABC, Cucuta, Norte de Santander, Colombia. 250 watts. "La Voz de Cucuta," Interval sig.: Chimes C-D-E-F-C. Address: J. Alejandro Sanchez C. Daily exc. Sun. 1800-2100.

5.980 megs. 50.14 m. HIX, Santo Domingo, D. R. Mr. J. R. Sa Director HIX. Tues., Fri., 2000-2200. 5.980 megs. Mr. J. R. Saladin,

HJ2ABD, Bucaramanga, Colombia. 100 watts. Sr. Hector McCormick.

XECW, Mexico City, D. F. 10 watts. "del Caballero Santokan." add: Calle del Bajio 120. Daily 2300-2400.

50.01 m.

5.995 megs. 50.0 RPT, Tashkent, USSR. 1 kW. WVD, Seattle, Wash. 500 watts. Phones Alaska. Alaskan Telephone Co., 517 Federal Office Bldg., Seattle.

5.996 megs. 50.00 m. , "Radio-Tananarive," Tananarive, Madagascar. Theme song: Ramona. 500 watts. Administration des Postes des Telegraphes et des Telephones. Sun., 0230-0400; daily exc. Sun. and Mon., 0300-0345.

RV59, Moscow, USSR. 20 kW. Kremlin chimes at 4 p.m. EST. sign off: l'Internationale. Add: Trades Union Radio Station, Solianka 12, Moscow. (temporarily discontinued).

6.000 megs. 49.97 m. XEBT, Mexico City, D. F. 1 kW. Interval sig.: cuckoo. rooster, bugle, auto horn, fire bell. Relays XEB. Add: El Buen Tono S. A., Apartado 79-44. Daily 1000 to 0115.

XGOX, Nanking, China (proposed). Administration of Central Broadcasting Stations, Central Executive Committee of Kuomintang, Nankina.

49.93 m. 6.005 megs. VE9DN, Drummondville, P. Q. Canadian Marconi Co., P. O. Box 1690, Montreal. VE9DR, Montreal, P. Q. Address VE9DN above.

6.006 megs. HJ1ABJ, Santa Marta, Colombia. 50 watts. Voz de Santa Marta." Member Cadena Indo-Americana, Sr. Julio A. Sanchez T.

6.010 megs. 49.89 m. COC. Havana, Cuba. Add: P. O. Box 98. 0930-1300; 1600-1900. Saturday, 2330-0030. special program for all s.w. clubs (programa dedicado a los clubs de ondas cortas).

6.012 megs. HJ3ABH, Bogota, Colombia. 1.2 kW. "La Voz de la Victor." Member, Cadena Indo-Americana. Add: Manuel J. Gaitan, Almacenes Victor, Apartado 565. Sun., 1200-1400; 1609-2100. Other days, 1130-1400; 1800-2300.

6.020 megs. 49.80 m. DJC, Zeesen, Germany. 8 kW. Programs close with 2 Anthems, the Nazi Hymn and Watch on Rhine. Programs preceded by a music box tune, "Ever be True and Honest." Add: Reichs-Rundfunk-Gesellschaft, Haus Rundfunks, Masurenallee, Berlin-Char-lottenburg 9.

6.030 megs. 49.72 m. VE9CA, Calgary, Alta. 100 watts (input). "The Voice of the Prairle." Add: Voice of P., Ltd.,

Calgary. Thurs., 0900-0200; Sun., 1200-2400; other days, 0900-2400.

HP5B, Panama City, Panama. 100 watts. "Estacion Miramar". Address: Estacion Radiodifusora Miramar de la Radio Panama S. A., Apartado 910. Daily, 1900-2200.

6.040 megs. 49.64 m. WIXAL, Boston, Mass. Address: Educational Direct-or, University Club, Boston. Tues., Thurs., 1930-2130; Sun., 1700-1900.

W4XB, Miami, Fla. (transmitter on Collins Island). 2500 watts. Relays WIOD. (Temporarily discontinued).

YDA, Tandjongpriok, N. E. I. 10 kW. Key Station, NIROM Network, N. V. Nederlandsche Indische Radio Omroep Moatschappij, Koningsplein West 5, Batavia-Centrum, Java. N. E. I. 0530-1100; 1745-1845; 2230-0130.

> 6.042 meas. 49.62 m.

HJ1ABG, Barranquilla, Colombia. 150 watts. "Emisora Atlantico." Member, Cadena Indo-Americana. Interval sig: 4-note chime. Address: Sr. Andres Jimeno, Apartado 445.

6.050 meas. GSA, Daventry, England. 20 kW. "A for Aerial." Interval sigs: Bow Bells and Big Ben. Sign off: God Save the King. British Boradcasting Corp., Broadcasting House, London W. 1, England.

> 49.48 m. 6.060 megs.

OXY, Skamleback, Denmark (Copenhagen). 500 watts. Chimes at 6 p.m. EST. Add: Harold J. Rud. Press Secretary, Statsradiofonien, Heibergsgade 7, Copenhagen. Daily 1300-

VQ7LO, Nairobi, Kenya Colony. Cable & Wireless Ltd. Box 777. Tues., 0300-0400; Mon., Wed., 0545-0615; Thurs., 0800-0900; Sat.. 1100-1530; daily exc. Sat., 1100-1400.

W3XAU, Philadelphia (Newton Square) Pa. WCAU, CBS. WCAU Building, 1622 Chestnut St. 2100-2300.

W8XAL, Cincinnati (Mason) Ohio. 18 kW. Relays NBC-WLW. NBC-WLW. Crosley Radio Corp., 1329 Arlington St. Daily exc. Sun., 0630-2900; Sun., 0809-2000; daily exc. Sat., 2300-0290; Sat., 2300-0300.

ZHI, Singapore, Straits Settlements. Technical Director, Radio Service Co. of Malaya, Broadcast House 2 and 4, Orchard Road. Sat., 2300-0130; Mon., Wed., Thurs., 0600-0830.

> 49.39 m. 6.070 megs.

IRA, Rome, Italy. Address EIAR, 5.550 megs. VE9CS, Vancouver, B. C. 2-10 watts. Radio Service Engineers Ltd., 734 Davie St. Daily 2000-2200.

> 49.37 m. 6.072 megs.

OER2, Vienna, Austria. 1.5 kW. Oesterr. Radioverkehrs A. G., Wien I, Johannesgasse 4b. Sat., 0900-1800; Sun., silent; other days, n900-1700.

CQN, Macau. 500 watts. Ann: Portuguese and English. Mon., Fri., 0300-0500.

6 080 megs. 49.31 m.

CP5, La Paz, Bolivia. "Radio Illimani." Compania Radio Boliviana, Casilla 637. Daily, 2000-2100. DJM, Zeesen, Germany. Address, DJC, 6.020 megs. HJN, Bogota, Colombia. Sr. Luis Ramirez Arana, Jefe del Servicio de Inalambricos, Ministerio

de Correos y Telegrafos. VE9EH, Charlottetown, P. E. I. 250 watts. Relays CFCY. Island Radio Broadcasting Co., Ltd.,

143 Great George St. W9XAA, Chicago, III, 500 watts. Relays NBC-WCFL.

Daily exc. Sun., 0930-1800; Sun., 1130-2100. Mr. Maynard Marquardt, Chicago Federation of Labor, 666 Lake Shore Drive.

ZHJ, Penang, Straits Settlements. 49 watts. Hon-Secy., Penang Wireless Society, 40 Perak Road. Daily exc. Sun., 0640-0840.

> 6.085 megs. 49.27 m.

12RO, Rome, Italy. Address EIAR, 5.550 megs.

6.090 meas. 49.23 m.

VE9BJ, St, John, N. B. 50 watts. C. A. Munro. Ltd.. Canterbury Street.

VE9GW, Bowmanville. Ont. 200 watts. Canadian Radio Commission-CRCT. Address: R. R. No. 4. Sun., 1309-2190; Mon., Tues., Wed., 1500-2400; Thurs., Fri., Sat., 0700-2400.

> 6.100 megs. 49.15 m.

HJ4ABL, Manizales, Colombia. 150 watts. "L for "Ecos del Occidente." Chimes at Lady." midnight. Apartado 50. Sat., 2300-0100.

W3XAL, Bound Brook, N. J. 20 kW. National Broadcasting Co., 30 Rockefeller Plaza. N. Y. C. Relays NBC-WJZ. Mon., Wed., Sat., 1700-1800; Sun., 0000-0100.

W9XF, Chicago (Downers Grove), III. 5 kW. Relays NBC-WENR. N. B. C., Merchandise Mart, Chicago. Sat., 0100-0200; Sun., 0100-0230; 2100-2200; other days, 0100-0200; 2100-2200.

> 6.110 meas. 49.07 m.

GSL, Daventry, England. "L for Liberty." Int. sigs: Bow Bells and Big Ben. Sign off: God Save the King. Address GSA, 6.050 megs. Daily, 2200-2300.

HJ4ABB, Manizales, Colombia. 300 watts. "Radio Manizales." Sr. Ernesto Villegas.

VESC, Calgary, Alta. Calgary Herald, Ltd.
VESHX, Halifax, N. S. The Maritime Broadcasting
Co., Box 998.

49.05 m. 6.112 megs.

VUC, Calcutta, India. Indian State Broadcasting Service, 1 Garstin Place.

YV2RC, Caracas, Venezuela. 1 kW. "Broadcasting Caracas." "La Habla a la Nacion." Apartado 290. Sun., 1330-2230; Mon., Thurs., Sat., 1700-2200; Tues., Wed., 1700-2130; Fri., 1700-2145: daily, 1100-1330.

> 49.03 m. 6 115 meas.

HJ1ABE, Cartagena, Colombia. 180 watts. "La Voz de los Laboratorios Fuentes." Address: Laboratorios Fuentes L., Apartado 31. Mon. 2200-2400; Wed., 2000-2200.

> 6.120 meas. 48.99 m.

New York, N. Y. (Wayne, N. J.) 10 kW. Relays CBS-WABC. Columbia Brdcsting W2XE, New York, N. Y. System, 485 Madison Ave. at 52nd St., N. Y. C. Daily, 1800-2300.

YDA5, Bandoeng, Java, N. E. I. 1.5 kW. N. V. Nederlandsch Indische Radio Omroep Moat-shappij, Tegallegah 0.23, Bandoeng. 3530-1100; 1745-1845; 2230-0130.

6.122 megs.

ZTJ. Johannesburg, Union of South Africa. 5 kW. African Broadcasting Co., Joubert St. P. O. Box 4559.

> 6.125 megs. 48.95 m.

ZGE, Kuala Lampur, Federated Malay States. 180 watts. Hon. Secy., the Malayan Amateur Radio Society, Mercantile Bank Bidg., K. L. Sun., Tues., Fri., 0640-0840.

6.130 megs. 48.91 m.

COCD, Vedado, Havana, Cuba, Address: La Voz del Aire, S. A., Apartado 2294. Sun., 1100-1400; 1900-2400; other days, 1103-2400.

LCL, Jeloy, Norway. Director General, Administration des Telegraphes du Royaume de Norvege, Oslo, Norway.

6.140 meas 48.83 m.

W8XK, Pittsburgh (Saxonburg), Pa. 40 kW, Relays NBC-KDKA. Westinghouse Electric & Manufacturing Co., Grant Bldg., Pittsburgh. Daily, 2100-0100.

> 6.145 megs. 48.79 m., Durban, Union of S. A. 1 kW. African Broadcasting Co. . Villejust, France. 120 kW. (Under constr.)

6.150 megs. 48 75 m

CJRD, Winnipeg, Man. (Middlechurch). Relays CRC programs. James Richardson & Sons, Ltd., Royal Alexandria Hotel, Winnipeg. Daily, 2000-2400.

CO9GC, Santiago de Cuba. Relays CMKB. "Ask for Bacardi." Laboratorio Radio-electrico, Sres. Grau y Caminero, Apartado 137. Daily, 0930-1000; 1245-1330; 1530-1615.

CSL, Lisbon, Portugal.

YV3RC, Caracas, Venezuela. "Radiodifusora Venezuela YV3RC en Caracas." Bajos Pasaje Ramella. 1700-2200.

6.170 megs. 48,60 m. HJ2ABA, Tunja, Colombia. 50 watts. "Ecos de Boyaca." Member: Cadena Indo-Americana, Sr. Pompelio Sanchez.

CT1GO, Parede. Portugal. Sun., 1139-1390; Sun., Tues., Wed., Thurs., Fri., 1920-2030.

6.200 megs. 48.36 m. HJ3ABF, Bogota, Colombia. 50 watts. "La Voz de Bogota." Interval sig.: 6 chimes. Daily 6.200 megs. 1900-2300.

6.230 megs. 48.13 m.

HJ4ABC, Pereira, Colombia. 50 watts. "La Voz de
Pereira." 0930-1100; 1900-2000.

OAX4B, Lima, Peru. Relays OAX4C. R. Grellaud y Cie. Daily, 1900-2100.

6.240 megs. 48.05 m. HIIA, Santiago de los Caballeros, D. R. "La Voz del Yaque." Daily 1930-2130; Sun., 0100.

6.300 megs. 47.59 m. HJ1ABH, Cienaga, Colombia. 48 watts. Sergio Martinez Aparicio. Jr. Tues., Fri., 1945-2200.

6.315 megs. 47.48 m HIZ. Santo Domingo, D. R. 100 watts. Operator, Frank Hatton, Calle Duarte No. 68. Sat. 2300-0100; daily exc. Sun., 1700-1800.

> 6.330 meas. 47.36 m.

JZG, Nazaki, Japan. 10 kW. Works ships. Kokusai-Denwa Kaisha, Ltd., Osaka Bldg., Kojimachiku, Tokyo.

> 6.375 megs. 47.03 m

YV4RC, Caracas, Venezuela. "La Florida." "Estacion S.A.R." Member: Cadena Indo-Americana. Address: Estacion SAR, Este 10, Bis No. 71, Caracas. Daily, 1630-2230.

6.385 meas.

BC1, Chanute Field, Rantoul, III. Army airport. 153, Bolling Field, Va. (Washington, D. C.) Army airport.

WO9, Mitchell Field, Mineola, Long Island, Army airport.

WTR, Albrook Field, Canal Zone. Army airport.

6.425 megs. 46.66 m.

CZG, Prince Rugert, B. C. B. C. Provincial Police. VE9AS, Fredericton. N. B. Address, C'o Electrical Engineering Dept., University of New Brunswick.

VK1, Selfridge Field, Mt. Clemens, Mich. Army airport.

W3XL, Bound Brook, N. J. 18 kW. NBC Control station and cue station for nearly all special "stunt" broadcasts. Address NBC. 30 Rockefeller Plaza, N. Y. City.

W9XF, Chicago. (Downers Grove) III. Address W9XF, 6.100 megs.

6.440 megs. 46.56 m.

RTA. Navosibirsk, USSR. 15 kW.

6.445 megs. 46.52 m. PD1, Maxwell Field, Montgomery, Ala. Army airport. PE2, Wright Field, Dayton, Ohio. Army airport.

6.447 megs. 46.50 m.

HJ1ABB, Barranquilla, Colombia. 300 watts. 'La
Rarranquilla.'' Relays HJ1ABA. Address: Elias J. Pellet B., Apartado 715. Daily, 1703-2200.

6.450 merc 46.48 m YNIGG, Managua, Nicaragua. "La Voz de los Lagos." Raul Gutjerrez U. & Cie., Ltd. Daily, 1245-1430 - 1900-2145

6 490 megs. 46.20 m. HJ5ABD, Cali, Colombia. "La Voz del Valle." Apartado 270. Thurs , Sat., Sun., 1900-2100.

6.500 megs. 46.13 m HI4D, Santo Domingo, D. R. "La Voz de Quisqueya." 1300-1340; 1640-1940; daily exc. Sun.

46.00 m. 6.518 meas. HIL, Santo Domingo, D. R. Mr. J. C. Pellicer, Box 623.

6.520 megs. 45.98 m. YV6RV, Valencia, Carabobo, Venezuela. "La Voz

de Carabobo." Sres. Hermann y Williams Degwitz.

6.550 megs. 45.76 m. TIPG, San Jose, Costa Rica. 500 watts. "La Voz de la Victor". Perry Girton, Costa Rica Broadcasting Station, Apartado 225.

TIRCC, San Jose, Costa Rica. 500 watts. "Radioemisora Catolica Costaricense". Box 1064.

6.590 megs. 45.50 m. ZEA, Salisbury, Southern Rhodesia. 500 watts. Works ZEB.

ZEB, Bulawayo, Southern Rhodesia. 500 watts Works ZEA.

6.600 megs. 45.43 m. PE2, Wright Field, Dayton, Ohio. Army airport.

6.610 meas. CWE, Cerrito (Montevides) Uruguay. 1.5 kW.

6.615 meas. 45.32 m.

KIKL, Los Angeles, Calif. WMEP, Suffield, Ohio. 400 watts. Airways. WMEQ, Wheeling, III. Airways.

WMEU, St. Petersburg, Fla. 400 watts. Airways.

WMEV, Opa Locka, Fla. (Goodyear Zeppelin Base). 400 watts.

6.618 megs. WVD, Seattle, Wash. Phones Alaska, Alaskan Tele-

phone Co., 517 Federal Office Bldg.

6.620 megs. 45.29 m. PRADO, Riobamba, Ecuador. "Estacion El Prado." Member: Cadena Indo-Americana. Apartado Thurs., 2100-2330 and other nights 98. irregularly.

6.645 megs. 45.12 m. BF4, Kelly Field, San Antonio. Tex. Army airport. FG7, Langley Field, Va. Army airport.

IS3, Bolling Field, Va. (Washington, D. C.) Army airnort.

6.650 megs. 45.09 m. IAC, Coltano, Italy. 14 kW. Works ships. Address IAC, 4.355 megs. This frequency has been assigned to certain SHIPS but it is not known whether or not

voice is used. Reports from readers of actual VOICE reception are requested. 45.02 m. 6.659 megs.

HC2RL. Guayaquil, Ecuador. "Quinta Piedad." Address: Dr. Roberto Levi, Apartado 759. Tues., 2114-2314; Sun. 1745-1945.

45.00 m. 6.662 megs. WXH, Ketchikan, Alaska. Phones Seattle.

6.666 megs. 44.98 m. ZP10. Asuncion, Paraguay.

44.94 m. YVQ, Maracay, (Santa Rita), Venezuela. Address: Estados Unidos de Venez., Servicio Radiotelegrafico.

> 6.675 megs. 44.91 m.

DGK, Nauen, Germany. Address: Reichspostzentralamt, Telegraphentechnisches Reichsamt, Schoneberger Strasse 11-15. Berlin-Tempelhof.

6.690 meas. 44.82 m. CGA6. Drummondville, P. Q. Address VE9DN, 6.005 megs.

> 6.710 megs. 44.68 m.

TIEP, San Jose, Costa Rica, "La Voz del Tropico," Sr. Eduardo Pinto Hernandez, Apartado 257. Member: Cadena Indo-Americana. Daily, 1900-2200.

6.718 megs. 44.62 m. KBK, Manila, P. I. 50 kW. Radio Corp. of the Philippines, Plaza Moraga, Manila.

WDB. Rocky Point, N. Y. Works Havana. Corp. of A., Central Frequency Bureau, 66 Broad St., N. Y. City.

6.720 megs. 44.62 m. CFU, Rossland, B. C. Consolidated Mining & Smelting Co.

6.725 megs. 44.57 m. WQO, Rocky Point, N. Y. Address WDB, 6.718 megs.

6.735 megs. 44.53 m. KEO, Kahuku, Oahu, Hawaii. Works California.

6.758 meas. 44.47 m.

JVT, Nazaki, Japan. 20 kW. Works Dixon and broadcasts. Address JZG, 6.330 megs.

ZBW, Hong Kong. 250 watts. Address: Betty Billings, Secy., Hong Kong Broadcasting Committee, P. O. Box 200.

6.755 megs. 44.38 m. WOA, Lawrenceville, N. J. A. T. & T., Long Lines Dept., 32 Sixth Ave., N. Y. City.

6.760 megs. 44.35 m. CJA6, Drummondville, P. Q. Address VE9DN, 6.005 meas.

6.790 megs. 44.16 m. GDB, Rugby, England. Address GDW, 4.820 megs.

44.09 m. 6.800 megs. HIH, San Pedro de Macoris, D. R. "La Voz del Higuamo." 75 watts. Sr. Domingo Dom-Higuamo." 75 watts. Sr. Domingo Dominguez. Daily 1600-2030. Sunday, 0300-0400.

6.860 megs. 43.71 m. KEL, Bolinas, Calif. RCA Communications, Inc. Pacific Division, 28 Geary St., San Francisco. Calif.

6.870 megs. RKF, Moscow, USSR. 20 kW. 43.64 m.

6.880 meas. 43.58 m. CGA7, Drummondville, P. Q. Address VE9DN. 6.005 megs. RKF, Moscow, USSR. 20 kW.

43.45 m. 6.900 megs. RKF. Moscow, USSR. 20 kW.

6.905 megs. 43.42 m. GDS, Rugby, England. 15 kW. Phones N. Y. nights. Address GDW, 4.820 megs.

6.928 megs. 43.27 m.

WEZ, Rocky Point, N. Y. Address WDB, 6.718 megs.

43.23 m. 6.935 meas.

WEB, Rocky Point, N. Y. Works Paris. Address WDB, 6.718 megs.

6.950 megs. 43.13 m.

WKP, Rocky Point, N. Y. Address WDB, 6.718 megs. YNLF, Managua, Nicaragua. Cadena Indo-Americana. 2100-2200.

> 6.990 megs. 42.89 m.

JVS, Nazaki, Japan. Works Shanghai. Address JZG, 6.330 megs.

7.000 megs, to 7.300 megs.

41.07 meters to 42.83 meters. Amateur Band. Foreign amateurs use phone in this band. USA, code only.

> 7.090 megs. 42.29 m.

HKE. Bogota, Colombia. 138 watts. Observatorio Nacional de San Bartolome.

41.78 m. 7.175 meas.

CR6AA. Lobito, Portuguese West Africa. "Radio Eddystone." The Manica Trading Co., Ltd., Caixa Postal 118, Lobito.

7.200 meas.

HJ4ABB, Manizales, Colombia. "B for Baby." "Radio Manizales." Sr. Roberto Baena V.. Apartado 175.

41.61 m.

7.220 meas. 41.53 m.

HAT2, Szekesferhervar, Hungary. 6. kW. "Justice for Hungary!" Announcements Hungarian, French, English by lady. Address: Magyar Kiralyi Postakiserleti Allomas, IX Kerulet Gyali Ut 22, Budapest.

7.225 megs. 41.50 m. RPK, Mescow, USSR. 20 kW.

7.260 megs. 41.30 m RFF, Kharkov, USSR. 1 kW.

7.275 megs. 41.23 m RTZ, Irkutsk, USSR, 15 kW.

7.280 megs. 41.18 m. HJ1ABD, Cartagena, Colombia. 50 watts. "Ondas de la Hereica." Jzd. Villarreal, Director,

Apartado 252. Daily, 1945-2115. 7.370 megs. 40.68 m. WJN. Rocky Point, N. Y. Address WDB, 6,718 megs.

7.380 megs. 40.63 m XECR, Mexico City, D. F. Announcements: Spanish. Fnalish. Address: Departamento de Publicidad de la Secretario de Relaciones Exteriores. Sunday, 1880-1900.

7.390 megs. 40.57 m.
HJ3ABD, Bogota, Colombia. 50 watts. "Colombia
Broadcasting." Apartado 509. Daily, 1930-7.390 meas. 2300

JVR, Nazaki, Japan. Works Hongkong. Address JZG, 6.330 megs.

ZLR, Wellington, N. Z. 1 kW. Works VLJ. Address: Supt. of Post and Telegraphs, G. P. O.

7.409 megs. 40.51 m. WEM, Rocky Point, N. Y. Works London, Honolulu. Address WDB, 6.718 megs.

7.465 megs. 40.16 m. HJP, Bogota, Colombia. Works Hialeah nights.

7.470 megs. 40.14 m.
JVQ, Nazaki, Japan. 10 kW. Works PLE, PLV.
Address JZG, 6.330 meg.

7.510 megs. 39.92 m. JVP, Nazaki, Japan. 20 kW. Works Europe. Address JZG, 6.330 megs.

7.520 megs. 39.87 m. KDK, Kahuku, Oahu, Hawaii. Works Doxon. (?) KKH, Kahuku, Oahu, Hawaii. Works Dixon. RKI, Moscow, USSR. 20 kW.

....., Kahuku, Oahu, Hawaii. Works GMBJ.

7.550 megs. 39.71 m. CFQ, Edmonton, Alta. The E. Journal, Ltd. CGE, Calgary, Alta. The Calgary Herald, Southam Bldg.

CKS, Portable. Address CGE above.

7.565 meas. 39.63 m. KWY (W6XN), Dixon, Calif. Address: Transpacific Communication Co., Ltd., 140 New Montgomery St., San Francisco.

7.575 megs. 39.58 m. XGO, Shanghai, China. Chinese Govt. Radio Administration, Sassoon House, Jinkee Road.

7.610 megs. 39.40 m. KWX (W6XN), Dixon, Calif. Address KWY, 7,565 megs.

7.626 megs. 33.32 m. RIM, Tashkent, USSR. Works RKI. 20 kW.

7.680 megs. YBZ, Menado, Celebes, N. E. I. Works PNI, Macassar. Address: Mr. H. Van der Veen, Engineer-Incharge, Post-Telegraafen Telefoondienst, Bedrijf der Radiostations op Java, Bandoeng.

7.685 megs. 39.01 m. HJA3, Barranguilla, Colombia, TIR, Cartago, Costa Rica. Address: Compania Radiografica Internacional de C. R., San Jose,

7.715 megs. 38.86 m KEE, Bolinas, Calif. Address KEL, 6,860 megs.

7.740 megs. 38.74 m. CEC, La Granja (Santiago) Chile. Address CEC. 5.820 mags

7.770 megs. 38.59 m. HC2JSB, Guayaquil, Ecuador. Int. Sig.: one gong.

7.797 megs. 38.47 m. HBP, Prangins (Geneva) Switzerland, 20 kW, "Radio Works USA and broadcasts. Nations." Programs consist of talks in English, French. Spanish. Address: M. G. Gallarati, Information Section, League of Nations, Geneva. Sat. 1730-1815.

7.820 meas. 38.34 m. OCO, Lima (Valverde) Peru.

7.880 megs. 38.05 m. JYR, Kemikawa-Cho, Chiba-Ken, Japan. 5 kW. Experimental.

7.920 megs. 37.86 m. GCP, Rugby, England. Address GDW, 4,820 megs.

7.960 megs. 37.67 mg VLZ (VK2ME), Pennant Hills (Sydney), N. S. W., VLZ (VKZME), Pennant Hills (Sygney), n. 5. ..., Australia. 3.5 kW. Address: Amalgamated Wireless (A/sia) Ltd., 47 York St., Sydney, XGL, Shanghai. China. Address: XGO, 7.575 megs.

7.968 megs. 37.63 m. HSP, Bangkok, Siam. 20 kW. Address Post and Telegraph Dept.

7.980 megs. 37.57 m. VLZ (VK2ME), Pennant Hills (Sydney) Australia. Address VLZ, 7.960 megs.

8.020 megs. 37.38 m. HSJ, Bangkok, Siam. 20 kW. Address HSP, 7.968 megs.

8.035 megs. 37.31 m. CNR, Rabat, Morocco. 12 kW. Phones Paris. rection de l'Office des Postes, des Telegraphes et des Telephones du Maroc, Rabat. , "Radio-Maroc". 25 kW. Address CNR above. Sun., 1100-1200; 1400-1900.

8.070 megs. 37.15 m. IRF, Rome, Italy. Works N. Y. Societe Italo Radio, Servizi Radioelectrici, Via Calabria No. 46-48, Roma 125, Italy.

8.095 megs. 37.04 m. VLK, Pennant Hills (Sydney) Australia. Address VLZ, 7.960 megs.

8.120 megs. 36.92 m. KTP, Manila, P. I. Phones Dixon near 1000. Address

8.180 megs.

KBK, 6.718 megs.

PSK, Rio de Janeiro (Marapicu) Brazil. Phones N. Y. and Buenos Aires. Companhia Radio Internacional do Brasil, Caixa Postal 709, Rio de Janeiro.

8.214 megs. HCJB, Quito, Ecuador. 150 watts. "La Voz de los Andes." Interval sig.: 4 strokes on gong. Address Clarence W. Jones, Casilia 691, Quito. Sun., 1615-2245; Mon., sllent; other days, 1915-2315.

36.50 m

36.47 m. DDEA, S. S. Cap Ancona. 8.220 megs. DDED, S. S. New York. ZSV, Walvis Bay, Union of South Africa. 1 kW. DDFF, S. S. Reliance. DDFT, S. S. Oceana. 8.225 megs. 36 45 m. DDNY, S. S. Albert Ballin. DHEY, S. S. Deutschland. RRD. Moscow, USSR, 20 kW. DHTY, S. S. Resolute. DOAL, S. S. Europa. 35.71 m. 8.396 megs. HSP. Bangkok, Siam. 20 kW. Address HSP, 7.968 DOBX, S. S. Columbus. GBZW, S. S. Berengaria. meas. GFWV, S. S. Majestic. 35.69 m. 8.400 megs. GLSQ, S. S. Olympic. GMBJ, S. S. Empress of Britain. HC2AT, Guayaquil, Ecuador. 15 watts. American Trading Co., Mr. E. F. Gahan, Gerente, GMJQ, S. S. Belgenland. VQJM, S. S. Monarch of Bermuda. Casilla 872. Daily exc. Sun., 2000-2200. VQJP, S. S. Queen of Bermuda. 8.455 megs. CWF, Montevideo (Cerrito) Uruquay. 1.5 kW. 8.900 megs. 33.69 m.
ZLS, Wellington, N. Z. Address Supt. of Post and 33.69 m. 35 42 m 8.464 megs. Telegraphs, GPO. Works ships. DAF, Norden, Germany. Hauptfunkstelle Norddeich, Norden-Land. 8,930 megs. 33.57 m. WAD. Rocky Point, N. Y. R. C. A., Central Frequency 35.27 m. 8.500 megs. Bureau, 66 Broad St., N. Y. City. JZF, Nazaki, Japan. 10 kW. Works ships. Address WEC. Rocky Point, N. Y. Address WAD above. JZG, 6.330 megs. 8 940 mens 33.54 m. 35.03 m. 8.560 megs. KZGG, Cebu, Island of Cebu, P. I. Inter-Island phone. Philippine Long Distance Telephone WOO, Ocean Gate, N. J. 20 kW, Works ships. American Telephone & Telegraph Co., Long Lines Dept., 32 Sixth Ave., N. Y. C. WOY, Lawrenceville, N. J. 20 kW. Address WOO WKL, Rocky Point, N. Y. Address WAD, 8,930 megs. above. 8.950 megs. 33 50 mm WEL, Rocky Point, N. Y. Address WAD, 8,930 mcgs. 8.565 megs. 35.00 m. HAT3, Szekesfehervar, Hungary. 20 kW. "Justice for Hungary!" Announce in Hungarian, French, 8.975 megs. VWY, Kirkee, Poona, India. Phones London. English by lady. Address HAT2, 7.220 megs. 33.28 m. 9 DID mens 8 575 mens KEJ, Bolinas, Calif. 20-40 kW. Address KEL, 6.860 YCP, Balikpapan, N. E. I. 3 kW. Address YBZ, 7.689 megs. 9.020 meas. 33.24 m. 8.680 megs. 34.54 m. GCS, Rugby, England. 15 kW. Phones N. Y. night. GBC, Rugby, England. Works ships. Address GDW, 4.820 megs. 9.050 megs. 33.13 m. 34.50 m. TFK, Reykjavík, Iceland. 8.5 kW. (under construc-VWZ, Kirkee, Poona, India. 10 kW. Works also on freqs. 8.691, 8.693, 8.700 megs. Phones tion). 32 88 m. 9.120 megs. London. CP6, La Paz, Bolivia. "Illimani Radio." Compania 34 43 mm 8.708 megs. Radio Boliviana, Casilla 637. VWZ, Kirkee, Poona, India. 10 kW. Phones London. 32.86 m. 9.125 megs. HAT4, Szekesfehervar, Hungary. 20 kW. "Justice for Hungary!" Announce in Hungarian, 34.42 m. CEC, La Granja, (Santiago) Chile. 800 watts. Ad-French, England by lady. Address HAT2, dress CEC, 5,820 megs. 7.220 meas. 8.779 meas. 34.19 m. 32.70 m. 9.168 megs. RSZ, Irkutsk, USSR, 15 kW. Tests with RNE. YVR, Santa Rita, Maracay, Venezuela. Address YVQ, 6.672 megs. 34.16 m. 8.775 megs. PNI, Macassar, Celebes, N. E. I. 3 kW. Phones 32.70 m. 9.170 megs. Bandoeng. Address YBZ, 7.680 megs. KZGF, Manila, P. I. Inter-Island phone. WNA, Lawrenceville, N. J. Works London. A. T. & 8.790 megs. 34.11 m. T., Long Lines Dept., 32 Sixth Ave., N. Y. HJA3. Barranquilla, Colombia. City. 8.830 meas. 33.95 m. 32.31 m. 9,280 megs. SHIPS. For address of these ships refer to 4.413 GCB, Rugby, England. 15 kW. Phones Canada. megs., 4.415 megs. and 4.430 megs. All these Address Engineer-in-Chief, G.P.O. (Radio Section), Armour House, St. Martins le ships work with WOO. The German ships work also DAF: British ships with GBC and Grand, London EC1. CZA; Furness-Bermuda ships with ZFA-B.

9.332 megs.

CGA4, Drummondville, P. Q. Phones London.

Address VE9DN, 6.005 megs.

32.13 m.

DDAS, S. S. Bremen.

DDCP, S. S. Cap Polonio. DDDX, S. S. Hamburg.

DDBR, S. S. Berlin.

9.415 meas. 31.84 m.

PLV, Bandoeng, Java, N. E. 1. 80 kW. Works Dixon and JVB, JVE, JVQ. Address Mr. H. Van der Veen, Post-Telegraafen Telefoondienst, Bedrijf der Radiostations op Java, Bandoeng.

COH, Vedado, Havana, Cuba. Slogan: "Cuba, the Evergreen Land." Address: No. 2, B. Street, Daily 1000-1200; 1600-1800; 2100-2200; Relays CMCY Sunday, 1000-1100.

9.448 megs. 31.74 m. WES, Rocky Point, N. Y. Address WAD, 8.930 megs.

9.460 megs. 31.69 m. WKJ. New Brunswick, N. J. Address WNA, 9,170 megs.

9.470 megs. 31.66 m. WET, Rocky Point, N. Y. Works Buenos Aires, Caracas. Address WAD, 8.930 megs,

9.490 megs. 31.59 m. KZGH, Iloilo, P. I. Inter-Island phone. Philippine Long Distance Telephone Co.

OXY, Copenhagen, Denmark. Not used at present. SR1, Poznan, Poland. 1 kW. Tues., 1300-1500; Wed., 0800-0900. Radio Pozanski, Plac Wolnosce 11, Rozglosnia, Poznan. (This station is probably off the air).

9.500 megs. 31.56 m. XGOX, Nanking, China. See 6.000 megs.

9.503 megs.

VK3ME, Melbourne, Victoria, Australia (Braybank). 5 kW. Amalgamated Wireless (A/sia) Ltd., Box No. 1272L, Elizabeth St. P. O., Mel-bourne. Wed., Thurs., Fri., Sat., 0500-0700.

9.505 megs. 31.54 m.

PRF5, Rio de Janeiro, Brazil. "Radio Journal." Program consists of talks in Portuguese, Spanish, English and sometimes French, German. Address: Director of the Imprensa Nacional. Daily, 1730-1815.

9.510 megs.

GSB, Daventry, England. 20 kW. "B for Broadcasting." Interval sig.: Bow Bells and Big Ben. Sign off: God Save the King. Address GSA, 6.050 megs. Daily, 0115-0315; 1215-1500-1515-1645

> 9.530 megs. 31.46 m.

W2XAF, Schenectady, N. Y. 40 kW. Relays NBC-WGY. The General Electric Co., Schenectady. "The Voice of Electricity". Programs commence with electrical discharge of 10,000,000 Volts Sun., 1615-2400; Thurs., 1700-2300; other days, 1730-2300.

> 9.540 megs. 31.43 m.

DJN, Zeesen, Germany. 8 kW. Programs close with Nazi Hymn and Watch on the Rhine. Pro-grams preceded by a music box tune, "Ever be True and Honest." Address DJC, 6.020 megs.

LKJ1, Jeloy, Norway. 500 watts. 6.130 megs. Daily, 0500-9800.

9.555 meas.

VE9DN, Drummondville, P. Q. Canadian Marconi Co., Box 1690, Montreal, P. Q.

9.560 meas. 31 36 m. DJA, Zeesen, Germany. For details see DJN, 9.540 meas.

9.565 megs. 31.35 m. VUB, Bombay, India. Indian State Broadcasting Service, Irwin House, Sprotts Road, Ballard Estate, Bombay. Sun., 0700-0900 approximately.

> 9.570 megs. 31.33 m.

W1XK, Millis (Boston), Mass. 10 kW. Relays WBZ-WBZA, NBC programs. "These are the New England Westinghouse stations WBZ, WBZA, W1XK." Address: Westinghouse Radio Stations of New England, Hotel Bradford, Sunday, 0800-0100; other days. Roston. 0700-0100

W8XK, Pittsburgh (Saxonburg), Pa. This frequency loaned to W1XK.

9.575 megs. 31.31 m.

VUC, Calcutta, India. Refer to VUC, 6.112 megs.

9.580 megs. 31.30 m. GSC, Daventry, England. 20 kW. "C for Cerporation." For other details see GSB, 9.510

megs. Daily, 1800-2000; 2200-2300. VE9DR, Montreal, P. Q. Address VE9DN, 9.555 megs. VK3LR, Melbourne, Australia. Research Section.

P. M. G. Dept., 61 Little Collins St., C1, Melbourne. Daily, 0400-0800. XGBD, Shanghai, China. 18.5 kW. (Existence

> 9.585 megs. 31.28 m.

VK2ME, Sydney (Pennant Hills), Australia. 12 kW.
"The Voice of Australia." Laughing notes of the kookaburra, the Laughing Jackass, various times during program. Sign off: various times during program. Sign off:
God Save the King. Address: Amalgamated
Wireless (A/sia) Ltd., 47 York St., Sydney.
Sundays, 0100-0300; 0500-1100.
Villejust, France. 120 kW. (Under con-

struction)

doubtful).

9.590 megs. 31.26 m. HP5J, Panama City, Panama. 1 kW. "La Vez de Panama." Manuel Diaz Doce, Apartado 867. Daily, 1145-1300; 1930-2200.

W3XAU, Philadelphia (Newton Square), Pa. Relays CBS-WCAU. 750 watts. At 6.060 megs. Daily, 1200-2000. Address W3XAU,

31.25 m. 9.595 meas.

HBL, Prangins (Geneva), Switzerland. 18 kW.
"Radio Nations." Works USA and broadcasts. Programs consist of talks in English. French, Spanish. Address HBP, 7.797 megs. Sat., 1730-1815.

9.600 megs. 31.23 m. CT1AA, Lisbon, Portugal. 2 kW. "Radlo Colonial." Interval sig.: 3 cuckoos. Address: Senhor Abilio Nunes dos Santos, Jr., Av. Antonio d'Aguiar 144. Tues., Thurs., Sat., 1630-1900.

LQA, Buenos Aires, Argentina. Compania Internacional de Radio. Defensa 143, B. A.

9.609 megs. 31.20 m. DGU, Nauen, Germany. Phones Egypt irreg. Address DGK, 6.675 megs.

9.630 megs. 31.13 m.

12RO, Rome, Italy. Address Ente Italiano Audizioni Radiofoniche, Via Montello 5, Rome. American Hour broadcast Mon., Wed., Fri., 1800-

9.710 megs. 30.88 m. GCA, Rugby, England. 15 kW. Phones N. Y. and Buenos Aires. Address GCB, 9.280 megs.

9.750 megs. 30.75 m. RKF, Moscow, USSR. 20 kW.

VLJ, Sydney (Pennant Hills), Australia. Phones Bandoeng. Address VK2ME, 9.585 megs.

WOF, Lawrenceville, N. J. Address WNA. 9.170 megs.

9.790 megs. 30.63 m. GCW. Rugby, England. 15 kW. Phones N. Y. evenings. Address GCB, 9.280 megs.

9.840 megs. JYS. Kemikawa-Cho, Chiba-Ken, Japan. mental. 10 kW. Experi-

9.862 megs. 30.40 m. EAQ, Madrid (Aranjuez), Spain. 20 kW. "La Voz de Espana." Transradio Espanola, S. A., Departamento de Radiodifusion Ibero-Americana, Apartado 951. Programs close with National Hymn, "Himno de Riego." Daily, 1730-1900; Sat., 1200-1400.

30.38 m. 9.870 meas.

WON, Lawrenceville, N. J. 20 kW. Works London. Add.: WNA, 9.170.

₩ 9,890 megs. 30.32 m. LSN2, Buenos Airos (Hurlingham), Argentina. Address LQA, 9.600 megs.

9.895 megs. LSN, Buenos Aires (Hurlingham), Argentina. Works N. Y. Address LQA, 9.600 megs.

9,920 megs. 30.22 m. JDY, Darien. Works JVU, Nazaki.

9.930 megs. 30.19 m. HJY, Bogota, Colombia. Phones CEC, OCI evenings.

9.950 megs. GCU, Rugby, England. 15 kW. Works N. Y. nights. Address GCB, 9.280 megs.

9.990 megs. 30.01 m. KAZ, Manila, P. I. 40 kW. Works Dixon. Radio

Corp. of the Philippines, Plaza Moraga, LSL, Buenos Aires, Argentina. Address LQA, 9.600 megs.

> 10.000 megs. 29.98 m.

WWV, Beltsville, Md. 20 kW. Standard Frequency Station. Dept. of Commerce, National Bureau of Standards, Washington, D. C. Tues., Fri., 1315-1415.

10.040 meas. 29.86 m.

HII, Santo Domingo, D. R.

10.055 megs. 29.82 m.

SUV, Cairo (Abu Zabal), Egypt. 10 kW. Marconi Radio Telegraph Co. of Egypt, S. A., Box 795, Cairo.

ZFB, Hamilton (St. George) Bermuda. 1.5 kW. Phones N. Y. days.

> 29.77 m. 10 070 meas.

EHY, Madrid (Pozuelo del Rey), Spain. Phones YVR afterneons. Compania Telefonica Nacional de Espana, S. A., Margall 2, Madrid.

OPM, Leopoldville, Belgian Congo. 12 kW. Works ORK, Address Leopoldville Radio Station.

10.200 megs. 29.39 m. CMHB. Sancti-Spiritus, Cuba. Sr. Vicente Weiss Arias, Apartado 85.

29 34 mg 10,200 megs. PSH, Rio de Janeiro (Marapicu), Brazil. 12 kW,

Works Buenos Aires. Cia. Radiotelegraphica Brasileira, Caixa Postal 500.

10.250 megs. 29.25 m.

LSK3, Buenos Aires (Hurlingham), Argentina. 5 kW

PMN, Bandoeng, N. E. I. 3 kW. Works Sydney. Address PLV, 9.415.

10.285 megs. 29.15 m

DIQ. Koenigswusterhausen, Germany. Address DGK, 6.675 megs.

10.290 megs. 29.14 m.

HPC, Panama City, Panama.

10.330 meas. 29.02 m. ORK, Brussels (Ruysselede), Belgium, 11 kW. Works OPM irregularly; broadcasts daily. Ann.: Radio I.N.R. Sign off: La Brabaconne. Address: Regie des Telegraphes et des Telephones, Direction des Radiocommunications,

Bruxelles.

10,335 megs. 29.01 m.

ZFD, St. George, Bermuda. 1.5 kW. Address reports on special transmissions to Town Clerk. St. George.

> 28.97 m. 10.350 megs.

LSX, Buenos Aires (Monte Grande), Argentina. 20 kW. Transradio Internacional, Compania Radiotelegrafica Argentina S. A. San Martin

10.370 megs. 28.91 m. WCG (W2XBJ), Tuckerton, N. J.

10.375 megs. 28.89 m. JVO, Nazaki, Japan. 10 kW. Works JZA, JZB, JZC. Harbin. Address JZG, 6.330 megs.

10.400 megs. 28.83 m. KEZ, Bolinas, Calif. 40 kW. RCA Communications. Inc., Pacific Division, 28 Geary St., San Francisco, Calif.

> 28.80 m. 10,410 megs.

KES, Bolinas, Calif. 40 kW. Address KEZ, 18.400 meas.

28.80 m. 10.410 megs.

PDK, Kootwijk, Netherlands. 60 kW. Address Radiolaboratory, Neth. State Telegraphs, Park-straat 29, S'Gravenhage.

28.79 m.

PDK. Kootwijk, Netherlands. 60 kW. Address PDK. 10.410 megs.

> 28.77 m. 10.420 megs.

PDK, Kootwijk, Netherlands. 60 kW. Address POK, 10,410 megs.

XGW, Shanghai, China. 20 kW. Address XGO. 7.575 megs.

> 10.430 megs. 28.75 m.

YBG, Medan, Sumatra, N. E. I. 3 kW. Works Bandoeng. Director of Govt. Radio Service, Telegraaf en Telefoondienst, Serdangweg 2. Medan. Daily, 0430-0530; 2030-2300.

28.64 m.

10.465 megs. 28.64 m. WKC, Rocky Point, N. Y. 100 kw. Address WAO, 8.930 megs.

28.50 m. 10.520 megs. VLK. Pennant Hills (Sydney), Australia. 16 kW. Address VK2ME, 9.585 megs.

10.530 megs. 28.47 m. GBX, Rugby, England. 8 kW. Address GCB, 9.280 megs. JIB. Taiwan. Works JVG, JVL, JVV, Nazaki.

10.550 megs. 28.42 m. WOK, Lawrenceville, N. J. 20 kW. Address WNA, 9.170 megs.

10.600 megs. 28.28 m. WQW, Rocky Point, N. Y. Works Berlin. Address WAD, 8.930 megs.

10.610 megs. 28.25 m. WEA, Rocky Point, N. Y. 40 kW. Address WAD, 8,930 megs.

10.660 megs. 28.13 m.

JVN, Nazaki, Ibaraki-Ken, Japan 20 kW. Works
Europe and broadcasts to America. Sign off:
Japanese National Anthem. Address, see
JZG, 6.330 megs. Mon., Thurs., 1600-1700;
daily, 0000-0100.

10.670 megs. 28.10 m.
CEC, La Granja, (Santiago) Chile. 4 kW. Compania
Internacional de Radio S. A. (Chile), Casilla
16-D, Santiago. Broadcasting irregularly.

10.675 megs. 28.09 m. WNB, Lawrenceville, N. J. 500 watts. Phones Bermuda. Address, WNA, 9.270 megs.

10.740 megs. 27.92 m. JVM, Nazaki, Ibaraki-Ken, Japan. 20 kW. Other details identical JVN, 10.660.

10.770 megs. 27.84 m. GBP, Rugby, England. 15 kW. Address GCB. 9.280 megs.

10.840 megs. 27.66 m.
KWV (W6XN), Dixon, Calif. 20 kW. Address: Transpacific Communication Co., Ltd., 140 New
Montgomery St., San Francisco, Calif.

10.960 megs. 27.36 m. JZB, Harbín, Manchukuo. Works JVI, JVO, Nazaki.

10.990 megs. 27.28 m.
ZLT, Wellington, N. Z.
and Telegraphs.

11.140 megs. 26.91 m. XGB, Shanghai China. 15 kW. (Existence doubtful).

11.370 megs. 26.38 m. CWG, Cerrito (Montevideo), Uruguay. 1.5 kW.

11.495 megs. 26.08 m.

VIZ3, Rockbank (Melbourne), Australia. Tests with Canada. Address VK3ME, 9.503 megs.

11.660 megs. 25.71 m.

JVL, Nazaki, Japan. 10 kW. Works JIA, JIB, JIC
Taiwan. Address JZG, 6.330 megs.

11.670 megs. 25.69 m.
PPQ, Rio de Janeiro (Sepetiba), Brazil. 5 kW. Ad-

dress, see PSH, 10.220 megs.

KIO, Kahuku, Oahu, Hawaii. Works Bolinas. ....., Kahuku, Oahu, T. H. Works GMBJ.

11.720 megs. 25.58 m.
CJRX, Winnipeg, Man. (Middlechurch). James
Richardson & Sons, Royal Alexandra Hotel.
Daily, 2000-2400.

HJ4ABA, Medellin, Colombia. "Ecos de la Montana."
..., "Radio Coloniale," Pontoise, France. 15
kW. Address: Ministere des Postes, Telegraphes et Telephones. Direction de la
Radiodiffusion, 98 bis, Blvd. Haussmann,
Paris. Daily, 1900-2200; 2300-0100.

11.725 megs. 25.57 m.
PHI, Hilversum, Netherlands. 23.6 kW. Winter frequency). Philips' Omroep Holland-Indie, Emmasingel 29, Eindhoven. Announces in Dutch, Malay, German, French, English, Spanish, Portuguese. Close: Dutch National Anthem.

11.750 megs. 25.52 m.

GSD, Daventry, England. 20 kW. "D for Daventry."
Interval sig: Bow Bells and Big Ben. Sign
off: God Save the King. Address, see GSA,
6.050 megs. Daily, 0115-0315: 1215-1600;
1800-2000; 2200-2300.

11.770 megs. 25.47 m.

DJD, Zeesen, Germany. 8 kW. Programs close with
Nazi Hymn and Watch on the Rhine. Programs preceded by a music box tune. "Ever
be True and Honest." Address DJC. 6.020
megs.

11.790 megs. 25.43 m.
DJO, Zeesen, Germany. Address DJC. 6.020 megs.
W1XAL. Boston. Mass. 5 kW.

11.810 megs. 25.39 m.

11.810 megs. 25.39 m VE9GW, Toronto (Bowmanville), Ont.

11.811 megs. 25.38 m.
IRE, Rome, Italy. Address I2RO, 9.630 megs. Daily.
0815-0900; 0915-1015; 1200-1300; 1345-1430.

11.830 megs. 25.34 m. W2XE, New York, N. Y. (Wayne, N. J.). Relays CBS, WABC. 10 kW. Address W2XE, 6.120 megs.

Daily, 1500-1700. W9XAA, Chicago, III.

11.845 megs. 25.31 m., Villejust, France. 120 kW. Under construction.

11.860 megs. 25.28 m.

GSE, Daventry, England. 20 kW. "E for Empire." Interval sig.: Westminster Chimes and Big Ben. Sign off: God Save the King. Address: see GSA, 6.050 megs. Daily, 1100-1200.

11.870 megs. 25.25 m.

W8XK, Pittsburgh (Saxonburg), Pa. 40 kW. Relays NBC-KDKA. Westinghouse Electric & Manufacturing Co., Grant Bldg., Pittsburgh, Pa. Daily. 1700-2100.

11.880 megs. 25.24 m.

, "Radio Coloniale," Pontoise, France. 15 kW. Address, see 11.720 megs. Daily, 1115-1415; 1500-1800.

11.940 megs. 25.11 m.

FTA, Ste. Assise, France. Works Saigon. Societe Francaise Radio-Electrique, 79 Blvd. Haussmann, Paris VIII.

11.950 megs. 25.08 m.

KKQ, Bolinas, Calif. Address KEZ, 10.400 megs.

11.990 megs. 25.00 m. FZS2, Saigon. French Indo-China. 15 kW. Phones

Paris. Cie. Generale de Telegraphie Sans Fil, Boite Postale 238.	12.830 megs. 23.36 m. HJA3, Barranquilla, Colombia.
12.000 megs. 24.99 m. RNE, Moscow, U. S. S. R. 20 kW. Kremlin Chimes at 1600 EST. Programs in English, Russian,	, "Radio-Maroc," Rabat, Morocco. 25 kW. Address CNR, \$.035 megs. Broadcasts Sun., 0700-0900.
German, French, Czech, Hungarian, Dutch,	12.840 megs. 23.35 m.
Spanish, Swedish. Address: Mme. Inna Marr, Trade Union Radio Station, Palace of	WOO, Ocean Gate, N. J. 20 kW. Works ships. Address WNA, 9.170 megs.
Laber, Solianka 12, Moscow. Daily, 1500- 1800; Sunday, 0700-1100; Wed., 0600-0700.	WOY, Lawrenceville, N. J. 20 kW. Address WNA 9.170 megs.
12.020 megs. 24.94 m. IVK, Nazaki, Japan. Works Shanghal. Address JZG, 6.330 megs.	12.930 megs. 23.18 m. WAW, Hialeah, Fla.
12.030 megs. 24.92 m. HBO, Prangins, (Geneva) Switzerland. 20 kW. "Radio Nations." Address: see HBP, 7.797 megs.	12.955 megs. 23.14 m. GMBJ, S. S. Empress of Britain. Works WOO, IAC, DAF, GBC, CZA, etc.
12.035 megs. 24.91 m. DJK, Nauen, Germany. 7.2 kW. Address DGK, 6.675 megs.	13.020 megs. 23.03 m. JZE, Nazaki, Japan. 10 kW. Works ships. Address JZG, 6.330 megs.
12.050 megs. 24.88 m.	13.045 megs. 22.98 m.
PDV, Kootwijk, Netherlands. 60 kW. Address: PDK, 10.410 megs.	VPD, Suva, Fiji Islands. "Radio Suva." Amal- gamated Wireless, (A/sia) Ltd., Suva, Fiji Dally exc. Sun., 0030-0130.
12.150 megs. 24.68 m. GBS, Rugby, England. 15 kW. Phones N. Y. After- neons. Address: GCB, 9.280 megs.	13.050 megs. 22.97 m. ICEJ, S. S. Rex. Address Italian Line, No. 1 State St.
12,210 megs. 24,56 m.	N. Y. C.
VIY, Ballan, Victoria, Australia. Address VK2ME, 9.585 megs.	13.140 megs. 22.82 m. CWH, Montevideo (Cerrito), Uruguay. 1.5 kW.
12.215 megs. 24.55 m.	13.185 megs. 22.74 m.
TYA, Paris, France. Phones Algeria. Address: FTA, 11.940 megs.	SHIPS. For addresses of these ships refer to 4.41: megs., 4.415 megs. and 4.430 megs. Al
12.225 megs. 24.53 m. TFK, Reykjavik, Iceland. 8.5 kW. Under construc- tion.	these ships work with WOO. The German ships also work DAF; the Italian ships work IAC; British ships with GBC and CZA.
12.241 megs. 24.41 m.	DDAS, S. S. Bremen. DDBR, S. S. Berlin.
GBU, Rugby, England. Phones N. Y. Address: GCB, 9.280 megs.	DDCP, S. S. Cap Polonio. DDDX, S. S. Hamburg.
	DDEA, S. S. Cap Ancona.
12.260 megs. 24.46 m. FTN, Ste. Assise, France. Address: FTA, 11.940 megs.	DDED, S. S. New York. DDFF, S. S. Relianca. DDFT, S. S. Oceana.
12.270 megs. 24.52 m.	DDNY, S. S. Albert Ballin.
IVJ, Nazaki, Japan. Works Hongkong. Address JZG, 6.330 megs.	DHTY, S. S. Resolute.
RKK, Moscow, USSR. 20 kW.	DHEY, S. S. Deutschland. DHTY, S. S. Resolute. DOAI, S. S. Europa. DOBX, S. S. Columbus.
12.325 megs. 24.33 m.	FNSM, S. S. Paris.
DAF, Norden, Germany. 5 kW. Phones ships, morn-	FTNQ, S. S. Ile de France. GBZW, S. S. Berengaria.
ings. For address see DAF, 8.464 megs.	GFWV, S. S. Majestic.
12.500 megs. 23.99 m.	GLRZ, S. S. Aquitania.
RKF, Moscow, USSR. 20 kW.	GLSQ, S. S. Olympic. GMJQ, S. S. Belgenland.
ZSV, Walvis Bay, Union of South Africa. 1 kW.	IBEJ, S. S. Conte Rosso. Italian Line, One Stat
12.745 megs. 23.60 m. DAF, Norden, Germany. 5 kW. Works ships. Ad-	St., N. Y. C. IBGI, S. S. Conte Verde. Idem. IBLI, S. S. Conte di Savoia. Idem.
dress DAF, 8.464 megs.	13.200 megs. 22.71 m.
12.780 megs. 23.46 m. GBC, Rugby, England. 5 kW. Works ships. Address	CFU, Rossland, B. C. Consolidated Mining & Smelling Co.
GCB, 9.280 megs.	13.237 megs. 22.65 m.
12.795 megs. 23.45 m.	FNSK, S. S. Normandie.
IAC, Coltano, Italy. 14 kW. Works ships. Address IAC, 4.355 megs.	13.320 megs. 22.51 m. GDLJ, S. S. Homeric. Address GBZW, 4.413 meg
12.820 megs. 23.38 m. CNR, Rabat, Morocco. Works Parls. Address, CNR, 8.035 megs.	13.337 megs. 22.48 m. YVQ, Maracay (Santa Rita), Venezuela. Phono Hialeah days.

13.390 megs. 22 39 .... WMA, Lawrenceville, N. J. Works London. Address WNA, 9,170 megs.

13.415 megs. 22.35 m. GCJ, Rugby, England. Works JVH, Nazaki, Address GCB 9.280 megs., 0300-0800.

TIEP, San Jose, Costa Rica, "La Voz del Tronico". Sr. Eduardo Pinto Hernandez, Apartado 257. Sunday at 1300.

13.435 megs. 22 31 199

WEL, Rocky Point, N. Y. Phones London. Address WAD 8.930 megs.

> 13.465 megs. 22.26 m.

WKC, Rocky Point, N. Y. Address: WAD, 8.930 megs.

13.500 megs. 22.21 m.

GBB, Rugby, England. Phones Canada and Egypt days. Address: GCB, 9.280 megs.

13.560 megs. 22.11 m. JVI, Nazaki, Japan. 10 kW. Works JZA, JZB, JZC Harbin. Address: Kokusai-Denwa Kaisha, Ltd., Osaka Bldg., Kojimachiku, Tokvo.

13.600 megs. 22.05 m. JYK, Kemikawa-Cho, Chiba-Ken, Japan. Experimental.

13.690 megs. 21.90 m.
Calif. Works Honolulu, Hsinking, KKZ, Bolinas, Calif. Works Honolulu, Hsinki New York. Address: KEZ, 10.400 megs.

13.745 megs. 21.81 m. CGA2, Drummondville, P. Q. Canadian Marconi Co., Box 1690, Montreal, P. Q.

13.780 megs. 21.75 m. KKW, Bolinas, Calif. Address: KEZ, 10.400 megs.

13.810 megs. 21.71 m.

HRM, Tela, Honduras. Tela Railroad Co. SUZ, Cario (Abu Zabal), Egypt. 10 kW. Uses any freq. between 13.810 and 13.830 megs. Address: SUV, 10.055 megs.

13.840 megs. 21.66 m.
WPE, Rocky Point, N. Y. Radio Corp. of America. Central Freq. Bureau, 66 Broad St., New York City

13.855 megs. 21,63 m. WQU, Rocky Point, N. Y. Address: WPE, 13.840 megs.

13.870 megs. 21.61 m.

WIY, Rocky Point, N. Y. Address: WPE, 13.840 megs. 13,900 megs. 21.57 m.

WQP (W2XBJ), Rocky Point, N. Y. Address: WPE, 13.840 megs.

> 13.915 megs. 21.54 m.

WQS, Rocky Point, N. Y. Address: WPE, 13.840 megs.

13.980 megs.

LCO, Jeloy, Norway. 1 kW. Address LCL, 6.130 megs.

13.984 megs. 21,44 m.

GBA, Rugby, England. Address GCB, 9.280 megs.

14.000 to 14.400 megs.

20.82 to 21.42 meters. AMATEURS. Phones work between 14.150 and 14.250 megs.

20.76 m. 14.440 meas.

GBW, Rugby, England. 15 kW. Address GCB, 9.280 megs.

14.470 megs. 20.72 m.
WMF, Lawrenceville, N. J. A. T. & T., Long Lines
Dept., 32 Sixth Ave., N. Y. City.

14.480 megs.

LSN, Buenos Aires (Hurlingham), Argentina. Phones N. Y. Address: Compania Internacional de Radio, Defensa 143.

YNA, Managua, Nicaragua. Phones Hialeah days.

14.500 megs. 20.68 m HRM, Tela, Honduras. Works Hialeah days.

14.535 megs. HBJ, Prangins (Geneva), Switzerland. 20 kW. "Radio Nations." Address: M. Gallaratl, Information Section, League of Nations. Geneva

14.545 megs. 20 69 m HPF, Panama City, Panama.
TGF, Guatemala City, Guat.
Phones Hialeah days.
TIN, Cartago, Costa Rica.
Phones Hialeah days.

Compania Radiografica Internacional de C. R., San Jose.

TIU, Cartago, Costa Rica, See TIN above.

14.590 megs. 20.55 m. WMN, Lawrenceville, N. J. 20 kW. Address WMF, 14,470 meas.

14.640 megs. 20.42 m. JVH, Nazaki, Japan. 20 kW. Addr megs. Works GCJ, 0200-0600. Address JVI, 13.560

14.690 megs. PSF, Rio de Janeiro, Brazil. Phones Madrid and Buenos Aires. Companhia Radio Internacional do Brasil, Caixa Postal 709.

14.800 megs. 20.26 m. WQV, Rocky Point, N. Y. 40 kW. Address WPF. 13.840 meas.

14.815 megs. 20.23 m. WQL, Rocky Point, N. Y. 40 kW. Address WPE, 13.840 meas.

14.830 megs. 20.21 m. WKU, Rocky Point, N. Y. 40 kW. Address WPE, 13.840 megs.

14.910 megs. 20.11 m. JVG, Nazaki, Japan. 10 kW. Works JIA, JIB, JIC Taiwan. Address: JVI, 13.560 megs.

14.930 megs. HJB, Bogota, Colombia. Phones Hialeah, days.

14.935 megs. 20.07 m.

PSA, Rio de Janeiro, Brazil. Phones Buenos Aires and Madrid. Address: PSF, 14.690 megs. 14.980 megs. 20.01 ms

KAY, Manila, P. I. 40 kW. Radio Corp. of the Philippines, Plaza Moraga, Manila.

> 15.040 megs. 19.93 m.

RKI, Moscow, USSR. 20 kW. Works RIM Tashkent. WQG, Rocky Point, N. Y. 40 kW. Address WPE. 13.840 megs.

> 15.055 megs. 19.91 m.

WNC, Hialeah, Fia. 400 watts. Works HJB, HJP, HPF, HRM, TGF, TIN, TIU, YNA, YVQ and ZFS daily; other S. Americans Irregularly.

15.070 megs. 19.89 m. PSD, Rio de Janeiro (Marapicu), Brazil. 12 kW.

Works Madrid and Buenos Aires mornings. Address: PSF, 14.690 megs.

19.87 m. 15.090 megs. RKI. Moscow, USSR. 20 kW. Works Rocky Point.

19.85 m. 15.104 megs. RAU Tashkent USSR. Phones Moscow mornings.

15.120 meas. 19.83 m. HVJ. Vatican City, 10 kW. Interval sig.: clock ticking for 10 minutes preceeding transmission; hells of St. Peter's at 3 o'clock. Announcement: Laudatur Jesus Christus. follows: Mon., Italian; Tues., English; Wed., sonows: mon., statian; tues., English; wed.. Spanish; Thurs., French; Fri., German; Sat., Dutch; Sun., Latin. Address: Stazione Radio-Vatican, Pontificia Accademia Della Scienze, Roma-Castina Pio IV, Citta del Vaticano. Schedule: 1000-1045.

15 1/0 mens

GSF. Daventry, England. 15 kW. "F for Fortune." Interval sig.: Westminster chimes and Big Ben. Sign off: God Save the King. Address. Bertish Broadcasting Corp., Broadcasting House, London W.1. Daily, 0900-1200; daily exc. Sun., 0600-0845; Sun., 0630-0845.

15.200 megs. 19.73 m. DJB, Zeesen, Germany, 8 kW. Programs close with Mazi Hymn and Watch on the Rhine. Pro-grams preceded by a music box tune, "Ever be True and Honest." Address DJC 6.020 mens

19.71 m. 15.210 meas. W8XK, Pittsburgh (Saxonburg), Pa. 40 kW. Relays NBC-KDKA. Westinghouse Electric Manufacturing Co., Grant Bldg. Daily 0900-1900.

15,220 megs. 19.70 m. PCJ. Hilversum, Netherlands. Philips' Omroep Holland-Indie, Emmasingel 29, Eindhoven. Announcements in Dutch, English, French. German, Malay, Portuguese, Spanish. Sign off: Dutch National Anthem. Irregular in operation.

19.66 m. 15,250 megs. "Radio Coloniale," Pontoise, France. 12 kW. Address, see 11.720 megs. Daily, 0709-1100. W1XAL, Boston, Mass. 5 kW.

15.260 megs. 19.65 m. GSI, Daventry, England. "I for Island." For other details see GSF, 15.140 megs.

15.270 megs. W2XE. New York, N. Y. (Wayne, N. J.). 10 kW. Relays WABC-CBS. For address see 6.120 megs. Daily 1100-1300.

15.280 meas. 19.62 m. DJQ, Zeesen, Germany.

19.60 m. 15.295 megs. Villejust, France. 120 kW. Under con-

struction.

15.300 megs. 19.60 m. CP7, La Paz, Bolivia. Compania Radio Boliviana. Casilla 637. OXY, Copenhagen, Denmark.

19.56 m. 15.330 megs. W2XAD, Schenectady, N. Y. 20 kW. The General Electric Co. Relays NBC-WGY. "The Voice of Electricity." Program commences with electrical discharge of 10,000,000 volts of

man-made lightning. Sunday, 1030-1600; other days, 1400-1500.

15.340 megs. 19 55 m. DJR. Zeesen, Germany.

19.53 m. 15.350 meas. CT1AA, Lisbon, Portugal. 2 kW. Int. Sig.: 3 cuckoos.

Address CT1AA, 9,600 megs.

15.355 meas. 19.52 m. KWU (W6XN), Dixon, Calif. 20 kW. Address KWV. 10.840 meas.

15.370 meas. 19,51 m. HAS3, Szekesferhervar, Hungary. 20 kW. "Justice for Hungary!" Announce in Hungarian, French, English by lady. Address, see HAT2. 7.220 megs.

15.415 megs. KWO (W6XN), Dixon, Calif. 20 kW. Address KWV, 10.840 megs.

19.42 m. 15 440 meas. PRADO, Riobamba, Ecuador. "Estacion El Prado." Apartado 98. This freq. used in summer only, Sundays, 1700-1800.

19.41 m. 15.445 megs. WKW. Rocky Point, N. Y. Address WPE, 13.840.

15.454 megs. 19.40 m. , Pontoise, France. (Proposed).

15.475 megs. 19 37 m. KKL, Bolinas, Calif. Address KEZ, 10.400 megs.

15.510 meas. JDX, Darien. Works JVU Nazaki.

19.19 m. 15.620 megs. JVF. Nazaki. Japan. 20 kW. Works Dixon, nights. Address JVI, 13.560 megs.

15.660 meus. 19.15 m. JVE, Nazaki, Japan. 10 kW. Works Bandoeng nights. Address JVI, 13.560 megs.

19.12 m. 15.680 meas.

JZA, Harbin, Manchukuo. Works JVI, JVO Nazaki.

15.750 meas. JIA, Taiwan. Works JVG, JVL. JVV Nazaki.

15.760 megs. 19.02 m. JYT, Kemikawa-Cho, Chiba-Ken, Japan. 5 kW.

18.90 m. 15.860 megs.

CEC, La Granja (Santiago), Chile, 800 watts. Phones Peru, afternoons. Address CEC, 10.670 megs.

JVD, Nazaki, Japan. Works Shanghai. Address

JVI, 13.560 megs.

15.863 meus. 18.90 m. FTK, Ste. Assise, France. Phones Saigon. Address FTA, 11.940 megs.

15.970 megs. 18.77 m. WKO, Rocky Point, N. Y. Address WPE, 13.840 megs.

18.72 m. 16.015 megs. WQR, Rocky Point, N. Y. Address WPE, 13.840 megs.

16.030 meas.

KKP, Kahuku, Oahu, Hawaii. ....., Kahuku, Oahu, T. H. Phones GMBJ.

18.68 m. 16.050 megs.

JVC, Nazaki, Japan. Works Hongkong. Address JVI, 13.560 megs.

16.150 megs. 18.56 m.
GBX, Rugby, England. Phones Sydney. Address
Engineer-in-chief, G.P.O. (Radio Section),
Armour House, St. Martins le Grand,
London EC1.

16.200 megs. 18.51 m.
FZR, Saigon, French Indo-China. Phones Paris.
Address FZS2, 11.990 megs.

16.240 megs. 18.49 m. KTO, Manila, P. I. Phones Dixon. Radio Corp. of the Philippines, Plaza Moraga, Manila.

16.270 megs. 18.48 m.
WLK, Lawrenceville, N. J. Works London. Address
WMF, 14.470 megs.

16.380 megs. 18.30 m. XGN. Shanghai, China. Address XGO, 7.575 megs.

16.460 megs. 18.22 m.
DOAI, S. S. Europa. Phones WOO, DAF. Address
DDAS, 4.413 megs.

16.600 megs. 18.05 m.
DHEY, S. S. Deutschland. Works WOO, DAF. Address DDAS, 4,413 megs.

16.765 megs. 17.88 m.
DHTY, S. S. Resolute, Works WOO, DAF.

16.910 megs. 17.73 m. JZD, Nazaki, Japan. 20 kW. Works ships. Address JVI, 13.560 megs.

17.080 megs. 17.55 m. GBC, Rugby, England. 5 kW. Works ships. Address GBX, 16.150 megs.

17.120 megs. 17.51 m. WOO, Ocean Gate, N. J. 20 kW. Works ships. Address WMF, 14.470 megs.

WOY. Lawrenceville, N. J. 20 kW. Address WMF, 14.470 megs.

17.260 megs. 17.37 m.

DAF, Norden, Germany, 5 kW. Works ships. Address DAF, 8.464 megs.

17.310 megs. 17.32 m.
CZA, Drummondville, P. Q. Works ships. Address

CGA2, 13.745 megs. W3XL, Bound Brook, N. J. 20 kW. National Broadcasting Co., 30 Rockefeller Plaza, N. Y. C.

17.480 megs. 17.15 m. VWY, Kirkee, Poona, India. Phones London.

17.520 mens. 17.11 m

DFB, Nauen, Germany. Works S. America mornings. Address DGK, 6.675 megs.

17.710 megs. 16.93 m.
CJA3, Drummondville, P. Q. Works London. Address CGA2, 13.745 megs.

17.740 megs. 16.90 m. HSP, Bangkok, Siam. 20 kW. Post & Telegraph Dept.

17.760 megs. 16.88 m.

DJE, Zeesen, Germany. 5 kW.

17.765 megs. 16.88 m.
, VilleJust, France. 120 kW. Under construction.

17.770 megs. 16.87 m.
IAC, Coltano, Italy. Works ships. Radiomarittimo
Coltano Radio IAC, Piza, Italy.

17.775 megs. 16.87 m.
PHI, Hilversum, Netherlands. 23.6 kW. For details see PCJ, 15.220 megs. Mon., Thurs.. Fri., 0730-0930; Sat., Sun., 0730-1030.

17.780 megs. 16.86 m.
W3XAL, Bound Brook, N. J. 14 kW. Relays WJZNBC programs. Address W3XL, 17.310 megs.
Daily exc. Sun., 0900-1000; Tues.. Thurs..
Frl., 1500-1600.

W8XK, Pittsburgh (Saxonburg), Pa. 40 kW. Not used at present.

W9XAA, Chicago, III. Not used at pres.

17.790 megs. 16.85 m.
GSG, Daventry, England. 15 kW. "G for Greeting."
For other details see GSF, 15.140. Daily,
0900-1045; daily exc. Sun., 0600-0845; Sun.,
0630-0845.

17.830 megs. 16.82 m.
PCV, Kootwijk, Netherlands. Works Java, mornings.
Radiolaboratory Neth. State Telegraphs,
Parkstraat 29, S'Gravenhage.

17.860 megs. 16.78 m. WQC, Rocky Point, N. Y. 40 kW. Address WPE, 13.840 megs.

17.880 megs. 16.76 m. WQI, Rocky Point, N. Y. 1 kW. Address WPE, 13.840 megs.

17.900 megs. 16.75 m.
WLL, Rocky Point, N. Y. 20 kW. Address WPE,
13.840 megs.

17.920 megs. 16.73 m.
WQF, Rocky Point, N. Y. 40 kW. Address WPE,
13.840 megs.

17.940 megs. 16.71 m.

WQB (W2XBJ), Rocky Point, N. Y. 40 kW. Address

WPE. 13.840 megs.

18.020 megs. 16.64 m. KQJ, Bolinas, Calif. 40 kW. Address KEZ, 10.400 megs.

18.115 megs. 16.55 m. LSY3, Buenos Aires (Monte Grande), Argentina. Transradio Internacional, San Martin 329,

18.135 megs. 16.53 m.
PMC, Bandoeng, Java, N. E. I. 40 kW. Works Neth.,
0330-0900. Address: Mr. H. Van der Veen,
Engineer In Charge, Post-Telegraaf-en Telefoondienst, Bedrijf der Radiostations op

Java. Bandoeng.

18.180 megs. 16.49 m. CGA, Drummondville, P. Q. Canadian Marconi Co., Box 1690, Montreal, P. Q.

18.190 megs. 16.48 m. JVB, Nazaki, Japan. 10 kW. Works PLE, PLV. Address: Kokusai-Denwa Kaisha, Ltd., Osaka Bidg., Kojimachiku, Tokyo.

18.200 megs. 16.47 m.
GAW, Rugby, England. 15 kW. Works N. Y. Address:
GBX, 16.150 megs.

18.296 megs. 16.39 m. YVR, Maracay (Santa Rita), Venezuela. Works Berlin. Estados Unidos de Venezuela. Servicio Radiotelegrafico.

18.304 megs. 16.38 m.
GAS, Rugby, England. Works N. Y. mornings.

Address: GBX, 16.150 megs.	19.120 megs. 15.68 m. LSM, Buenos Aires, Argentina. Works Europe.
18.330 megs. 16.36 m. FTE, Ste. Assise, France. Societe Francaise Radio- Electrique, 79 Blvd. Haussmann, Paris VIII.	19.200 megs. 15.62 m. ORG, Brussels (Ruysselede), Belgium. 8 kW. Works Leopoldville, Address ORK, 10.330 megs.
18.342 megs. 16.35 m. FZS, Saigon, French Indo-China. Works Paris. Address: FZS2, 11.990 megs.	19.220 megs. 15.60 m. WKF, Lawrenceville, N. J. 20 kW. Address WLA. 18.350 megs.
18.350 megs. 16.34 m. WLA, Lawrenceville, N. J. A. T. & T. Long Lines Dept., 32 Sixth Ave., N. Y. City.	19.270 megs. 15.57 m. PPU, Rio de Janeiro, Brazil. Works Paris. 13.5 kW. Address: Cia Radiotelegraphica Brasileira,
18.400 megs. 16.29 m. PCK, KootwiJk, Netherlands. Works Java. Address: PCV, 17.830 megs.	Caixa Postal 500, Rio de Janeiro.  19.345 megs. 15.50 m. PMA, Bandoeng, Java, N. E. f. 40 kW. Address:
18,444 megs. 16,25 m. HJY, Bogota, Colombia. Works CEC, LSR, OCI days.	PMC, 18.135 megs.
18.450 megs. 16.25 m. HBH, Prangins, Switzerland. 20 kW. Address: HBJ,	19.355 megs. 15.46 m. FTM, Ste. Assise, France. Address: FTE, 18.330 megs.
18.600 megs. 16.12 m. PCM, Kootwijk, Netherlands. Address: PCV, 17.830	19.520 megs. 15.36 m. IRW, Rome, Italy. Works Argentina. 20 kW. Address: Societe Italo Radio, Servizi Radioelectrici, Via Calabria No. 46-48, Roma 125.
megs.  18.620 megs.  16.10 m.  GAU, Rugby, England.  15.150 megs.	19.600 megs. 15.30 m. LSF, Buenos Aires (Monte Grande), Argentina. 7 kW. Address: LSY3, 18.115 megs.
18.670 megs. 16.06 m. OCI, Lima (Valverde), Peru. Works HJY, CEC, LSR, WNC days. Compania Peruana de	19.680 megs. 15.24 m. CEC, La Granja (Santiago), Chile. 4 kW. Compania Internacional de Radio S. A. (Chile), Casilia 16-D, Santiago.
Telefonos, Apartado 986, Lima.  18.830 megs.  15.92 m.  PLE, Bandoeng, Java, N. E. I. 40 kW. Works Dixon nights, Tokyo mornings. Address: PMC, 18.135 megs.	19.820 megs. 15.13 m. WKN, Lawrenceville, N. J. Address: WLA, 18.350.  19.900 megs. 15.06 m. LSG, Buenos Aires (Monte Grande), Argentina. 7 kW. Address: LSY3, 18.115 megs.
18.860 megs. 15.89 m. WKM, Rocky Point, N. Y. 40 kW. Address: R.C.A., 66 Broad St., N. Y. City.	19.980 megs. 15.01 m. KAX. Manila. P. I. Radio Corp. of the Philippines.
18.880 megs. 15.88 m.  WQH, Rocky Point, N. Y. Address WKM, 18.860 megs.  18.890 megs. 15.87 m.  ZSS, Capetown (Klipheuvel), Union of South Africa.	Plaza Moraga, Manila.  20.020 megs. 14.98 m. DHO, Nauen, Germany. 7.2 kW. Works S. America. Reichspost-zentralamt, Telegraphentechnisches Reichsamt, Schoneberger Strasse 11-15, Berlin-Tempelhof.
5 kW. Works London. Overseas Communica- tion Co., Kodak House, Shortmarket St., Capetown.	20.040 megs. 14.97 m. OPL, Leopoldville, Belgian Congo. 9 kW. Works ORG.
18.900 megs. 15.86 m. WDS, Rocky Point, N. Y. Address WKM, 18.860 megs.	20.100 megs. 14.91 m. WQY, Rocky Point, N. Y. 40 kW. Address: WKM, 18.860 megs.
18.910 megs. 15.86 m. JVA, Nazaki, Japan. 20 kW. Works Europe. Address JVB, 18.190.	20.368 megs. 14.72 m. GAA, Rugby, England. 15 kW. Address: GBX, 16.150 megs.
18.920 megs. 15.84 m. WQE, Rocky Point, N. Y. Address WKM, 18.860 megs.	20.606 megs. 14.55 m. PMB, Bandoeng, Java, N. E. I. Works PCK. Address:
18.940 megs. 15.83 m. WTT, Rocky Point, N. Y. Address WKM, 18.860 megs.	PMC, 18.135 megs.  21.020 megs. 14.27 m.
18.950 megs. 15.82 m. HBF, Prangins (Geneva), Switzerland. 20 kW. Address HBJ, 14.535 megs.	LSN, Buenos Aires (Hurlingham), Argentina. Works N. Y. Address: LSN, 14.480 megs.
18.958 megs. 15.82 m. LSR, Buenos Aires, Argentina. Works CEC, HJY, OCI.	21.060 megs. 14.24 m. KWN (W6XN), Dixon, Calif. 20 kW. Address: KWV, 10.840 megs. WKA, Lawrenceville, N. J. 20 kW. Address: WLA,
18.970 megs. 15.80 m. GAQ, Rugby, England. Works Capetown 0800. Address GBX, 16.150 megs.	21.070 megs. 14.23 m. PSA, Rio de Janeiro (Marapicu), Brazil. 10 kW.

Works N. Y. Address: PSF, 14.690 megs.

21.128 megs. 14.19 m. LSM, Buenos Aires (Monte Grande), Argentina. Address: LSY3, 18.115 megs.

21.410 megs. 14.00 m. WKK, Lawrenceville, N. J. Address: WLA, 18.250 megs.

21.460 megs. 13.97 m.

21.460 megs. 13.97 m. W1XAL, Boston, Mass. 5 kW.

21.470 megs. 13.96 m.
GSH, Daventry, England. "H for Home." Interval
sig: Westminster Chimes and Big Ben.
Sign off: God Save the King. Address:
British Broadcasting Corp., Brdcsting.
House, London W.1.

21.490 megs. 13.95 m. ...., Villejust, France. 120 kW, Under construction. 21.530 megs. 13.93 m.
GSJ, Daventry, England. "J for Justice." See GSH,
21.470 megs.

21.540 megs. 13.92 m. W8XK, Pittsburgh (Saxonburg), Pa. 40 kW. Relays NBC-KDKA. Grant Building. 0700-0900.

22.290 megs. 13.45 m. GBU, Rugby, England. Works N. Y. Address: GBX,

16.150 megs. 12.29 m.

VE9GW, Bowmanville, Ont. Not used at present.

25.100 megs. 11.49 m. GSK, Daventry, England. "K for King." See GSH, 21.470 megs.

29.820 megs. 10.05 m.
IAF, Fiumicino, Italy, 5 kW.
30.604 megs. 9.80 m.
IAG. Golfo Aranci, Sardinia, 5 kW.

### SHORT WAVE STATIONS BY LOCATIONS

ALASKA (K)	TODD	AUSTRIA	BRAZIL	Claydon Bay	St. John
	KIJN 2.512	(OAE-OEZ)	(PPA-PYZ)	CZP 4.505	CJW 2.416
Cape Pole	KIJN 3.190		B	Homalko	VE9BJ 6.090
KIJB 2.994	View Cove	Vienna	Rio de Janeiro	VFJ 2.290	
Circle	KICI 3.093	OER2 6.072	PPM 10.310	Humpback Bay	NOVA SCOTIA
KIIK 2.994	Willow Creek		PPQ 11.670	CZL 2.290	
KIKK 3.190	Mines	AZORES	PPU 19.270	Knight Inlet	Halifax
Eagle	KIIP 3.093	(CT2-)	PRF5 9.505	CJK 1.510	VBQ 2.350
KIIN 2.994			PSA 14.935	Margaret Bay	VE9HX 6.110
KIIN 3.190	ARGENTINA	Ponta Delgada	PSA 21.070	CJX 2.290	Lunenburg
Eaushik	(LOA-LVZ)	CT2AJ 4.000	PSD 15.070	Namu	VBY 1.540
KIGP 3.190		1	PSF 14.690	CFV 2.290	VBY 1.650
Excursion Inlet	Buenos Aires	BAHAMAS	PSH 10.220	Ocean Falls	Pictou
	LQA 9.600	(ZF-)	PSK 8.180	CGO 4.505	CKB 2.284
KILY 2.994	LSA 14.530			Prince George	Pictou Island
Eyak River	LSF 19.600	Cat Cay	CANADA	CZO 4.505	CKU 2.284
KIKN 3.093	LSG 19.900	ZFO 5.300	(CFA-CKZ;	Prince Rupert	
Fort Yukon	LSI 9.830	Nassau	CYA-CZZ;	CGP 3.268	ONTARIO
KIIL 2.994	LSK3 10.250	ZFS 4.512	VAA-VGZ:	CGP 5.405	
KIIL 3.190	LSL 9.990		VXA-VYZ)	CZG 1.712	Bowmanville
Hot Springs		BELGIAN		CZG 2.416	VE9GW 6.090
KIIM 2,994		CONGO	ALBERTA	CZG 6.425	VE9GW 11.810
KIIM 3.190		(OP-)		1	VE9GW 24.380
Iron Creek	LSM 19.120	(0.1-)	Calgary	Rossland	Kenora
2.632	LSM 21.128	Leopoldville	CGE 3.040	CFU 4.755	CFD 1.620
2.912	LSN 9.895	OPL 20.040	CGE 7.550	CFU 5.660	CFD 5.660
Juan	LSN 14.480	OPM 10.135	CKS 3.040	CFU 6.720	Leamington
	LSN 21.020	OF W 10.135	CKS 7.550	CFU 13.200	CFT 2.284
Ketchikan	LSN2 9.890	BELGIUM	VE9CA 6.030	Sage Creek	Pelee Island
KGM 3.093	LSR 18.958		VE9CA 11.860	VXX 5.405	CFX 2.284
KIAX 3.093	LSX 10.350	(ONA-OTZ)	Edmonton	Vancouver	Red Lake
KIAY 3.093	LSY3 18.115	Brussels	CFO 3.040	CGZ 2.452	CFJ 1.620
WXH 6.662		ORG 19.200		VE9CS 6.070	
Le Merced	AUSTRALIA		CFQ 7.550	Waterloo Mine	CFJ 5.660
	(VHA-VMZ)	ORK 10.330	DOITIGH	CZV 3.300	5544.65
KIGF 2.986			BRITISH	CZV 4.840	PRINCE
Marshall	Ballan	BERMUDA	COLUMBIA	7.040	EDWARD
KIIU 3.385	VIY 12.210	(ZF-)		MANITOBA	ISLAND
McGrath	Melbourne		Alert Bay		
KIIO 2.994	VK3LR 5.678	Hamilton	VAF 1,510	Winnipeg	Borden
KIIO 3.190	VK3LR 9.580	ZFA 5.025	Anyon		CJM 1.580
Poorman	VK3ME 9.503	ZFB 10.055	CZQ 5.405	CJRO 6.150	Charlottetown
KIEJ 2.994		St. George	Bones Bay	CJRX 11.720	VE9EH 6.080
Red Bluff	Rockbank	ZFD 10.335	CFW 2.290	CJU 3.070	
1.622	VIZ3 11.495		Campbell River	CJU 3.452	QUEBEC
Rose Inlet	Sydney	BOLIVIA	CGT 4.865	VYW 2.416	
KIAP 3.093	VK2ME 9.585	(CPA-CPZ)	CJD 1.510		Bellevue
KIAQ 2.512	VLJ 9.750		CJD 1.540	NEW	CZB 1.620
St. Michael	VLK 8.095	La Paz	Cape Lazo	BRUNSWICK	Crane Island
KIIT 3.265	VLK 10.520	CP5 6.080	VAC 1.510		CKO 2.284
Tin City	VLZ 7.960	CP6 9.120	Ceepeecee	Fredericton	Drummondville
2.616	VLZ 7.980	CP7 15.300		VE9AS 6.425	CFA2 4.465

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CFA4	10.520			San J	ose	FEDER		DJP	11.850	IAC	12.7
CGA	18.180	(CAA-	CEZ)	TIEP	6.710	MAL		DIG	15.280	IAC_	17.7
CGA2	13.745			TIEP	13.415	STA		DJR	15.340	Fium	
CGA3	13.285	Santi		TIGPH	5.820	(ZG	<b>i</b> -)	S. S. /		IAF	5.4
CGA4	9.332	CEC	5.820	TIPG	6.550			Bal		IAF	29.8
GA6	6.690	CEC	7.740	TIRCC	6.550	Kuala L	ampur	DDNY	4.413	Golfo	Aranci
GA7	6.880	CEC	8.710	TINCC	6.550	ZGE	6.125	S. S. B	remen	IAG	30.6
GA9	4.348	CEC	10.670					DDAS	4.413	-	me
	3.340	CEC	15.860	CUE	IA.	FIJI (VF	A-VEZ	S. S. Col			
GD		CEC		(CLA-C		1131 (41	A-V32)	DOBX	4.413	IRA	6.0
GM	3.340	CEC	19.680	COA-C						IRE	11.8
:JA	12.100			UUA-C	,0_,	Su		S. S. E		IRF	8.0
JA3	17.710	CHI	NA			VPD	13.045	DOAL	4.413	IRM	9.8
JA6	6.760	(XGA-	XUZ)	Hava	na	l				IRO	9.7
ZA	2.980			CMB	5.780	FRA	NCE	GUATE	MALA	IRW	19.5
ZA	4.785	Nank	ine	CMB1	5.900	(F; TY	A-TZZ)	(TGA-	TGZ)	I2RO	5.5
ZA	6.285	XGOX	6.000	COC	6.010	l				I2RO	5.7
ZA	8.515	XGOX	9.500	COCD	6.130	Par	.:-	Guatema	ala City		6.6
						TYA ""	12.215	TGF	14.545	12RO	
ZA	12.660	XGOX	11.900	сон	9.428					12RO	6.9
ZA	17.310	XGOX	17.800	Sancti 9	piritus	Pont	oise	TGW	5.940	12RO	9.€
E9DN	6.005	Shang	hai	СМНВ	10.200	9.585;	11.720;	TGX	5.937		
E9DN	9.555	XGB	11.140			11.880;	15.250;				. Rex
		XGBD	9.580	Santi		15.4		HAWA	H (K)	ICEJ	13.0
E9DN	11.780		10.000	CO9GC	6.150				(3-)		
E9DN	15.130	XGK	18.690			Ste. A			1	JAPA	N (J)
High	Falls	XGL	7.960	DARIE	(L) N	FQO	12.160	Hono			
Y2	2.212	XGN	16.380		- (-)	FRO	19.420	KGPQ	1.712	Kemika	
		XGO	7.575		-:	FTA	11.940	Kah			wa-Ul
Manico		XGW	10.420	Dai		FTE	18.330	KDK	7.520	JYK	13.0
	1.620	7011	10.420	XQL	15.510	FTI	9.840	KEQ	6.733	JYR	7.1
Montn	agny			JDY	9.920			KIO	11.680	JYS	9.1
KP	2.284	COLO				FTK	15.863			JYT	15.
Mont		(HJA-I	HKZ)	JDZ	5.710	FTM	19.355	KKH	7.520	1	
						FTN	12.260	KKP	16.030	Naz	taki
GM	3.152	Barran	aulila	DENM	ARK	FTX	6.175	KQH	14.920	JVA	18.9
E9DR	6.005	HJA3	7.685	(OUA-	OZZ)		l l	KRO	5.845	JVB	18.1
E9DR	9.580			(0.0.1	/	Ville				JVC	16.0
E9DR	11.895	HJA3	8.790			6.145:	9.585:	157111	5.845		
YR	1.712	HJA3	12.830	Copenh	agen	11.845;	15.295:		7.520	JVD	15.8
		HJ1ABB	6.447	OXY	6.060	17.765;	21.490		11.680	JVE	15.0
Riviere d	lu Chef	HJ1ABG	6.042	OXY	9.490				16.030	JVF	15.0
	1.620	Bogo				S. S. Nor				JVG	14.9
St. Feld	ecien			OXY	15.300	FNSK	13.237	HOND	LIDAG	JVH	14.6
ZZ	1.620	HJA2	5.825			S. S.				JVI	13.
4.2	1.020	HJB	14.930	DOMIN		FNSM	13.395	(HRA-			
Tabo	uret	HJN	6.080	REPU	3LIC			Te		1A1	12.
FL	1.620	HJP	7.465	(HIA-I	H17)	FRE	ICH	HRM	13.810	JVK	12.0
		HJY	9.930	(******	, , ,	INDO-		HRM	14.500	JVL	11.0
Verd		HJY	18.444	San Par						JVM	10.7
JZ	2.452	HJ3ABD		San r.:	170 06	(F	)	HONG	KONC	JVN	10.6
Yamac	hiche		7.390	Maco	ris			(Z		JVO	10.
GY	3.152	HJ3ABF	6.200	нин	6.800	Saig	jon	(2	.,	JVP	7.
· G ·	3.132	HJ3ABH	6.012			FZR	16.200		-		
		HKE	7.090	Santiago	ae ios	FZS	18.342	Hong	kong	JVQ	7.4
SASKAT	TCHE-	Bucarat	nanga	Caball	егоз	FZS2	11.990	ZBW	6.75 <b>0</b>	JVR	7.3
WA	N	HJ2ABD	5.980	HI-1-A	6.240	F 2.32	11.550	_		JVS	6.9
		Ca						HUNG	ARY	JVT	6.7
Cub I	ake			Santo Do	mingo	GERMA	NY(D)	(HAA-		ÚVÚ	5.
	1.596	HJ5ABC	5.615	HII	10.040			(AAA-	IIAL)		
FC		HJ5ABD	6.490	HIL	6.518	Nau	ien			JAA	5.7
FC	1.668	Carta			5.980	DFA	19.240	Buda	pest	JZD	16.9
Emma	Lake	HJ1ABD	7.280	HIX		DFB	17.520	HAS3	15.370	JZE	13.0
GV	1.596	HJ1ABE	6.115	HIZ	6.340			HAT	5.400	JZF	8.
				HI4D	6.500	DFC	12.980	HAT2	7.220	JZG	6.
GV	1.668	Cien	aya			DFD	14.665	HAT3	8.565		
Hudson	1 Bav	HJ1ABH		ECUAI	DOR	DFE	9.810			MENINA	2103
		Cuci		(HCA-I		DFL	10.850	HAT4	9.125	KENYA	(40)
Jun	ct.	HJA7	5.400	(.TCA-I		DGK	6.675				
ΧV	5.540	HJ2ABC	5.975			DGU	9.609	IND			robi
sie-a-la-	-Crosse	Maniz		Guaya	quil			(VTA-		VQ7L0	6.0
ZJ	1.596	HJ4ARB	7.200	HC2AT	8.400	DHO	20.020		,		
ΖĴ	1.668			HC2ET	4.600	DJK	12.035	R	hav	MAG	CAD
		HJ4ABL	6.100			Nore	len	VUB.		l links	
Lac la	Ronge	Mede		HC2JSB	4.283	DAF	4.320		9.565		
GQ	1.596		11.720	HC2JSB	7.770			Calc			cau
GQ	1.668	HJ4ABE	5.900	HC2RL	6.659	DAF	8.464	VUC	6.112	CQN	6.0
		Pere		Quit		DAF	12.325	VUC	9.575		
Prince		HJ4ABC	6.230			DAF	17.260	Kirl		MADAG	ASCA
YP	1.596			HC1B	8.214	Zee		VWY	8.975	(F	
ΥP	1.668	Santa		Rioba	mba			VWY	17.480	l '•	,
p		HJ1ABJ	6.006	PRADO	6.620	DIQ	10.285			-	
Regi		Tun				DJA	9.560	vwz	8.690	I anai	narive
ΧU	5.540	HJ2ABA	6.170	PRADO	15.440	DJB	15.200	vwz	8.693		5.1
Porta	hle					DIC	6.020	vwz	8.700		
XW	5.540	COSTA	DICA	EGY	PT	DLD	11.770	vwz	8.708	MANCE	IUKU
A ***	3.340			(STA-9	SUZ)		17.760		000	(1	
		(TIA-	1 (Z)	,31,4-		DJE			V (1)	(3	• /
	ZONE	1		Cair		DJG	4.580	ITAL	Y (I)		
		Carta	ago		-	DJL	15.110			Har	
	,			SUV	40 055	DJM	6.080	Colt	ano	JZA	15.6
(W	,	TIN	14.545	304	10.055						
		TIN	14.545 14.545		.810 to	DJN	9.540		4.355	JZB	10.9

### SHORT WAVE STATIONS BY LOCATIONS

	XICO		ribon	NICAR	AGUA	P	arede	RRZ	4,400	GMBJ	12.95
(XA	A-XFZ)	YDA6	2.870		YNZ)	CT1G	6.132		5.996		Homeric
Mari	co City	YDJ4	1.840						sibirsk	GDLJ	4.42
	-		mber 3.390	YNA	agua		IAM	RTA	6.440	GDLJ	13.32
XDA XEBT	14.525 6.000		acarta	YNLF	14.480 6.714	(HS	A-HSZ)		linsk 5.375		
XECR	7.380		1.660	YNIGG	6.450	P.	ngkok	RSB	dlovsk		ITED
XECW	5.980	YDE5	2.750		0.430	HSJ	8.020	ROI	5.490		ATES N; W)
		YDL4	3.410	NORV	VAY	HSP	7.968	RSN	5.440	(**;	14; 27
	OCCO	YDL5	3.210	(LAA-I	LNZ)	HSP	8.396	Tas	hkent	ALA	BAMA
(CNA	-CNZ)	YDL6	2.750			HSP	17.740	RAU	15.104		
		YDHS	roet	Jelo				RIM	7.626		ingham
CNR Ra	abat	,	3.250 diri	LCL	6.130		THERN	RPT	5.995	WPFM	2.38
CNR	8.035 12.820	YDN2	1.940	LKJ1	13.980 9.540		DESIA ZE-)	RIR	iflis	Maxwe	ell Field
UIII	12.020	Mad	lioen		3.340		ZE-)	RIR	5.040	PD1	6.44 obile
NETHE	RLANDS	YDN3	2.790	PANA	MA	Sal	isbury	UNIC	ON OF	NMG	2.67
(PAA	A-PIZ)	Mage	lang	(HPA-I	HPZ)	ZEA	6.590		AFRICA	WPGW	2.38
		YDK4	3.270				awayo	(ZSA	-ZUZ)		
	ersu m	Mal	ang	Panama		ZEB	6.590			ARI	ZONA
PCJ 2	15.220	YDB6	1.570	HPC	10.290	-		Сар	etown		
PHI	11.725	YDQ3	3.350	HP5B	14.545 6.030		AIN (-EHZ)	ZSS	18.890		enix
PHI	17.775	YDQ4	3.230	HP5J	9.590		adrid	ZTŢ	nesburg 6.123	KNGG	1.69
	twijk	YDQ5	2.950		J.330	EAQ	9.862		is Bay	KNZJ	2.43
PCK	18.400	YDQ6	2.810	PARAG	UAY			zsv	8.220	ARK	NSAS
PCM	18.600	Pekale		(ZPA-2	(PZ)		RAITS	ZSV	12.500		
PCV PDK	17.830 10.410	YDA7	3.270				EMENTS				Rock
PDV	10.410	YDJ2	2.890	Asunc		(2	(H-)		TED	KGHZ	2.406
	12.030	Sema	rang	ZP10 ZP11	6.666				DOM		
NETHE	RLAND	YDB2 YDF3	2.450	ZP11	3.800	ZH J	nang 6.080	(G;	M)	CALIF	ORNIA
	INDIES	YDE3 YDK2	2.910 3.190	PER	PI .		apore	Davis	entry	D. L.	
	-POZ;	YDK3	2.910	(OAA-C		ZHI	6.060	GSA	6.050	KGPS	rsfield 2.414
YBA-	YHZ)	YDK5	2.710					GSB	9.510		celey
D	men	YDK6	1.860	Lim			ERLAND	GSC	9.580	KSW	1.658
	rmasin	Soekat	oemi	OAX4B	6.230	(HBA	-HBZ)	GSD	11.750	Ksw	2.422
YDU5	1.850	YDA4	1.550	OAX4D OCI	5.780			GSE	11.860		inas
YDV2	3.330	YD12	2.110	OCI	10.962 18.670	Ge HRF	neva	GSF	15.140	KEB	7.370
Cele	ebes	So	lo	001	15.625	HBH	18.950 18.450	GSG GSH	17.790	KEE	7.715
	assar	YDB5	1.595	000	7.820	HBJ	14.535	GSI	21.470 15.260	KEI KEJ	9.490
PNI	8.775	YDE2	4.810			HBL	9.595	GSJ	21.530	KEL	6.860
Men	ado	YDL2	4.810	PHILIPP	PINE	HBO	12.030	GSK	26.100	KES	10.410
YBZ	7.680	YDL3	3.450	ISLAN	DS	HBP	7.797	GSL	6.110	KEZ	10.400
Ja	va	Soura		(K)				Ru		KKL	15.475
Balikp	papan	YDB	4.480	Cebu Is		TAIW	AN (J)	GAA	20.368	KKQ	11.950
YCP	8.575	YDB7 YDE4	1.530 2.415	Cebu		Tai	wan	GAQ GAS	18.970	KKW	13.780
Band PLE	0eng 18.830	YDO2	3.430	KZGG	5.825	JIA . a.	15.750	GAU	18.304 18.620	KKZ KQJ	13.690 18.020
PLF	17.850	YDO3	3.290	KZGG	8.940	JIB	10.530	GAW	18.200	Com	
PLG	15.950	YDO4	3.170	floito Is	land	11C	5.890	GBA	13.984	KNFM	2.490
PLK	14.480	YDQ5	2.930	Hoile				GBB	13.500	Death	Valley
PLM	12.290	YD06	2.770	KZGH	5.795		N OF	GBC	4.430	KNLO	3.410
PLP	11.000	YDO7 YDO8	2.070	KZGH Luzon Is	9.490		ALIST /	GBC	4.975	Devil's P	
PLQ	10.670	Y D O 8	1.980	Manil			BLICS	GBC GBC	8.680 12.780	KNKY	3.410
PLV PMA	9.415				19.980	(R:		GBC	17.080	Dix KWN	on 21.060
PMB	20.606	Tandjon YDA	3.040		14.980		-/	GBP	10.770	KWO	15.415
PMC	18.135	YDA	6.040	KAZ	9.990	Irkı		GBS	12.150	KWU	15.355
PMN	10.260	YDA8	1.510	KBK	6.718	RSZ	8.770	GBU	12.240	KWV	10.840
MY	5.140	Teg	1		16.240	RTZ	7.275	GBU	22.290	KWX	7.610
YDA5	6,120	YDJ3	2.870	KTP KZGF	8.120		arovsk	GBW	14.440	KWY	7.565
YDD2	1.630	Tjep		KZGF	5.765 9.170	RV15	4.273 rkov	GBX GBX	10.530	El Ce	ntro 2.490
YDH3 YDH4	3.490	YDB4	1.615	ur	3.170	RFF	7.260	GCA	16.150 9.710	KNGJ Fres	
YDH4 YDH6	3.310 3.130	YDM2	3.320	POLAN	ID	Mos		GCB	9.280	KGZA	2 414
YDH8	1.960	Suma	tra	(SOA-SI		RKF	4.875	GCJ	13.415	Lo	
Bata		Meda				RKF	6.870	GCP	7.920		2.414
YDA2	2.385	YBG	10.430	Pozna		RKF	6.880	GCS	9.020	Los Ar	
YDD3	1.585	YDU2		SR1	9.490	RKF	6.900	GCU	9.950	KGPL	1.712
DG2	3.470	YDU3 YDU4	5.260 2.830	PORTUG	201	RKF RKF	9.750 12.500	GCW	9.790	KIIY	2.726
YDG3	3.150	1004	2.830	(CSA-C		RKI	7.520	GDS	6.798	KIKL Palo	6.615
DG4	2.850	NEW ZEA	LAND	(CSA-CI	- L)	RKI	15.040	GDS	4.820	Palo KGHK	Alto 1.674
/DG5	2.090	(ZKA-Z		Lisbor		RKI	15.090	GERX	4.320	Pasad	
/DG6	1.900				6.150	RKK	6.135	S. S. Aq		KGJX	1.712
	3.300	Welling		CT1AA	9.600	RKK	12.270	GLRZ	4.415	Point B	
					15.350	RNE	12.000	S. S. Em		NMC	2.670
YDG7 Buiten								J. J. LIII	press or i		
		ZLS		CT1CT	3.750	RPK RRD	7.225 8.225	Brita GMBJ	4.413	Pome	

Sacramento	W4XB 6.040	IOWA *	Brookline	Sault Ste. Marie	WNA 9.170
KNGF 2.422	Opa Locka		WPEJ 1.712	NOR 2.670	WNB 10.675
San Bernardino	WMEV 2.930	Cedar Rapids	Fairhaven	NOR 2.698	WOA 6.755
KGZY 1.712	WMEV 6.615	KGOZ 2.466	WPFN 1.712	Selfridge Field	WOB 5.850
San Diego	ANIMEA 0.013	Davenport	Fitchburg		WOF 9.750
KGZD 2.490	Orlando	KGPN 2.466	WPHA 2.466	VK1 6.425	WOK 10.550
San Francisco	WPHM 2.442	Des Moines	Framingham	Stannard Rock	WON 9.870
KGPD 2.466	Palm Beach	KGHO 1.682	WMP 1.666	WWH 3,410	WOY 4.178
San Gabriel	WPFX 2,442	KGZG 2.466	Gloucester	3.410	WOY 4.753
Dam	St. Petersburg	Sioux City	NOG 2.670	MINNESOTA	WOY 8.560
KIIW 2.726	NOF 2.670	KGPK 2.466	Marshfield	MINITESOTA	WOY 12.840
San Jose	WMEU 2.930	Storm Lake	WOU 2.506	Duluth	WOY 17.120
KGPM 2.466	WMEU 6.615	KNFO 1.682	Medford	KNFE 2.382	New Brunswick
San Pedro	Tampa	Waterloo	WPHG 1.712		WKJ 9.460
NOJ 2.670	WPHN 2.466	KNFN 1.682	Millis	Minneapolis	Ocean Gate
San Rafael	2.400		W1XK 9.570	KGPB 2.430	WOG 4.253
KLH 2.506	GEORGIA	KANSAS	Newton	St. Paul	WOO 4.178
Santa Ana	GEORGIA		WPFA 1.712	WPDS 2.430	WOO 4.753
KGHX 2.430	Atlanta	Chanute	Northampton		WOO 8,560
Santa Barbara	WPDY 2.414	KGZF 2.450	WPEW 1.666	MISSOURI	WOO 12.840
	Columbus	Coffeyville	Somerville		WOO 17.120
KGZO 2.414 Santa Cruz	WPFI 2.414	KGZP 2.450	WPEH 1.712	Jefferson City	Passaic
KGZT 1.673	La Grange	Dodge City	W. Bridgewater	KIUK 1.674	WPDJ 2,414
	WPGM 2.414	KNGH 2.474	WPEL 1.666		Tuckerton
Tujunga Dam	Macon	Garden City	Winthrop	Kansas City	WCG 10.370
K11X 2.726		KNFH 2.474	NMF 2.670	KGPE 2.422	Wayne
Tulare WPDA 2.414	WQFB 2.414	Hutchinson	Woods Hole	Napoleon	W2XE 6.120
	IDAMO	KGHN 2.450	NOP 2.670	WYBF 2.604	W2XE 11.830
Vallejo KGPG 2.422	IDAHO	Leavenworth	Worcester	St. Louis	W2XE 15,270
KGPG 2.422	1.1.1. =	KNFF 2.422	WPGX 2.466	KGPC 1.706	
Whittier	Idaho Falis		WFGX 2.460		NEW MEXICO
KGHY 1.712	KNFB 2.458	Manhattan	MICHIGAN	MONTANA	MEW INEXTOO
Wilmington		W9XAK 2.050	MICHIGAN		Albuquerque
KOU 2.566	ILLINOIS	Salina	D C'A	Glacier Nat'l	KGZX 2.414
Yosemite		2.422	Bay City WPGA 2,466	Park	Clovis
KNKS 3.410	Chicago	Topeka		KNIA 3.410	KNFA 2.414
	WPDB 1.712	KGZC 2.422	Cheboygan		Santa Fe
COLORADO	WPDC 1.712	Wichita	Range	NEBRASKA	KGPF 2.414
	WPDD 1.712	KGPZ 2.450	WWG 3.410		NGFF 2.414
Denver	W9XAA 6.080	11012	Detroit	Lincoln	NEW YORK
KGPX 2.442	W9XAA 11.830	KENTUCKY	WCK 2.414	KGZU 2.490	NEW TORK
	W9XAA 17.780	TIENT GOTT	WKDT 1.630	Norfolk	Albany
CONNECITCUT	W9XF 6.100	Lexinaton	WPDX 2.414		
	W9XF 6.425	WPET 1.706	WWN 3.410	KNGN 2.490	
Bridgeport	Highland Park	Louisville	WWR 3.410	Omaha	Auburn WPDN 2.382
WPFW 2.466	WPFD 2,430	WPDE 2.442	E. Lansing	KGPI 2.466	
New Haven	Rockford	W DE 2.442	WRDS 1.642		Binghamton WPGL 2.442
WQFA 2.466	WPGD 2.458	LOUISIANA	Flint	NEVADA	Bronx
New London		LOUISIANA	WPDF 2.442		WPEF 2.450
NOU 2.670	Wilmette	Baton Rouge	Fourteen Foot	Reno	Barakina
2.670	NMP 2.670	WPEQ 1.570		KGHM 2.474	Brooklyn WPEE 2.450
DISTRICT OF	NMP 2.698	New Orleans	Shoals		
COLUMBIA	Wheeling	WPEK 2.430	WWE 3.410	NEW	Buffalo NOB 2.670
COLOWIBIA	WMEQ 6.615	Shreveport	Grand Rapids		
144 1 7		Sinevebore			NOD 0.000
Washington		KCDV 1 574	WPEB 2.442	HAMPSHIRE	NOB 2.698
	INDIANA	KGPY 1.574	Grosse Pointe		WMJ 2.422
WPDW 2.422		KGZL 1.712	Grosse Pointe WRDR 2.414	Nashua	WMJ 2.422 Huntington
	INDIANA Columbia City		Grosse Pointe		WMJ 2.422 Huntington WPGO 2.490
FLORIDA		KGZL 1.712 KNGP 2.430	Grosse Pointe WRDR 2.414	Nashua WPHB 2.422	WMJ 2.422 Huntington WPGO 2.490 Mineola
FLORIDA	Columbia City	KGZL 1.712	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414	Nashua	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490
FLORIDA	Columbia City 1.634 Culver	KGZL 1.712 KNGP 2.430 MAINE	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island	Nashua WPHB 2.422 NEW JERSEY	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field
FLORIDA Clearwater 2.466	Columbia City 1.634 Culver WPHS 1.634	MAINE  Portland	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410	Nashua WPHB 2.422 NEW JERSEY Bound Brook	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490
FLORIDA	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne	KGZL 1.712 KNGP 2.430 MAINE	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson	Nashua WPHB 2.422 NEW JERSEY Bound Brook W3XAL 6.100	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490	MAINE Portland WPFU 2.422	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466	Nashua WPHB 2.422 NEW JERSEY Bound Brook W3XAL 6.100 W3XAL 17.780	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423
FLORIDA  Clearwater 2.466  Dry Tortugas	Columbia City	MAINE  Portland	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing	Nashua WPHB 2.422 NEW JERSEY Bound Brook W3XAL 6.100 W3XAL 17.780 W3XAL 6.425	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410  Ft. Lauderdale NMV 2.670	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442	MAINE  Portland WPFU 2.422  MARYLAND	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442	Nashua WPHB 2.422 NEW JERSEY Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 6.425 W3XL 17.310	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410 Ft. Lauderdale	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634	MAINE Portland WPFU 2.422 MARYLAND Baltimore	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island	Nashua WPHB 2.422  NEW JERSEY  Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 6.425 W3XL 17.310 Cape May	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410  Ft. Lauderdale NMV 2.670	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper	MAINE  Portland WPFU 2.422  MARYLAND	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410	Nashua WPHB 2.422 NEW JERSEY Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 6.425 W3XL 17.310	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville 2.466	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette	Nashua WPHB 2.422  NEW JERSEY  Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 6.425 W3XL 17.310 Cape May	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta
Clearwater 2.466 Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville 2.466 Hialeah	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634 Kokomo	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA-	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410	Nashua   WPHB   2.422   NEW JERSEY   Bound   Brook   W3XAL   17.780   W3XL   6.425   W3XL   17.310   Cape   May NOV   2.670   Hackensack   S.422   S	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta 2.414
Clearwater 2.466 Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville 2.466 Hialeah WND 4.098	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon	Nashua WPHB 2.422  NEW JERSEY  Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 17.310 Cape May NOV 2.670 Hackensack WPFK 2.430	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634 Kokomo WPDT 2.490 Marion County	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA- CHUSETTS	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442	Nashua WPHB 2.422  NEW JERSEY  Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 6.425 W3XL 17.310 Cape May NOV 2.670 Hackensack WPFK 2.430 Lawrenceville	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta 2.414 Rochester WPDR 2.422
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.570 Gainsville 2.466  Hialeah WNB 4.098 WAW 12.930 WNC 15.055	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634 Kokomo WPDT 2.490	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA- CHUSETTS Arlington	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island	Nashua   WPHB   2.422   NEW JERSEY   Bound   Brook   W3XAL   17.780   W3XAL   17.310   Cape   May   NoV   2.670   Hackensack   WPFK   2.430   Lawrenceville   WKA   21.060	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta 2.414 Rochester WPDR 2.422 WPDR 2.422
Clearwater 2.466 Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville 2.466 Hialeah WNB 4.098 WAW 12.930 WNC 15.055 Jacksonville	Columbia City	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA- CHUSETTS	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island WWAL 3.410	Nashua WPHB 2.422  NEW JERSEY  BOUND Brook W3XAL 6.100 W3XAL 17.780 W3XL 6.425 W3XL 17.310  Cape May NOV 2.670 Hackensack WPFK 2.430 Lawrenceville WKA 21.060 WKF 4.253	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634 Kokomo WPDT 2.490 Marion County WPHE 1.634 Muncie	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA- CHUSETTS Arlington WPED 1.712 Boston	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island MWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island WWAL 3.410 Poe Reef	Nashua WPHB 2.422  NEW JERSEY  Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 6.425 W3XL 17.310  Cape May NOV 2.670 Hackensack WPFK 2.430 Lawrenceville WKA 21.060 WKF 4.253 WKF 19.220	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta 2.414 Rochester WPDR 2.422 Rockaway Point NMY 2.670 Rocky Point
FLORIDA  Clearwater 2.466 Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville 2.466 Hialeah WNB 4.098 WAW 12.930 WNC 15.055 Jacksonville WPFG 2.442 Key West	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634 Kokomo WPDT 2.490 Marion County WPHE 1.634 Muncie WPGP 2.442	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA-CHUSETTS Arlington WPED 1.712 Boston WEY 1.630	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island WWAL 3.410 Poe Reef WRJ 3.410	Nashua WPHB 2.422  NEW JERSEY  Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 17.310 Cape May NOV 2.670 Hackensack WPFK 2.430 Lawrenceville WKA 21.060 WKF 4.253 WKF 19.220 WKK 21.410	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville	Columbia City	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA- CHUSETTS Arlington WPED 1.712 Boston	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island WWAL 3.410 Poe Reef WRJ 3.410 Port Huron	Nashua   WPHB   2.422   NEW JERSEY   Bound Brook   W3XAL   6.100   W3XAL   17.780   W3XL   17.310   Cape May   NOV   2.670   Hackensack   WPFK   2.430   Lawrenceville   WKA   21.200   WKF   4.253   WKF   19.220   WKK   21.410   WKN   19.820   2.422   WKN   21.410   WKN   19.820   WKN   21.410   WKN   19.820   WKN   21.410   WKN   21.410	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta 2.414 Rochester WPDR 2.422 Rockaway Point NMY 2.670 Rocky Point WAD 8.930 WAJ 13.480
FLORIDA  Clearwater 2.466 Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville 2.466 Hialeah WNB 4.098 WAW 12.930 WNC 15.055 Jacksonville WPFG 2.442 Key West	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634 Kokomo WPDT 2.490 Marion County WPHE 1.634 Muncie WPGP 2.442 Richmond WPDH 2.442	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA-CHUSETTS Arlington WPED 1.712 Boston WEY 1.630	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island WWAL 3.410 Poe Reef WRJ 3.410 Port Huron WPGB 2.466	Nashua   WPHB   2.422   NEW JERSEY   Bound   Brook   W3XAL   17.780   W3XL   17.310   Cape   May   MoV   2.670   Hackensack   WPFK   2.430   Lawrenceville   WKA   21.060   WKF   4.253   WKF   4.253   WKF   21.410   WKN   19.820   WKN   19.820   WLA   18.350   WLA   18.350   WKN   18.350   WKN   19.820   WKN   18.350   WLA   WLA   18.350   WLA   WLA   18.350   WLA   WLA   18.350   WLA   WL	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta 2.414 Rochester WPDR 2.422 Rockaway Point NMY 2.670 Rocky Point WAD 8.930 WAJ 31.3480 WBU 21.260
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville	Columbia City	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA- CHUSETTS Arlington WPED 1.712 Boston WEY 1.630 WPGV 1.712	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island WWAL 3.410 Poe Reef WRJ 3.410 Port Huron	Nashua   WPHB   2.422   NEW JERSEY   Bound Brook   W3XAL   6.100   W3XAL   17.780   W3XL   17.310   Cape May   NOV   2.670   Hackensack   WPFK   2.430   Lawrenceville   WKA   21.060   WKF   19.220   WKK   21.410   WKN   19.820   WLA   18.350   WLA   18.350   WLA   16.270   NEW   16.270   Cape   Cape	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta
Clearwater 2.466 Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville 12.466 Hialeah WND 4.098 WAW 12.930 WNC 15.055 Jacksonville WPFG 2.442 Key West WWZ 3.410	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634 Kokomo WPDT 2.490 Marion County WPHE 1.634 Muncie WPGP 2.442 Richmond WPDH 2.442	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA-CHUSETTS Arlington WPED 1.712 Boston WEY 1.630 WPGV 1.712 W1XAL 6.040	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island WWAL 3.410 Poe Reef WRJ 3.410 Port Huron WPGB 2.466	Nashua WPHB 2.422  NEW JERSEY  Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 17.310 Cape May NOV 2.670 Hackensack WPFK 2.430 Lawrenceville WKA 21.060 WKF 4.253 WKF 19.220 WKK 21.410 WKN 19.820 WKA 18.350 WLA 18.350 WLK 16.270	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta 2.414 Rochester WPDR 2.422 Rockaway Point NMY 2.670 Rocky Point WAD 8.930 WAJ 13.480 WBU 21.260 WDA 9.340 WDB 6.718
FLORIDA  Clearwater 2.466  Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.570 Gainsville	Columbia City	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414  MASSA- CHUSETTS Arlington WPED 1.712 Boston WEY 1.712 W1XAL 6.040 W1XAL 11.790 W1XAL 11.790	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island WWAL 3.410 Poe Reef WRJ 3.410 Port Huron WPGB 2.466 Rock of Ages WWAM 3.410	Nashua WPHB 2.422  NEW JERSEY  Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 17.310 Cape May NOV 2.670 Hackensack WPFK 2.430 Lawrenceville WKA 21.060 WKF 4.253 WKF 19.220 WKK 19.420 WLA 18.350 WLA 18.350 WLK 16.270 WMA 13.390 WMF 14.470	WMJ 2.422 Huntington WPGO 2.490 Mineola WPGS 2.490 Mitchell Field WO9 6.385 New York WOZ 3.423 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta
Clearwater 2.466 Dry Tortugas WST 3.410 Ft. Lauderdale NMV 2.670 Gainsville 2.466 Hialeah WNB 4.098 WAW 12.930 WNC 15.055 Jacksonville WPFG 2.442 Key West WWZ 3.410 Lakeland WPFT 2.442	Columbia City 1.634 Culver WPHS 1.634 Fort Wayne WPDZ 2.490 Indianapolis WMDZ 2.442 1.634 Jasper WPHU 1.634 Kokomo WPDT 2.490 Marion County WPHE 1.634 Muncie WPGP 2.442 Richmond WPDH 2.442 Seymour WGFE 1.634 South Bend	MAINE Portland WPFU 2.422 MARYLAND Baltimore WPFH 2.414 MASSA- CHUSETTS Arlington WPED 1.712 Boston WEY 1.630 WPGV 1.712 WIXAL 6.040 WIXAL 11.790	Grosse Pointe WRDR 2.414 Highland Park WMO 2.414 Huron Island WWAO 3.410 Jackson WPHP 2.466 Lansing WPDL 2.442 Manitou Island WWAJ 3.410 Marquette WWM 3.410 Muskegon WPFC 2.442 Passage Island WWAL 3.410 Poe Reef WRJ 3.410 Port Huron WPGB 2.466 Rock of Ages WWAM 3.410 Saginaw	Nashua WPHB 2.422  NEW JERSEY  Bound Brook W3XAL 6.100 W3XAL 17.780 W3XL 17.310 Cape May NOV 2.670 Hackensack WPFK 2.430 Lawrenceville WKA 21.060 WKF 4.253 WKF 19.220 WKK 19.820 WLK 16.270 WMA 13.350 WMF 14.470	WMJ 2.422 Huntington WPGO 2.490 Mincola WPGS 2.490 Mitchell Field W09 6.385 New York WOZ 3.422 WPEG 2.450 Niagara Falls WNFP 2.422 Oneonta 2.414 Rochester WPDR 2.422 Rockaway Point NMY 2.670 Rocky Point WAD 8.930 WAJ 13.486 WBU 21.260 WDA 9.844 WBB 6.718

## SHORT WAVE STATIONS BY LOCATIONS

WDS WEA	18.900 10.610		OREGON	Memphis WPEC 2,466	Bellingham	WEST
WEB			Hood River			VIRGINIA
WEC	8.930		KIIV 2 729	Nashville	S. S. Cadrew	-
WED	10.630			1.666		Charleston
WEF			Klamath Falls		Carbon	WPH1 2.49
WEG	10.620		KGZH 2.442	TEXAS	KGYF 3.387	•
			Portland		Centralia	Clarksburg
WEJ	6.740		KGPP 2.442	Austin	KGHW 2.414	WPFP 2.49
WEL	8.950		Salem	KGHU 2,442		Fairmont
WEL	13.435	WPFS 2,458	KGZR 2.442		KGHQ 2.490	
WEM	7.400					
WEO	6.958	Charlotte	PENN-			Parkersburg
WES	9.448			Brownsville	KOW 2.522	WPHQ 2.49
WET	9,470		SYLVANIA	KGHT 2.382		
WEX				Brownwood	KNFX 2,490	WISCONSIN
	13.450		Harrisburg	2,458	Ephrata	
WEZ	6.928		WPSP 1.674	Cleburne	2,490	W
WFX	18.980		Monessen	KNGE 1.712		**CIIOSIIA
WHR	13.420	WPDO 2.458		Corpus Christi	KNFP 2.414	WPEP 2.450
WIR	4.276		New Castle			Milwaukee
WIR	4.540				Grays Harbor	WPDK 245
WIY	13.870			Dallas	NMW 2.670	2.430
WJN			Oil City	KVP 1.712	Hells Crossing	
	7.370	Cleveland	WPHZ 2.482	El Paso	Camp	URUGUAY
WKC	10.465	NMD 2.670	Philadelphia	KGZM 2,414	KNFZ 2.490	(CVA-CXA)
WKC	13.465	NMD 2.698	WPDP 2.474	Fort Worth		
WKL	8.940	WRBH 2.458	WWHJ 3,410	KGPR 1.712	Longmire KGYA 3.387	Montevideo
WKM	18.860	Columbus	1			CWD 5.830
WKO	15.970			Galveston	KGYB 3.387	CWE 6.610
WKP	6.950	1.430	W3XAU 9.590	KNGL 1.712	Mt. Vernon	
WKU		WPGQ 1.596	Pittsburgh	NOY 2.670	KNFI 2.414	
	14.830	Dayton	WPDU 1.712	Houston	Olympia	CWG 11.370
WKW	15.445	WPDM 2.430	W8XK 6.140	KGBZ 1.712	KNFG 2.490	CWH 13.140
WLL	17.900	Findlay		Lubbock	Paradise	
WPE	13.840	WPGG 1.596		KGZW 2.458		VATICAN
WQA	21.220	Lancaster	W8XK 11.870	1.430		STATE
WQB	17.940	WQFO 2.430	W8XK 15.210	San Antonio	Port Townsend	(HVA-HVZ)
WQC	17.860	Lorain	W8XK 17.780	KGZE 2.482	NOZ 2.670	_ (,
WQD	18.960		W8XK 21.540	Waco	Satus Pass	V-4: 0:4
WQE		WMES 2.550	Reading	KGZQ 1.712	Camp	Vatican City
WOE	18.920	Massillon	WPFE 2.442	Wichita Falls	KNGA 2.490	HVJ 5.970
WQF	17.920	WPHC 1.596		KGZI 2,458	Seattle	HVJ 15.120
WQG	15.040	Portsmouth	Swarthmore		KGHD 2,490	
WQH	18.880	WPGI 2.430	WPFQ 2.474	UTAH	KGPA 2.414	VENEZUELA
WQI	17.880	Steubenville				(YVA-YWZ)
LDW	21.240	WPHD 2.458	RHODE	Salt Lake City		
WQL	14.815	Suffield	ISLAND			Caracas
WQN	5.263			KGPW 2.406	WVD 6.618	
WQN	5.505		Cranston		Shuksan Camp	YV2RC 6.112
WQN	5.505		WPGK 2.466	VIRGINIA	KNFL 2,490	YV3RC 6.150
WUN	5.825	Toledo			Skykomish	YV4RC 6.375
WQO	6.725	WRDQ 2.474	E. Providence	Bolling Field	KNFU 2.490	
WQP	13.900	Wilmington	WPEI 1.712	IS3 5,015	Snoqualmie	Maracaibo
WQQ	20.260	WPHK 1.596	Pawtucket	Cape Henry	Pass	YV5RMO 5.850
WQR	16.015	Wright Field	Pawtucket	NMN 2.670		Maracay
WQS	13.915	PE2 6.445	WPFV 2.466			YVQ 6.672
WQU	13.855	Youngstown	Woonsocket	Langley Field	Spokane	YVQ 13.337
wov	14.800		WPEM 2.466	FG7 6.645	KGHS 2.414	
WQW	10.600	2.430	2.430	Lynchburg	KGHS 2.458	YVR 9.168
		Zanesville	SOUTH	2.450	Sunrise	YVR 18.296
WQX	20.180	WPHO 2.430		Petersburg	KGYD 3.387	Valencia
WQY	20.100		DAKOTA	2.450	Tacoma	YV6RV 6.520
WTT	18.940	OKLAHOMA		Richmond	KGZN 2.414	
Schan	nectady		Rapid City	WPHF 2,450		VIRGIN
W2XAD	15.330	Duncan	KNGM 2.450	Roanoke	Vancouver KNGC 2.490	ISLANDS
		KNGK 2.450				
W2XAF		Lawton	TENNESSEE	2.450	Walla Walla	( <b>W</b> )
S. Sch	enectady		TENNESSEE		KNGD 2.490	
WPGC	1.658	KGHP 2.466	Elizabethton	WASHINGTON	Wenatchee	St. Thomas
		Muskogee			2.490	WTDV 4.295
	George	KNGT 2.450	2.474	Aberdeen	White River	St. Croix
wox	2.590	Oklahoma City	Johnson City	KGZV 2,414		
	4	KGPH 2,450	WPGZ 2.474	Bear River	Yakima	WTDW 4.295
Syra	acuse	Tulsa	Knoxville			St. John
WPEA	2.382	KGPO 2.450	WPFO 2,474		KNGB 2.490	
	21002	Mai 0 2.430	WPF 0 2.474	KNFY 2.490	KNGU 2.414	WTDX 4.295
		SHORT	WAVE STAT	TIONS BY C	ALLS	
EC	5.820   CF	C 1.596   CFQ	3.040   CFW	2 200   6040	349 1000	1010
EC	7.740 CF				348 CGP 5.405	CJA 12.100
EC	8.710 CF		7.550 CFX	2.284 CGD 3.	340 CGQ 1.596	CJA3 17.710
			2.284 CGA	L8.180 CGE 3.	040 CGQ 1.668	CJA6 6.760
	10.670 CF		4.755 CGA2			CJD 1.510
	15.860 CF.			L3.285 CGM 3.		CJD 1.540
	19.680 CF.	- 0.000 0.0	6.720 CGA4			CJE 2.290
			13.200 CGA6			
FA4	10.520 CF	M 1.620 CFV				
FA2 FA4	4.465 CF 10.520 CF	L 1.620 CFU		6.690 CGO 4.	506 CGY 3.152	CIW

### SHORT WAVE STATIONS BY CALLS

ı						W							-	
ı	CJRO	6.150	DJL	15.110	НВН	18.450	JDY	9,920	KGPG	2.422	KIIP	3.093	KWU	15.355
	CJRX	11.720	DJM	6.080	нвј	14.535	JDZ	5.710	KGPH	2.450		2.150		10.840
	OLLO	3.079	DJN	9.540	HBL	9.595	JIA	15.750	KGPI	2.466	KIIT	3.265		7.610
	OLO	3.452	DJO	11.790	HBP	7.797	JIB	10.530	KGPJ	1.712		3.385		7.565
	CJW	2.416	DJP	11.850	нво	12.030	Jic	5.890	KGPK	2.466		2.726		5.765
	CJX	2.290	DIG	15.280	HCIB	8.214	JVA	18.910	KGPL	1.712	KIIX	2.726		9.170
			DJR		HC2AT	8.400	JVB	18.190	KGPM	2.466	KIIY	2.726		5.825
	CJZ	2.452		15.340			JVC	16.050	KGPN	2.466		2.994		8.940
	CKB	2.284	DDAS	4.413	HC2ET	4.600			KGPO	2.450		2.512		5.795
	CKO	2.284	DDDX	4.413	HC2JSB	4.283	JVD	15.860		2.450	KIJN			9.490
	CKP	2.284	DDED	4.413	HC2JSB		JVE	15.660	KGPP	2.442		3.190		
	CKS	3.040	DDNY	4.413	HC2RL	6.659	JVF	15.620		1.712		2.728		6.130
	CKS	7.550	DOAL	4.413	HIH	6.800	JVG	14.910	KGPR	1.712		2.728		13.980
	CKU	2.284	DOBX	4.413	HII	10.040	JVH	14.640	KGPS	2.414		6.615		9.540
	CMB	5.780	EAQ	9.862	HIL	6.518	1/1	13.560	KGPW	2.406		3.093		9.600
	CMB1	5.900	FG7	6.645	HIX	5.980	JVJ	12.270	KGPX	2.442		2.150		14.530
	CMHB	10.200	FNSK	13.237	HIZ	6.340	JVK	12.020	KGPY	1.574		1.622		19.600
	CNR	8.035	FNSM	13.395	HI1A	6.240	JVL	11.660	KGPZ	2,450		2.150		19.900
	CNR	12,820	FQO	12.160	H14D	6.500	JVM	10.740	KGYA	3.387		2.994		9.830
	COC	6.010	FTA	11.840	HJA2	5.825	JVN	10.660	KGYB	3.387	KINT	2.726	LSK3	10.250
	COCD	6.130	FTE	18.330	HJA3	7.685	JVO	10.375	KGYC	3.387	KIO	11.680	LSL	9.990
	СОН	9.428	FTK	15.863	HJA3	8.790	JVP	7.510	KGYD	3.387	KIUK	1.674	LSL	15.810
	CO9GC	6.150	FTM	19.355	HJA3	12.830	JVQ	7.470	KGYE	3.387		7.520		10.300
	CP5	6.080	FTN	12.260	HJA7	5.400	JVR	7.390	KGYF	3.387	KKL	15.475		19.120
	CP6	9.120	FTX	6.175	нјв	14.930	JVS	6.990	KGYG	3.387		16.030		21.128
	CP7	15.300	FZR	16.200	HJN	6.080	JVT	6.750	KGYH	3.387		11.950		9.895
	CQN	6.073	FZS	18.342	HJP	7.465	ĴΫÜ	5.790	KGYI	3.387		13.780		14.480
	CREAA	7.175	FZS2	11.990	нју	9.930	JVV	5.730	KGZA	2.414		13.690		21.020
			GAA	20,368		18.444	JYK	13.600	KGZB	1.712		2.506		9.890
	CSL	6.150	GAQ	18.970	HJ1ABB		JYR	7,880	KGZC	2.422		2.414	LSR	18.958
	CT1AA	9.600	GAS	18.304	HJIABB		JYS	9.840	KGZD	2.490		2.458		10.350
	CT1AA	15.350	GAU		HJ1ABD		JYT	15.760	KGZE	2.482		2.438		18.115
	CT1CT	3.750		18.620						2.452	KNFF	2.422		2.670
	CT1CT	12.223	GAW	18.200	HJ1ABG		JZA	15.680	KGZF KGZG		KNFG	2.422	NMD	2.670
	CT1G0	6.132	GBA	13.984	HJ1ABH		JZB	10.960		2.466				
	CT2AJ	4.000	GBB	13.500	HJ1ABJ		JZC	5.830	KGZH	2.442		2.474	NMD	2.698
	CWD	5.830	GBC	4.430	HJ2ABA		JZD	16.910	KGZI	2.458	KNFI	2.414	NMF	2.670
	CWE	6.610	GBC	4.975	HJ2ABC		JZE	13.020	KGZJ	2.430	KNFJ	1.712	NMG	2.670
	CWF	8.455	GBC	8.680	HJ2ABD		JZF	8.500	KGZL	1.712	KNFK	2.490	NMN	2.670
	CWG	11.370	GBC	12.780	HJ3ABD		JZG	6.330	KGZM	2.414	KNFL	2,490	NMP	2.670
	CWH	13.140	GBC	17.080	HJ3ABF		KAX	19.980	KGZN	2.414	KNFM	2.490	NMP	2.698
	CZA	2.980	GBP	10.770	HJ3ABH		KAY	14.980	KGZO	2.414	KNFN	1.682	NMV	2.670
	CZA	4.785	GBS	12.150	HJ4ABA		KAZ	9.990	KGZP	2.450	KNFO	1.682	NMW	2.670
	CZA	6.285	GBU	12.240	HJ4ABB		KBK	6.718	KGZQ	1.712	KNFP	2.414	NMY	2.670
	CZA	8.515	GBU	22.290	HJ4ABC		KDK	7.520	KGZR	2.442	KNFR	2.490	NOB	2.670
	CZA	12.660	GBW	14.440	HJ4ABE		KEB	7.370	KGZT	1.674	KNFS	2.490	NOB	2.698
	CZA	17.310	GBX	10.530	HJ4ABL	6.100	KEE	7.715	KGZU	2.490	KNFU	2.490	NOF	2.670
	CZB	1.620	GBX	16.150	HJ5ABC	5.615	KEI	9.490	KGZV	2.414	KNFX	2.490	NOG	2.670
	CZG	1.712	GCA	9.710	HJ5ABD	6.490	KEJ	9.010	KGZW	2.458	KNFY	2.490	LON	2.670
	CZG	2.416	GCB	9.280	HKE	7.090	KEL	6.860	KGZX	2.414	KNFZ	2.490	NOM	2.670
	CZG	6.425	GCJ	13.415	HPC	10.290	KEQ	6.733	KGZY	1.712	KNGA	2.490	NOP	2.670
	CZJ	1.596	GCP	7.920	HPF	14.545	KES	10.410	KIAP	3.093	KNGB	2.490	NOR	2.670
	CZJ	1.668	GCS	9.020	HP5B	6.030	KEZ	10.400	KIAQ	2.512	KNGC	2.490	NOR	2,698
	CZL	2.290	GCU	9.950	HP5J	9.590	KGHA	2.490	KIAX	3.093	KNGD	2.490	NOU	2.670
	czo	4.505	GCW	9.790		13.810	KGHB	2.490	KIAY	3.093	KNGE	1.712	NOV	2.670
	CZP	4.505	GDB	4.320		14.500	KGHC	2.490	KICI	3.093	KNGF	2.422	NOY	2.670
	CZQ	4.505	GDB	6.790	HSJ	8.020	KGHD	2.490	KIED	1.622	KNGG	1.698	NO7	2,670
	czv	3.300	GDLJ	4.430	HSP	7.968	KGHE	2.490	KIED	2.150	KNGH	2.474	OAX4B	6.230
	CZV	4.840	GDLJ	13.320	HSP	8.396	KGHG	2.474	KIEF	1,622	KNGJ	2,490	OAX4D	5.780
	CZY	1.620	GDS	6.095		17.740	KGHK	1.674	KIEF	2,150	KNGK	2.450	OCI	10.962
	CZZ	1.620	GDW	4.820	HVJ	5.970	KGHM	2.474	KIEJ	2.994	KNGL	1.712	oci	18.670
	DAF	4.320	GLRZ	4.415		15.120	KGHN	2.450	KIEL	1.622	KNGM	2.450	001	15,625
			GMBJ	4.413			KGHO	1.682	KIEL	2.150	KNGN	2.490	OER2	6.072
	DAF DAF	8.464	GMBJ	12,955	IAC IAC	4.355 6.650	KGHP	2.466	KIEO	2.150	KNGO	2.450	OPL	20.040
		12.325									KNGP		OPM	
	DAF	12.745	GSA GSB	6.050 9.510		12.795	KGHQ	2.490	KIFI	1.622 2.150	KNGT	2.430 2.450	ORG	10.135 19.200
	DAF	17.260				17.770								
	DFA	19.240	GSC	9.580	IAF	5.415	KGHS	2.458	KIFT	2.150	KNGU	2.414	ORK	10.330
	DFB	17.520	GSD	11.750		29.820	KGHT	2.382	KIGA	1.606	KNIA	3.410	OXY	6,060
		12.980	GSE	11.860		30.604	KGHU	2.442	KIGA	2.102	KNKS	3.410	OXY	9.490
	DFD	14,665	GSF	15.140		13.050	KGHV	2.382	KIGF	2.986	KNKY	3.410	OXY	15.300
	DFE	9.810	GSG	17.790	IRA	6.070	KGHW	2.414	KIGP	3.190	KNLO	3.410	PCJ	15,220
	DFL	10.850	GSH	21.470		11.810	KGHX	2.430	KIGW	2.102	KOU	2.566	PCK	18.400
	DGK	6.675	GSI	15.260	IRF	8.070	KGHY	1.712	KIIH	2.190	KOW	2.522	PCM	18.600
	DGU	9.609	GSJ	21.530	IRM	9.823	KGHZ	2.406	KIIK	2.994	KQH	14.920	PCV	17.830
		20.020	GSK	26.100	IRO	9.780	KGJX	1.712	KHK	3.190	KØl	18.020	PDK	10.410
	DIQ	10.285	GSL	6.110		19.520	KGM	3.093	KHL	2.994	KRO	5.845	PDK	12.050
	DJA	9.560	G6RX	4.320	153	5.015	KGOZ	2.466	KIIL	3,190	KSW	1.658	PD1	6.445
		15.200	HAS3	15.370	I2RO	5.550	KGPA	2.414	KIIM	2.994	KSW	2.422	PE2	6.445
	DJC	6.020	HAT	5.400	12RO	5.725	KGPB	2.430	KIIM	3.190	KTO	16.240	PHI	11.725
		11.770	HAT2	7.220	12R0	6.085	KGPC	1.706	KIIN	2.994	KTP	8.120	PHI	17.775
		17.760	HAT3	8.565	I2RO	6.980	KGPD		KIIN	3.190	KVP	1.712	PLE	18.830
	DIG	4.580	HAT4	9.125	I2RO	9.630	KGPE		KIIO	2.994	KWN	21.060	PLF	17,850
		12.035	HBF	18.950		15.510	KGPF		KIIO	3.190	KWO	15.415	PLG	15.950

												Ive	
PLK	14.480			WIEW	2.102			WPGS		W1XAL			3.300
PLM	12.290	VE9GW	V 6.090	WIEX	1.566	WPDB	1.712	WPGT	2.482		11.790		3.490
PLP	11.000		V 11.810	WIEX	1.606	WPDC	1.712	WPGV	1.712		15.250	YDH4	3.310
PLQ	10.670		V 24.380	WIEX	2.102	WPDD	1.712	WPGW	2.382	W1XAL	. 21.460	YDH5	3.250
PLV	9.415	VE9HX		WIEX	2.390	WPDE	2.442	WPGX	2.466	W1XH	2.110	YDH6	3.130
PMA	19.345	VFJ	2.290	WIFI	2.738	WPDF	2.442	WPGZ	2.474	W1XK	9.570	YDH7	1.960
PMB	20.606	VIY	12.210	WIR	4.276	WPDG	2.458	WPHA	2.466	W2XAE	15.330	YDH9	1.920
PMC	18.135	VIZ3	11.495	WIR	4.540	WPDH	2.442	WPHB	2.422	W2 XAF		YD12	2.110
PMN	10.260	VK1	6.425	WIY	13.870	WPDI	2.430	WPHC	1.596	W2XBJ		YDJ2	2.890
PMY	5.140	VK2ME	E 9.585	WJER	1.606	WPDJ	2.414	WPHD	2.458		10.370	YDJ3	2.870
PNI	8.775	VK3LR		WJER	2.102	WPDK	2.450	WPHE	1.634	W2XBJ	13.900	YD 34	1.840
PPM	10.310	VK3LR	9.580	WJN	7.370	WPDL	2.442	WPHF	2.450	W2XBJ	17.940	YDK2	3.190
PPO	11.670	VK3MI		WKA	21.060	WPDM	2.430	WPHG	1.712	W2XE	6.120	YDK3	2.910
PPU	19.270	VLJ	9.750	WHC	10.465	WPDN	2.382	WPHI	2.490	W2XE	11.830	YDK4	3.270
PRADO		VLK	8.095	WKC	13.465	WPDO	2.458	WPHJ	2.490	W2XE	15.270	YDKS	2.710
PRF5	9.505	VLK	10.520	WKDT	1.630	WPDP	2.474	WPHK	1.596	W3XAL		YDK6	1.860
PSA	21.069	VLZ	7.960	WKDU	1.706	WPDR	2.422	WPHM	2.442		17,780	YDL2	4.810
PSA	14.935	VLZ	7.980	WKEM	1.622	WPDS	2.430	WPHN	2.466	W3XAL		YDL3	3.450
PSD	15.070	VPD	13.045	WKEM	2.150	WPDT	2.490	WPHO	2.430	W3XAL		YDL4	3.410
PSF	14.690	VQ7LQ		WKF	4.253	WPDU	1.712	WPHP	2.466	W3XL	6.425	YDLS	3.210
PSH	10.220	VUB				WPDV	2.458	WPHO	2.490	W3XL	17.310	YDL6	2.750
PSK	8.180	VUC	9.565 6.112	WKF	19.220	WPDW	2.422	WPHS	1.634	W4XB	6.040	YDM2	3.320
					9.460					W8XA		YDN2	
RAU Ref	15.104	VUC	9.575	WEK	21.410	WPDX	2.414	WPHU	1.634	WEXAL	1.682 6.060	YDN3	1.940 2.790
	7.260		8.975	WKL	8.940	WPDY	2.414		2.482				
RIM	7.626	VWY	17.480	WKM	18.860	WPDZ	2.490	WPSP	1.674	W8XK W8XK	6.140	YDO2 YDO3	3.430
RIR	5.040	VWZ	8.690	WKN	19.820	WPE	13.840	WQA	21.220		9.570		3.290
RKF	4.875	VWZ	8.693	WKO	15.970	WPEA	2.382	WQB	17.940	W8XK	11.870	YDO4	3.180
RKF	6.870	vwz	8.700	WKP	6.950	WPEB	2.442	WQC	17.860	W8XK	15.210	YDO5	2.930
RKF	6.880	VWZ	8.708	WKU	14.830	WPEC	2.466	WQD	18.960	W8XK	17.780	YDO6	2.770
RKF	6.900	VXU	5.540	WKW	15.445	WPED	1.712	WQE	18.920	W8XK	21.540	YD07	2.070
RKF	9.750	VXV	5.540	WLA	18.350	WPEE	2.450	WQF	17.920	W9XAA	6.080	YD08	1.980
RKF	12.500	VXW	5.540	WLEB	1.646	WPEF	2.450	WQFA	2.466	W9XAA		YDO9	1.880
RKI	7.520	VXX	5.405	WLEX	2.150	WPEG	2.450	WQFB	2.414	W9XAA	17.780	YDQ2	3.390
RKI	15.040	VYP	1.596	WLK	16.270	WPEH		WQFE	1.634	W9XAF		YDQ3	3.350
RKI	15.090	VYP	1.668	WLL	17.900	WPEI	1.712	WQFO	2.430	W9XBL		YDQ4	3.230
RKK	6.135	VYR	1.712	WIMA	13.390	WPEJ	1.712	WQG	15.040	W9XF	6.100	YDQ5	2.950
RKK	12.270	VYW	2.416	WMDZ	2.442	WPEK	2.430	WQH	18.880	W9XF	6.425	YDQ6	2.810
RNE	12.000	VYZ	2.212	WMEF	1.606	WPEL	1.666	WQI	17.880	XDA	14.525	YDU2	3.370
ROI	5.490	WAD	8.930	WMEF	2.020	WPEM	2.466	MØ1	21.240	XEBT	6.000	YDU3	5.260
RPK	7.225	WAJ	13.480	WMEF	2.102	WPEP	2.450	WQL	14.815	XECR	7.380	YDU4	2.830
RPT	5.995	WAW	12.930	WMEF	2.760	WPEQ	1.570	WQN	5.263	XECW	5.980	YDU5	1.850
RRD	8.225	WBU	21.260	WMEP	2.930	WPES	2.442	WQN	5.505	XGB	11.140	YDV2	3.330
RRZ	4.400	WCG	10.370	WMEP	6.615	WPET	1.706	WQN	5.825	XGBD	9.580	YID	4.470
RSB	5.375	WCK	2.414	WMEQ	6.615	WPEV	1.666	WQO	6.725	XGK	18.690	YID	6.135
RSN	5.440	WDA	9.480	WMES	2.550	WPEW	1.666	WQP	13.900	XGL	7.960	YNA	14.480
RSZ	8.770	WDB	6.718	WMEU	2.930	WPFA	1.712	WQQ	20.260	XGN	16.380	YNLF	6.714
RTA	6.440	WDG	4.535	WMEU	6.615	WPFC	2.442	WQR	16.015	XGO	7.575	YN1GG	
RTZ	7.275	WDN	4.550	WMEV	2.930	WPFD	2.430	wqs	13.915	XGOX	6.000	YVQ	6.672
RV15	4.273	WDS	18.900	WMEV	6.615	WPFE	2.442	WQU	13.855	XGOX	9.500	YVQ	13.337
RV59	5.996	WEA	10.610	WMF	14.470	WPFG	2.442	WQV	14.800	XGOX	11.900	YVR	9.168
SR1	9.490	WEB	6.935	WMJ	2.422	WPFH	2.414	WQW	10.600	XGOX	17.800	YVR	18.296
SUV	10.055	WEC	8.930	WMN	14.590	WPFI	2.414	WQX	20.180	XGW	10.420	YV2RC	6.112
SUZ	13.810	WED	10.630	WMO	2.414	WPFK	2.430	WQY	20.100	YBG	10.430	YV3RC	6.150
SUZ	13.810	WEF	10.620	WMP	1.666	WPFM	2.382	WRBH	2.458	YBZ	7.680	YV3RC	9.510
TGF	14.545	WEG	7.415	WNA	9.170	WPFN	1.712	WRDQ	2.474	YCP	8.575	YV4RC	6.375
TGX	5.937	WEJ	6.740	WNB	10.675	WPFO	2.474	WRDR	2.414	YDA	3.040	YV5RM	
TIEP	6.710	WEL	8.950	WNC	15.055	WPFP	2.490	WRDS	1.642	YDA	6.040	YV6RV	6.520
TIEP	13.415	WEL	13.435	WND	4.098	WPFQ	2.474	WRJ	3.410	YDA2	2.385	ZBW	6.750
TIGPH	5.820	WEM	7.400	WNEI	1.622	WPFS	2.458	WST	3.410	YDA3	1.640	ZEA	6.590
TIN	14.545	WEO	6.958	WNEI	2.150	WPFS	2.474	WTDV	4.295	YDA4	1.550	ZEB	6.590
TIU	14.545	WES	9.448	WNER	2.060	WPFT	2.442	WTDW	4.295	YDA5	6.120	ZFA	5.025
TIPG	6.550	WET	9.470	WNFP	2.422	WPFU	2.422	WTDX	4.295	YDA6	2.870	ZFB	10.055
TIR	7.685	WEX	13.450	WOA	6.755	WPFV	2.466	WTR	6.385	YDA7	3.270	ZFD	10.335
TIRCC	6.550	WEY	1.630	WOB	5.850	WPFW	2.466	WTT	18.940	YDA8	1.510	ZFO	5.300
TYA	12.215	WEZ	6.928	WOF	9.750	WPFX	2.442	WVD	2.604	YDB	4.470		
VAC	1.510	WFX	18.980	WOG	4.253	WPFY	2.442	WVD	5.995	YDB2	2.450	ZFS	4.512
VAF	1.510	WHER	2.102	WOK	10.550	WPFZ	2.442	WVD	6.618	YDB3	1.660	ZGE	6.125
VBQ	2.350	WHER	1.606	WON	9.870	WPGA	2.466	WWAD	4.988	YDB4	1.615	zHI	6.060
VBY	1.540	WHR	13.420	WOO	4.178	WPGB	2.466	WWAJ	3.410	YDB5	1.595		
VBY	1.650	WIED	1.566	WOO	4.753	WPGC	1.658	WWAL	3.410	YDB6	1.570	ZHJ	6.080
VE9AS	6.425	WIED	2.390	WOO	8.560	WPGD	2.458	WWAM	3.410	YDB7	1.530	ZLR	7.390
VE9BJ	6.090	WIEG	2.150	<b>W</b> -20	12.840	WPGG	1.596	WWAO	3.410	YDD2	1.630	ZLS	8.900
VE9CA	11.860	MIEH	1.622	W O O	17.120	WPGH	2.414	WWE	3.410	YDD3	1.585		
VE9CA	6.030	WIEK	1.646	WOU	2.506	WPGI	2.430	WWG	3.410	YDE2		ZLT	10.990
VE9C5	6.070	WIEK	2.190	wox	2.590	WPGJ	2.414	WWH	3.410	YDE3	2.910	ZSS	19.890
VE9DN	6.005	WIEL	1.646	YGW	4.178	WPGK	2.466	WWHJ	3.410	YDE4	2.415	zsv	8.220
VE9DN	9.555	WIEL	2.190	WOY	4.753	WPGL	2.442	wwm	3.410	YDE5	2.750		
VE9DN	11.780	WIEO	1.606	WOY	8,560	WPGM	2.414	WWN	3.410	YDG2		ZSV	12.500
		WIEO	2.020	YC:W	12.840	WPGN	2.490	WWR	3.410	YDG3	3.150	ZTJ	6.123
VE9DR	6.005	WIEO	2.102	WOY	17.120	WPGO		wwz	3.410	YDG4	2.850	ZP10	6.666
VE9DR	9.580	WIEO	2.760	WOZ	3.423	WPGP	2.442	WXH		YDG5	2.030		
VE9DR	11.895	MIEM	1.606	WD9	6.385	WPGQ	1.596	WYBF	2.604	YDG6	1.900	ZP11	3.800

NORTH MALKICIA D. C. S	TATIONS BT TREQUENCIES
530 kilocycles (565.7)	WICC ae 500 2 C (1) Bridgeport, Conn. WMT af 1000 B (2.5) Cedar Rapids, Iowa
• • • • • • • • • • • • • • • • • • • •	WMT af 1000 B (2.5) Cedar Rapids, Iowa WREC ak 1000 C (2.5) Memphis, Tenn.
CJKL z 1000 Kirkland Lake, Ont	Willow the 1990 G (2.0) Memphis, Tenn.
540 kilocycles (555.2)	610 kilocycles (491.5)
CJRM ak 1000 F Moose Jaw, Sask.	KFRC ak 1000 C (5) San Francisco, Calif. WDAF ak 1000 R (5) Kansas City, Mo.
5501:1 1 /545 1)	WIP ae 500 (1) Philadelphia, Pa.
550 kilocycles (545.1)	WJAY ae 500 Cleveland, Ohio XFX ak 500 Mexico City, D. F.
CFNB ak 500 F (1) Fredericton, N. B. KFUO ae 500 2 (1) St. Louis, Mo.	
KFYR ae 1000 N (5) Bismarck, N. D.	620 kilocycles (483.6)
KOAC ak 1000 Corvallis, Ore. KSD ak 1000 2R (5) St. Louis, Mo.	KGW ak 1000 N (5) Portland, Ore. KTAR ae 1000 N Phoenix, Ariz.
KTSA ak 1000 C (5) San Antonio, Texas WDEV ae 500 D Waterbury, Vt.	KTAR ae 1000 N Phoenix, Ariz. WFLA ae 1000 Na Clearwater, Fla.
WGR ae 1000 C Buffalo, N. Y.	WHJB ak 250 (.5) Greensburg, Pa.
WKKC ak 1000 C (2.5) Cincinnati, Onio	WLBZ ak 500 C(1) Bangor Maine
WSVA z 500 D Harrisonburg, Va.	WSUN ae 1000 Na (1) St. Petersburg, Fla. WTMJ ae 1000 N (5.) Milwaukee, Wis.
560 kilocycles (535.4)	
	630 kilocycles (475.9)
KLZ ae 1000 C (5) Denver, Colo.	CFCO ak 100 F Chatham, Ont.
KSFO ak 1000 San Francisco, Calif. KWTO ak 5000 D Springfield, Mo.	CFCY ae 1000 F Char't'w'n. P.E.I.
TGW ak 10000 565 Guatemala City	CJGX ak 500 F Yorkton, Sask. CKOV ak 100 F Kelowna, B. C.
WFIL ae 1000 B Philadelphia, Pa.	KFRU ak 500 1 (1) Columbia, Mo.
WIND ak 1000 (2.5) Gary, Ind. WNOX ak 1000 C (2) Knoxville, Tenn.	KGFX ak 200 D Pierre, S. D.
WOAM ac 1000 G Miami, Fia.	WGBF ae 500 1 Evansville, Ind. WMAL ak 250 B (.5) Washington, D. C.
XEAO ak 250 (.15) Mexicali, B. C.	WOS ak 500 1D Jefferson City, Mo.
570 kilocycles (526.0)	WPRO ak 250 Providence, R. I. XEZ z 500 Merida, Yuc.
KMTR ak 500 Hollywood, Calif.	(401:1 1 (4(0.5)
KVI ak 1000 Tacoma, Wash.	640 kilocycles (468.5)
WKBN ae 500 1C Youngstown, Ohio WMCA ak 500 New York, N. Y.	CMBY z 125, Havana, Cuba
WNAX ak 1000 C (5) Yankton, S. D.	CMBY z 125 Havana. Cuba KFI ak 50000 N Los Angeles, Calif. WAIU ae 500 Columbus, Ohio
WOSU ak 750 1 (1) Columbus, Ohio WSYR ak 250 B Syracuse, N. Y.	WAIU ae 5000 Columbus, Ohio WOI ae 5000 D Ames, Iowa
WSYR ak 250 B Syracuse, N. Y. WWNC ae 1000 N Asheville, N. C.	XEOX ak 250 Saltillo, Coah.
580 kilocycles (516.9)	650 kilocycles (461.3)
CFPR z 50 Prince Rupert, B. C.	WSM ae 50000 N Nashville, Tenn.
CHRC ak 100 F Quebec, Que.	*
CKCL ae 100 F Toronto, Ont. CKUA ak 500 Edmonton, Alta.	660 kilocycles (454.3)
KMJ ak 1000 C Fresno, Calif.	
KSAC ak 500 2 (1) Manhattan, Kans. WCHS ak 500 (1) Charleston, W. Va.	CMCX z 150 Havana, Cuba WAAW ak 500 D Omaha, Neb, WEAF ak 50000 R New York, N. Y.
WDBO ac 1000 C Orlando, Fla.	WEAF ak 50000 R New York, N. Y.
WIBW ak 1000 G2 (5) Topeka, Kans. WTAG ae 500 R (1) Worcester, Mass.	
	670 kilocycles (447.5)
590 kilocycles (508.2)	WMAQ ck 50000 N Chicago, III.
KHQ ak 1000 N (2.5) Spokane, Wash. WEEI ak 1000 R Boston, Mass.	680 kilocycles (440.9)
WKZO ae 1000 D Kalamazoo, Mich. WOW ae 1000 R (5) Omaha, Neb.	CMCQ z 250 Havana. Cuba
WOW as 1000 R (5) Omaha, Neb. XEPN ak 50000 Piedras Negras, Coah.	KFEO ac 2500 D St. Joseph, Mo.
(00111 1 (400 7)	KPO ak 50000 N San Francisco, Calif. VAS akn 2000 685 Glace Bay, N. S.
600 kilocycles (499.7)	VOWR ck 500 681 St. John's, Nfld. WPTF ae 1000 DnN (5) Raleigh, N. C.
CFCF ae 400 Montreal, Que.	
CJOR ak 500 Vancouver, B. C. CMW ak 1000 Havana, Cuba	690 kilocycles (434.5)
CRCW z 500 F (1) Windsor, Ont.	
FON 7 250 609 St. Pierre, Miguelon	CFRB ae 10000 C Toronto, Ont. CJCJ ak 100 F Calgary, Alta.
WCAC ak 500 2 Storrs, Conn.	NAA akn 1000 Arlington, Va.
WCAO ae 500 C (1) Baltimore, Md.	XET ck 500 Monterrey, N. L.

	STATIONS BY FREQUENCIES
700 kilocycles (428.3)	800 kilocycles (374.8)
RDN z 500 706 San Salvador, E. S. WLW ak 500000 N Cincinnati, Ohio	WBAP ak 50000 Na Fort Worth, Tex. WFAA ak 50000 Na Dallas, Tex. WTBO ae 250 D Cumberland, Md.
710 kilocycles (422.3)	810 kilocycles (370.2)
KMPC ae 500 Beverly Hills, Calif. KPCB ae 250 Seattle, Wash. WOR ak 50000 Newark, N. J. XEN ak 1000 711 Mexico City, D. F.	CMCF ak 250 815 Havana, Cuba CMHW z 100 Clenfuegos, Cuba WCCO ae 50000 C Minneapolis, Minn. WNYC ak 1000 N New York, N. Y.
720 kilocycles (416.4)	ingulation, right
WGN ck 50000 Chicago, III.	820 kilocycles (365.6)
730 kilocycles (410.7)	WHAS aj 50000 C Louisville, Ky. XETW dk 500 Mexico City, D. F.
CFPL ak 100 F London, Ont. CJCA ah 1000 F Edmonton, Alta.	830 kilocycles (361.2)
CKAC ak 5000 C Montreal, Que. CMAF ak 250 Havana, Cuba XEBC ak 5000 Agua Caliente, L. C.	CMC         ae         500         835         Havana, Cuba           KOA         ak         50000         N         Denver, Colo.           WEEU         ak         1000         D         Reading, Pa.           WHDH         ae         1000         Dn         Boston, Mass.
740 kilocycles (405.2)	WRUF ae 5000 Dn Gainesville, Fla.
KMMJ ae 1000 D Clay Center, Neb. KTRB ak 250 D Modesto, Calif.	840 kilocycles (356.9)
WHEB ak 250 D Portsmouth, N. H. WSB ah 50000 N Atlanta, Ga.	CFQC ak 1000 F Saskatoon, Sask. CMO z 500 Havana, Cuba CRCT ak 5000 F Toronto, Ont.
XELC z 100 Mexico City, D. F.	VOGY ak 400 St. John's, Nfld.
750 kilocycles (399.8)	XEP z 500 Mexico City, D. F. XEXX z 500 845 Mexico City, D. F.
CMCW dk 125 Havana, Cuba KGU aj 2500 N Honolulu, T. H. WJR ak 50000 C Detroit, Mich,	850 kilocycles (352.7)
760 kilocycles (394.5)	KIEV aj 250 D Glendale, Calif. KWKH ae 10000 C Shreveport, La. TIEP z 500 San Jose, C. R, WESG ak 1000 C Elmira, N. Y.
CMHX z 150 Cienfuegos, Cuba	WESG ak 1000 C Elmira, N. Y. WWL ae 10000 New Orleans, La.
KXA ae 250 (.5) Seattle, Wash. WBAL ae 10000 BSy Baltimore, Md, WEW ae 1000 D St. Louis, Mo.	860 kilocycles (348.6)
WJZ ck 50000 BSy New York, N. Y. XEOK z 2500 765 Tijuana, L. C.	WABC ac 50000 C New York, N. Y. WHB ac 1000 D Kansas City, Mo.
770 kilocycles (389.4)	XEMO ak 2500 865 Tijuana, B. C.
CMBS ak 120 Havana, Cuba KFAB ae 10000 CSy Lincoln, Neb.	870 kilocycles (344.6)
WBBM ae 50000 CSy Chicago, III.	WENR ak 50000 Na Chicago, III. WLS ae 50000 Na Chicago, III.
780 kilocycles (384.4)	880 kilocycles (340.7)
CHWK ak 100 F Chilliwack, B. C. CKSO z 1000 F Sudbury, Ont.	CFJC ak 100 F Kamloops, B. C. CMBN z 150 Havana, Cuba
CMJK ak 150 Camaguey, Cuba KEHE ak 500 2 (1) Los Angeles, Calif.	CRCO ak 1000 F Ottawa, Ont.
KELW ae 500 2 Burbank, Calif.	KLX ae 1000 Oakland, Calif.
KFOD ck 250 Anchorage Alaska	KPOF ak 500 2 Denver, Colo. WCOC ae 500 (1) Meridian, Miss.
KGHL ak 1000 N (2.5) Billings, Mont. WEAN ae 500 C Providence, R. I.	WGBI ae 500 i Scranton, Pa.
WMC at 1000 N (2.5) Memphis Tenn	WPHR z 500 D Petersburg, Va. WOAN ae 250 1 Scranton, Pa.
WTAR ae 500 N (1) Norfolk, Va. XEYZ z 10000 Mexico City, D. F.	WSUI ae 500 (1) lowa City, Iowa
790 kilocycles (379.5)	890 kilocycles (336.9)
CMOA z 75 Havana Cuba	CJIC z 100 D S. Ste. Marie, Ont. KARK ak 250 (.5) Little Rock, Ark.
KGO ak 7500 N San Francisco, Calif. WGY ak 50000 R Schenectady, N. Y.	KFNF ak 500 2 (1) Shenandoah, Iowa KFPY ak 1000 C Spokane, Wash.

NORTH AMERICAN B. C. S	TATIONS BY FREQUENCIES
KUSD ae 500 2 Vermillion, S. D. WBAA ak 1000 D W. Lafayette, Ind. WILL ak 1000 2 Urbana, Ill.	KMBC ae 1000 C Kansas City, Mo. WRC ae 500 R (1) Washington, D. C.
WGST aeh 250 C (1) Atlanta, Ga. WJAR ae 500 R Providence, R. I.	960 kilocycles (312.3)
WMMN ae 500 (1) Fairmont, W. Va. XEW ak 50000 Mexico City, D. F.	CKY ak 15000 F Winnipeg, Man. CMCD ah 200 Havana, Cuba
900 kilocycles (333.1)	XEAM z 50 Nuevo Laredo, Tams. XEAW ak 10000 Reynosa, Tams.
KGBU ak 500 Ketchikan, Alaska	
KHI se 1000 C (5) Los Angeles, Calif.	970 kilocycles (309.1)
KSEI ck 250 (.5) Pocatello, Idaho WBEN ae 1000 R Buffalo, N. Y. WFMD z 500 DP Frederick, Md.	KJR z 5000 N Seattle, Wash. WCFL ae 1500 B Chicago, Ill.
WJAX ach 1000 N (5) Jacksonville, Fla. WKY ac 1000 N Oklahoma City, Ok.	WIBG ak 100 D Glenside, Pa.
WMFI z 500 DP New Haven, Conn.	980 kilocycles (303.9)
WTAD ak 500 D Quincy, Ill.	KDKA bk 50000 B Pittsburgh, Pa. XEAF z 250 Nogales, Sonora
910 kilocycles (329.6)	
CJAT ak 250 F Trail, B. C. CRCM ak 5000 F Montreal, Que.	990 kilocycles (302.8)
XENT ck 60000 Nuevo Laredo, Tams	WBZ ak 50000 BSy Boston, Mass. WBZA ak 1000 BSy Springfield, Mass.
920 kilocycles (325.9)	XEK ak 100 Mexico City, D. F. XES dk 250 Tampico, Tams.
CMX ae 500 Hayana, Cuba	1000 kilocycles (299.8)
HIIK ae 1000 Port-au-Prince,Haiti KFEL ak 500 2 Denver, Colo. KOMO ak 1000 N(5) Seattle, Wash.	
KPRC ae 1000 N(5) Houston, Texas	CMBZ ak 150 Havana, Cuba KFVD ak 250 Dn Los Angeles, Calif, TIGH z 500 San Jose, C. R.
KVOD ak 500 2 Denver, Colo. WAAF ak 500 D Chicago, Ill. WBSO ae 500 D Babson Park, Mass.	WHO ak 50000 R Des Moines, Iowa
WBSO ae 500 D Babson Park, Mass. WPEN ak 250 (.5) 1 Philadelphia, Pa. WRAX ak 250 1 (.5) Philadelphia, Pa.	1010 kilocycles (296.9)
WSPA ae 1000 D Spartanburg, S. C.	CHML aei 50 F Hamilton, Ont.
WWJ ak 1000 R Detroit, Mich. XEAA z 200 Mexicali, B. G. XEFE z 250 Nuevo Laredo, Tams.	CHWC ak 500 3F Regina, Sask. CKCD ak 100 Vancouver, B. C.
	CKCK ak 500 3F Regina, Sask, CKCO z 100 Ottawa, Ont.
930 kilocycles (322.4)	CKIC ak 50 Wolfville, N. S. CKWX ak 100 F Vancouver, B. C.
CFAC ak 100 F Calgary, Alta. CFCH ak 100 F North Bay, Ont.	CMJG z 50 Camaguey, Cuba KGGF ak 1000 2 Coffeyville, Kans.
CFLC ae 100 Prescott, Ont. CHNS ae 1000 F Halifax, N. S.	KGGF ak 1000 2 Coffeyville, Kans. KOW ae 1000 San Jose, Calif. TIGA z 30 1014 Cartago, C. R. WHN ae 1000 (5) New York, N. Y.
CKPC ae 100 F Brantford, Ont. CKPR ak 100 F Fort William, Ont. KGBZ ak 1000 2 (2.5) York, Neb.	WHN ae 1000 (5) New York, N. Y. WIS ae 500 N (1) Columbia, S. C. WNAD ae 1000 2 (1) Norman, Okla.
KGBZ         ak         1000         2 (2.5)         York, Neb.           KMA         ak         1000         2 (2.5)         Shenandoah, Iowa           KROW         ak         500         (1)         Oakland, Calif.	XEU ak 250 Veracruz, Ver.
TIRII z 50 San Jose, C. R.	1020 kilocycles (293.9)
WBRC ak 1000 C Birmingham, Ala. WDBJ ae 1000 C Roanoke, Va.	KYW ak 10000 R Philadelphia, Pa.
940 kilocycles (319.0)	WDZ ak 250 D Tuscola, Ill, XEJ ak 1250 Juarez, Chih,
CMBC de 200 Havana, Cuba KOIN ak 1000 C (5) Portland, Ore. VOAS ak 100 St. John's, Nfld.	1030 kilocycles (291.1)
WAAT on 500 D Jersey City, N. J.	CFCN ak 10000 F Calgary, Alta, CKLW ae 5000 Windsor, Ont.
WCSH as 1000 R (2.5) Portland Maine	CKLW ae 5000 Windsor, Ont. CMCY ak 1000 Havana, Cuba XEB ak 10000 Mexico City, D. F.
WDAY ae 1000 N (5) Fargo, N. D. WHA ak 2500 D Madison, Wis. XEFO ak 5000 Mexico City, D. F.	1040 kilocycles (288.3)
950 kilocycles (315.6)	CMGH ak 15 Matanzas, Cuba
CRCS ak 100 F Chicoutimi, Oue.	KRLD ae 10000 C Dallas, Texas KWJJ ak 500 . Portland, Ore.
CRCS ak 100 F Chicoutimi, Que. KFWB ak 1000 (2.5) Hollywood, Calif. KHSL z 250 D (5) Chico, Calif.	WKAR ak 1000 D East Lansing, Mich. WTIC ak 50000 R Hartford, Conn.

1050 1::100::0105 (205 5)	11401-1- 1 (202.0)
1050 kilocycles (285.5)	1140 kilocycles (263.0)
CMKD         z         250         Santiago, Cuba           CRCK         z         1000         F         Quebec, Que.           KFBI         ak         50000         Dn         Abilene, Kans.           KNX         ak         50000         Hollywood, Calif.           TIFA         z         75         San Jose, C. R.	CMBG z 300 Havana, Cuba KVOO ak 25000 IN Tulsa, Okla. WAPI ae 5000 IN Birmingham, Ala, z 250 PD Rockville, Md.
1060 kilocycles (282.8)	1150 kilocycles (260.7)
CMK ae 1500 Havana, Cuba KTHS ae 10000 N Hot Springs, Ark. VOAC z 40 1065 St. John's, Nfld. WBAL ae 10000 B Baltimore, Md. WJAG ak 1000 D Norfolk, Neb. XEA ak 125 Guadalajara, Jal.	CMJF z 200 Camaguey, Cuba WHAM ae 50000 B Rochester, N. Y. XEFL z 5000 P Tijuana, B. C. XEH ak 250 Monterrey, N. L. XEWZ z 100 Mexico City, D. F.
1070 kilocycles (280.2)	1160 kilocycles (258.5) CHHJ z 100 Clenfuegos, Cuba
CMHA z 50 Sagua la Grande, C. KJBS ak 500 Dn San Francisco, Calif. WCAZ dk 100 D Carthage, Ill.	WOWO ae 10000 1C Fort Wayne, Ind.  WWVA ak 5000 1C Wheeling, W. Va.  XED ck 500 Guadalajara, Jal.
WTAM ck 50000 R Cleveland, Ohio	1170 kilocycles (256.3)
1080 kilocycles (277.6)	CMBD z 150 Havana, Cuba WCAU ae 50000 C Philadelphia, Pa.
WBT ae 50000 C Charlotte, N. C. WCBD ak 5000 1Dny Waukegan, III. WMBI ae 5000 1Dn Chicago, III. XEMA z 50 Tampico, Tampi	1180 kilocycles (254.1)
Tampico, Tams.  1090 kilocycles (275.1)  KMOX ak 50000 C St. Louis, Mo.	CMJO ak 500 Ciego de Avila, Cuba KEX ak 5000 2N Portland, Ore. KOB ae 10000 2 Albuquerque, N. M. VE9EK ak 10 1185 Montmagny, Que. WINS ae 1000 D (5) Minneapolis, Minn. New York, N. Y.
1100 kilocycles (272.6)	WINS ae 1000 New York, N. Y. WMAZ ak 1000 Macon, Ga. XEFA z 500 Mexico City, D. F.
CRCV ak 1000 F Vancouver, B. C. KGDM ak 1000 D Stockton, Calif.	1190 kilocycles (252.0)
TIRC ak 75 San Inco C P	
TIRC ak 75 San Jose, C. R. WLWL ae 5000 1 New York, N. Y. WPG ak 5000 1C Atlantic City, N. J. XEFG ak 250 1105 Mexico City, D. F.	CMKV z 50 Santiago, Cuba IIIJ z 15 1195 Santo Domingo, D.R., VONF ak 5000 St. John's, Nfid. WATR ak 100 D Waterbury, Conn.
TIRC ak 75 San Jose, C. R. WLWL ae 5000 1 New York, N. Y. WPG ak 5000 1C Atlantic City, N. J. Mexico City, D. F. 1110 kilocycles (270.1)	CMKV z 50 Santiago, Cuba IIIJ z 15 1195 Santo Domingo, D.R. VONF ak 5000 St. John's, Nfid.
TIRC ak 75 San Jose, C. R. WLWL ae 5000 1 New York, N. Y. WPG ak 5000 1C Atlantic City, N. J. Mexico City, D. F. 1110 kilocycles (270.1)  CMC0 z 150 Havana, Cuba KSOO ak 2500 Dn Sioux Falls, S. D. WRVA ae 5000 N Richmond, Va.	CMKV z 50 Santiago, Cuba Sinto Domingo, D.R. St. John's, Nfid. WATR ak 100 D WOAI ak 50000 N San Antonio, Texas WSAZ ak 1000 Huntington, W. Va.
TIRC   ak   75	CMKV z 50 Santiago, Cuba Sinto Domingo, D.R. Santo Domingo, D.R. St. John's, Nfid. Waterbury, Conn. San Antonio, Texas WSAZ ak 1000 N San Antonio, Texas Huntington, W. Va.  1200 kilocycles (249.9)  CHAB ak 100 F Moose Jaw, Sask. CKNX ak 50 Wingham, Ont. CKTB ak 100 F St. Catherines, Ont. CMCJ ak 350 Havana, Cuba Ada, Okla.
TIRC ak 75 San Jose, C. R. New York, N. Y. WPG ak 5000 1 C Atlantic City, N. J. XEFG ak 250 1105 Mexico City, D. F.  1110 kilocycles (270.1)  CMCO z 150 Havana, Cuba Sioux Falls, S. D. Richmond, Va. XELO z 10000 Richmond, Va. Piedras Negras, Co.	CMKV z 50 Santiago, Cuba Sinto Domingo, D.R. Santo Domingo, D.R. St. John's. Nfid. Waterbury, Conn. San Antonio. Texas WSAZ ak 1000 St. John's. Nfid. Waterbury, Conn. San Antonio. Texas Huntington, W. Va.  1200 kilocycles (249.9)  CHAB ak 100 F Moose Jaw, Sask. CKNX ak 50 Wingham, Ont. CKTB ak 100 F St. Catherines, Ont. CMCJ ak 350 Havana, Cuba

						LQUL	TOTEG
WHBY ak	100	$(,25)_{-}$	Green Bay, Wis.	WREN ak	1000	Ba(5)	Lawrence, Kas,
WIBX ak	100	(,3) C	Utica, N. Y.	XETF z	12		Veracruz, Ver.
WIL ak WJBC ak	100	(.25)	St. Louis, Mo.				
WJBC ak WJBL ae	100 100	6	Bloomington, Ill. Decatur, Ill.	1230 ki	locvo	oles (2	243.8)
WJBW ak	100	6	New Orleans, La.	1200111	1005	0100 (2	710.07
WKBO ak	100	$\hat{3}$ (.25)	Harrisburg, Pa.	CJOC ak	100	F	Lethbridge, Alta.
WKJC ae	100	3 (.25) 3 (.25) (.25)	Lancaster, Pa.	CMCB ak	190		Lethbridge, Alta. Havana, Cuba
WLVA ak	100	(.25)	Lynchburg, Va.	KGBX ak	500		Springfield, Mo.
WMFR z	100	PD	High Point, N. C.	KGGM ak KYA ae	250	(.5) N	Albuquerque, N. M.
WMPC ak WNR1 z	100	(.25)	Lapeer, Mich.	WFBM ae	1000 1000	Č	San Francisco, Calif. Indianapolis, Ind.
WNR1 z WRBL ak	100 100	(.25) P	Newport, R. 1	WNAC ak	1000	C (2.5)	Boston, Mass.
WWAE ae	100	8	Columbus, Ga. Hammond, Ind.	XEFJ ak	100	(210)	Monterrey, N. L.
	- 00						
1210 ki	locvo	cles (2	247 8)	1240 ki	locvo	cles (2	(41.8)
	ioc _j .	0100 (2					
CJCS z CJCU z	50		Stratford, Ont. Aklavik, N. W. T.	CJCB ak CMHB z	1000	F	Sydney, N. S.
	50	<u>F</u>	Aklavik, N. W. T.	CMHB z   KGCU ak	50 250	i	San Spiritus, Cuba
CKBI ak	100	F F	Prince Albert, Sask.	KCKO ak	1000	Ċ	Mandan, N. D. Wichita Falls, Texas
CKCH ak CKMC ak	100 50	r	Hull, Que. Cobalt, Ont.	KLPM ak	250	ĭ	Minot, N. D.
CMHI ak	150		Santa Clara, Cubá	KTAT ak	1000	С	Fort Worth, Texas
KASA ck	100		Elk City, Okla.	K'I'FI ae	1000		Twin Falls, Idaho
KDLR ak	100		Devils Lake, N. D.	WKAO ae WXYZ ak	1000		San Juan, P. R.
KFJI ak	100	1320.4	Klamath Falls, Ore.		1000		Detroit, Mich. Mexico City, D. F.
KFOR ak KFPW ak	100	(.25)C	Lincoln, Neb.	XEAL Z	100 500		Leon, Guan.
KFPW ak KFUH z	100 100	P	Fort Smith, Ark. Del Monte, Calif.	XELA z	50		Saltillo, Coah.
KFVS ae	100	6 (.25)	Cape Girardeau, Mo.				
KFXM ak	100	9 (.20)	San Bernardino, Cal.	12501-1	1	1 /3	20.0\
KGY ak KIEM ak	100		Olympia, Wash. Eureka, Calif.	1250 ki	юсус	cies (2	39.9)
KIEM ak	100		Eureka, Calif.	CMCC a	150	1255	Hamana Cuba
KIUL z	100	9	Garden City, Kans.	CMCG z CMKC z	150 150		Havana, Cuba Santiago, Cuba
KPPC ak KVSO z	50 100	ĎР	Pasadena, Calif. Ardmore, Okla.	KFOX ae	1000		Long Beach, Calif.
KWEA z	100		Shreveport, La.	WCAL ah	1000	2 (2.5)	Northfield, Minn.
KWTN ak	100		Watertown, S. D.	WDSU ak	1000	G	New Orleans, La.
WALR ak	100		Zanesville, Ohio	WHBI ak	1000	a (2.5)	Newark, N. J.
WBAX ae	100	1	Wilkes Barre, Pa.	WLB ak	1000	2	Minneapolis, Minn.
WBBL ak	100	S	Richmond, Va. Red Bank, N. J.	WNEW ae WTCN ak	1000 1000	a (2.5)	Newark, N. J.
WBRB ak WCOL ak	100 100	3	Red Bank, N. J.	WTCN ak	1000	2 (5)	Minneapolis, Minn.
WCOL ak WCRW ae	100	4	Columbus, Ohio Chicago, Ill.	100011	4	1 /2	20.0
WEBQ ae	100	6 (.25)	Harrisburg, Ill.	1260 ki	locy	cles (2	38.0)
WEDC ae	100	4	Chicago, III.		-	`	
WFAS ak	100	3	White Plains, N. Y.	CFRN ak	100 1000	61.55	Edmonton, Alta.
WGBB ae	100	3	Freeport, N. Y. Chester, N. Y.	KGVO ak KOHL ak	1000	D (2.5)	Missoula, Mont.
WGNY ak	100	3	Chester, N. Y.	KPAC ak	500	B (2.5) D	Council Bluffs, Iowa Port Arthur, Texas
WHBF ak WHBU ak	100 100	(.25) (.25)	Rock Island, Ill.	KRGV ak	500		Weslaco, Texas
WIBU ak	100	(.25)	Anderson, Ind. Poynette, Wis. Gadsden, Ala.	KUOA ak	1000	D	Fayetteville, Ark.
WJBY ak	100	(.20)	Gadsden, Ala.	KVOA ak	500		Tucson, Ariz.
WJEJ ah	100	D	Hagerstown, Md.	WIHO ae	1000	R	Dayton, Ohio
WJIM z	100	(.25)	Lansing, Mich.	WNBX ak WTOC ae	1000 1000	D C	Springfield, Vt. Savannah, Ga.
WJW ak WKOK ak	100 100	1000	Akton, Ohio	WIOC ae	1000	C	Savannan, Ga.
WMBG ak	100	1 C (.25)	Sunbury, Pa. Richmond, Va.	10501	1	1 /2	26 1
WMFG z	100	P (.23)	Hibbing, Minn.	1270 ki	locyo	cies (2	36.1)
WMFN z	100		Clarksdale, Miss.			`	
WOCL ak	50		Jamestown, N. Y. Manitowoc, Wis.	CMCP z	150		Hayana, Cuba
WOMT ae	100	42110		CMHD dk HIX ak	250 1000		Caibarien, Cuba Santo Domingo, D.R.
WPAX ae	250	D	Thomasville, Ga.	KGCA ak	100	2D	Decorah, lowa
WSBC ae WSIX ak	100 100	4	Chicago, Ill. Springfield, Tenn. Charlotte, N. C.	KOL ac	1000	C (2.5)	Seattle, Wash.
WSOC ak	100	N (.25)	Charlotte N C	KVOR ae	1000	C `	Colorado Spgs., Colo,
WTAX ak	100		Springfield, Ill.	KWLC ak	100	2D	Decorah, Iowa
XEE z	50		Durango, Dgo.	WASH ak	500	a	Grand Rapids, Mich.
XEFV ak	100		Juarez, Chih. Puebla, Pue.	WFBR ae	500	R	Baltimore, Md.
XETH ak	100		Puebla, Pue.	WJDX ac WOOD ak	1000 500	N (2.5)	Jackson, Miss. Grand Rapids, Mich,
			.= 0\ [====	XEG z	500	а	Ensenada, B. C.
1220 kil	ocyc	eles (2	45.8)	XFB ak	1000		Jalapa, Ver.
	_	`					
CMJE z	50 1000		Camaguey, Cuba	1280 ki	locve	100 (2	34 2)
KFKU ae KTW ak	1000	a S2	Lawrence, Kas. Seattle, Wash.	I & OU KI	iocyt	163 (2	U T. 2/
KWSC ae	1000	2 (5)	Pullman, Wash.	CMCU z	150		Havana, Cuba
WCAD ak	500	D	Pullman, Wash. Canton, N. Y.	KFBB ae	1000	(2.5)	Great Falls, Mont.
WCAE ak	1000	R (5)	Pittsburgh, Pa.	WCAM ae	500	ì	Camden, N. J.
WDAE ae	1000	C (2.5)	Tampa, Fla.	WCAP ae	500	1	Asbury Park, N. J.

	NORTE	i american B. C. S	TATIONS B	IFK	EQUEN	CIES
WDOD ae 10	000 C (5	) Chattanooga, Tenn.	WTAL z	100	P	Tallahassee, Fla.
WIBA ae 1	000 N	Madison, Wis.	WTEL ah	100	4	Philadelphia. Pa.
WORC ak	500 C	Worcester, Mass.	WTJS ak	100	(.25)	Jackson, Tenn.
WRR ak	500	Worcester, Mass. Dallas, Texas	WTRC ak	50	6 (.1)	Philadelphia, Pa. Jackson, Tenn. Elkhart, Ind.
	500 1	Trenton, N. J.	XEAJ z	15		Oaxaca, Oax,
XEMX z	12	Mexico City, D. F.	XEC z	50		Tijuana, B. C.
			XECW z XEFC ak	10 100		Mexico City, D. F.
1290 kilo	cvcles	(232.4)	XEFC ak XEFW ak	250		Merida, Yuc. Tampico, Tams.
12 JU KIIO	cycics	(202.1)	XELM z	15		Mineral del Monte
KDYL ak 1	000 N	Salt Lake City, Utah	XETB z	125		Torreon, Coah.
KDYL ak 1 KLCN z	000 N 100 D	Divebouille Ark	XEX ak	125		Monterrey, N. L.
KTRH ak 1	000 C (5 000 N (5 000 C (2	Houston, Texas Superior, Wis. Siperior, Pa.				
	000 N (	Superior, Wis.	1320 kil	00170	1ac (2	27 1)
WJAS ak 1 WNBZ z	000 C (2 100 D	Saranac Lake, N. Y.	1320 KII	ocyc	163 (2	27.1
	500	San Juan, P. R.	CMCK z	100	P	Havana, Cuba
WINDLE WILL		oun bunn, t. m.	CMOX z	250	i	Havana, Cuba Pueblo, Colo. Honolulu, T. II.
13001/10	03/0100	(230 6)	KGHF ak	500	<b>C</b>	Pueblo, Colo.
1300 kilo	Cycles	(230.0)	KGMB ak	1000	<b>C</b>	Honolulu, T. II.
CMKJ z	20	Guantanamo, Cuba	KID ae	250	(.5) C (1)	Idaho Falls, Idaho
HIZ z	10	Santo Domingo, D.R.	KRNT ak WADC ae	500 1000	6 (1)	Des Moines, Iowa
KALE ak	E00 261	Destord Oss	WADC ae WORK ak	1000	C (2.5)	Akron, Ohio York, Pa.
KFAC ak 1	000	Los Angeles, Calif.	WSMB ak	1000	N	New Orleans, La.
KFH ak 1	000 000 C	Wichita, Kans. Portland, Ore.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1000	••	
	200 B	i oi tiano, Oic.	1330 kil	OCTO	100 (2	25.4
	000 1 000 1	Brooklyn, N. Y. New York, N. Y.	1000 KI	ocyc	163 (2	20.4)
WEVD ak 1 WFAB ae 1	000 1	New York, N. Y.	CMHK z	250		Cruces, Cuba
WFBC ak 1	000 (5)	Greenville, S. C.	KGB ag	250 1000	C (2.5)	San Diego, Calif.
	500 ì	Greenville, S. C. Troy, N. Y.	KGB ag KMO ak	250		San Diego, Calif, Tacoma, Wash.
WIOD ae 1	000 N	Miami, Fla.	KSCJ aj	1000	1C (2.5)	) Sioux City, Iowa
			WDRC ae	1000	C (2.5)	Hartford, Conn.
1310 kilo	cvcles	(228 9)	WSAI ak WTAQ ae	1000 1000	R (2.5)	Cincinnati, Ohio Eau Claire, Wis.
			WIAQ ae	1000	1	Eau Glaire, Wis.
CHCK ak	50	Charlottetown, P.E.I.	1 2 4 0 1 - : 1	ممرا	100 (2	22 7)
	100 100 F	Yarmouth, N. S.	1340 kil	locyc	1168 (2	23.7)
	100 F 100 D	Quebec, Que.	CMJL z	75		Camaduey Cuba
KFPL dkh	100 (.25	Jerome, Ariz. ) Dublin, Texas	CMJL z KGDY ak KGIR ak	250	D	Camaguey, Cuba Huron, S. D. Butte, Mont.
	100 (.25	) Oklahoma City, Ok.	KGIR ak	1000	N (2.5)	Butte, Mont.
KFYO ak	100 (.25	) Lubbock, Texas	KGNO ak	250		Dodge City, Kans. Pensacola. Fla.
KGCX ak	100 (.25	) Wolf Point, Mont.	WCOA ak	500	C (1) C (2.5)	Pensacola, Fla.
KGEZ aj	100		WFEA ae	500	6 (3)	Manchester, N. H. Toledo, Ohio
KGFW ak KINY z	100 100	Luneau Alaska	WSPD ae XFD z	1000 250	G (2.5)	Orizaba, Ver.
KIT ak	100 (.25	Juneau, Alaska ) Yakima, Wash.	ALD Z	200		Orizaba, ver.
	100	Santa Fe, N. Mex.	1350 kil	00370	100 (2	22 1)
	100 (.25	) Medford, Ore.	1330 KI	ocyc	168 (2	.22.1)
KRMD ak	100 100 P	Shreveport, La.	CMCA z	450		Havana, Cuba
KROC z KTSM ak	100	Rochester, Minn. El Paso, Texas	KIDO ak	1000	(2.5)	Boise, Idaho
	100 100 P	Lafavetto La	KWK ak	1000	$\hat{\mathbf{B}}$ (5)	St. Louis, Mo.
KXRO ak	100		WAWZ ae	500	1 (1)	Zarephath, N. J. New York, N. Y.
WAML ak	100	Laurel, Miss.	WBNX ae	250	1	New York, N. Y.
	100	Marquette, Mich.	12601 11	i	1 /2	20.4
	100 (.25	) Terre Haute, Ind.	1360 kil	locyc	cies (2	20.4)
WBRE ak WCLS ae	100		CMJH ak	50		Ciego de Avila, Cuba
WCMI z	100 100 D	Ashland, Kv	KCRC ak	250		Enid, Okla.
WDAH ak	100 S	El Paso, Texas	KGER ak	1000		Land Roach Calif
WEBR ae	100 (.25	Bunalo, N. Y.	KGER ak WCSC ae	500	(1)	Charleston, S. C. Syracuse, N. Y. Chicago, III.
WEXL ak	50	Royal Oak, Mich.	WFBL ak	1000	C (5)	Syracuse, N. Y.
WFBG ae	100 3	Aitoona, Pa.	WGES ae	500 1000	1 D	Chicago, III.
WFDF am WGH ae	100 100 (.25	Flint, Mich, Newport News, Va.	WOBC ak WSBT ak	500	1	Vicksburg, Miss. South Bend, Ind.
WGH ae WHAT ak	100 4	Philadelphia, Pa.	WSD1 ak	300		South Bena, mo.
WISC z	100 PD	Milwaukee. Wis.	12501 1		1 /2	10.01
WIAC ae	100 3	Milwaukee, Wis. Johnstown, Pa.	1370 ki	locyc	cies (2	18.8)
WLBC ak	50 6 (.	1) Muncie, Ind.	i			
WLNH ak	100	. Laconia, N. H.	CKCW z CMGE z KAST z	100 50	F	Moncton, N. B. Cardenas, Cuba
WMBO ak	100 D	Auburn, N. Y.	CMGE z KAST z	100	<b>D</b>	
WMFF z WNBH ae		O C New Bedford, Mass.	KELD z	100	P	Astoria, Ore. El Dorado, Ark.
WOL ae	100	. Washington, D. C.	KERN ak	100		Bakersfield, Calif.
WRAW ak	100	, Keading, Pa.	KFGQ ak	100		Boone, Iowa Grand Forks, N. D. Fort Worth, Texas
WROL ak	100 (.25	) Knoxville, Tenn.	KFJM ak	100	(.25)	Grand Forks, N. D.
WSAJ ae	100	Grove City, Pa.	KFJZ ae	100	D	Fort Worth, Texas
WSGN ak WSJS ak	100 (.25 100 C	<ul> <li>Birmingham, Ala. Winston-Salem, N.C.</li> </ul>	KFRO z KGAR ae	100 100	(.25)	Longview, Texas Tucson, Ariz.
WSJS ak	100	" motom-batem, N.C.	MOME AC	100	(.23)	- octori, aliza.

		140	תוח	AMERICAN B. C. S	IAIIO	100	OI PR	EQUE	NCIES
KGFG	bk	100		Oklahoma City, Ok.	CKMC	) ao	100	5 <b>F</b>	Vancouver, B. C.
KGFL	ak	100	4	Roswell, N. M.	CMCR	z	150		Havana, Cuba
KGKL	ak	100	(.25)	San Angelo, Texas	KGNC WAAB	ae	1000	(2.5)	Amarillo, Texas
KICA KIUP	ak. z	100 100	P P	Clovis, N. M. Durango, Colo.	WAAH	ak	500 500	C	Boston, Mass.
KLUF	z	100	(.25)	Galveston, Texas	WHBI	ae	500	4	Bay City, Mich.
KMAC		100	(.25) 5		WHIS	ak	250	$\hat{2}$ (.5)	Sheboygan, Wis. Bluefield, W. Va.
KONO	ak	100	5	San Antonio, Texas San Antonio, Texas	WRBX	ae	250	Z (.3)	Roanoke, Va. Rockford, III.
KRE KRKO	ak ak	100 50	(.25)	Berkeley, Calif.	WROK	ak	500 500	4	Rockford, III.
KSLM	Z Z	100		Salem. Ore.	WSFA	ak	500	C (1)	Montgomery, Ala.
KUJ KVL	ak	100		Walla Walla, Wash.	1/20	11-:	1000	100 (2	11 1\
KVL	ak	100	1	San Antonio, Lexas Berkeley, Calif. Everett, Wash. Salem, Ore. Walla Walla, Wash. Seattle, Wash. Kansas City, Mo. Sheridan, Wyo. Albany, N. Y. Dothan, Ala.	1420	KI.	юсу	cies (A	211.1)
KWKC KWY0	Z ak	100 100		Kansas City, Mo.	CKGB	ak	100		Timmins, Ont.
WABY	ak	100		Albany, N. Y.	CKNC	ak	100	ř	Toronto, Ont.
WAGF	ak	100	(.25)	Dothan, Ala. Danville, Va.	CMGI	z	50		Toronto, Ont. Colon, Cuba
WBTM		100	(.25) (.25)	Danville, Va.	KABC KABR	ak z	100 100	(.25) D	San Antonio, Texas
WCBM WDAS		100 100	(.25) (.25)	Baltimore, Md.	KALB	z	100	PD	Aberdeen, S. Dak. Alexandria, La.
WGL	ak	100	C	Philadelphia, Pa. Fort Wayne, Ind.	KBPS	ai	100	4	Portland, Ore.
WHBQ		100		Fort Wayne, Ind. Memphis, Tenn. Calumet, Mich. Jackson, Mich.	KCMC	ak	100		Texarkana, Ark.
WHDF	ak	100	(.25)	Calumet, Mich.	KFIZ KGFF	ak ak	100 100		Fond du Lac, Wis.
WIBM WJTL	a k a e	100 100	(.25)	Jackson, Mich.	KGGC	ak	100		Shawnee, Okla. San Francisco, Cal.
WLLH	ak	100	(25)	Atlanta, Ga. Lowell, Mass.	KGIW	ak	100	1	Alamosa, Colo.
WMBR	ak	100	(.25) C	Jacksonville, Fla.	KIDW	Z	100	1	Lamar, Colo. Pecos, Texas
WMFD	Z	100	D	Wilmington, N. C.	KIUN KORE	z	100	P	Pecos, Texas
WMFO WOC	z z	100 100	DP	Decatur, Ala.	KRLC	ae z	100 100	1.1.	Eugene, Ore. Lewiston, Idaho
WPAY	ak	100	C (.25)	Davenport, Iowa	KUMA	ak	100		Yuma, Ariz.
WPFB	ak	100		Portsmouth, Ohio Hattiesburg, Miss. St. Albans, Vt.	KWBG KXL	z	100		Hutchinson, Kans.
WQDM	ae	100	Ď	St. Albans, Vt.	KXL	ae	100	4 (.25) C	Portland, Ore.
WRAK WRDO	ak	100	<b>(.25</b> )	Williamenort Pa	WACO WAGM	ak Lae	100 100	C	Waco, Texas Presque Isle, Maine
WRJN	ae ak	100 100	D	Augusta, Maine Racine, Wis. Buffalo, N. Y.	WAZL	ak	100	ž	Hazleton, Pa.
WSVS	ak	50	D	Buffalo, N. Y.	WCBS	ak	100		Springfield, Ill.
XEFZ	ae	100	. 57.1	Mexico City, D. F.	WEED		100	3	Rocky Mount, N. C.
XEI	ak	125		Morelia, Mch.	WEHC WEHS	ae ak	100 100	3 (.25)	Charlottesville, Va.
XEZZ	Z	100		San Luis Potosi, SLP	WELL	ak	100		Cicero, Ill. Battle Creek, Mich.
1200				>	⊢ WGPC	ak	100		Albany, Ga.
1380	Kil	ocyc	:les (2	217.3)	WHDL	ak	100	D	Albany, Ga. Olean, N. Y.
		•	`	/	WHFC WILM		100 100	a . 2	Cicero, III.
CMBX		150	$\mathbf{c}$ .	Havana, Cuba	WJBO	aj z	100		Wilmington, Del. Baton Rouge, La.
KOH KOV	ak ak	500 500	C 2	Reno, Nev.	WJMS		100		Ironwood, Mich.
WĂLA	ae	500	Ĉ (1)	Pittsburgh, Pa. Mobile, Ala.	WKBI	ak	100	a	Cicero, Ill.
WKBH	ae	1000		LaCrosse, Wis.	WLAP WLBF	ak ak	100 100	(.25)	Lexington, Ky.
WNBC WSMK	z,	250	D	New Britain, Conn.	WLEU	Z	100	(.25)	Kansas City, Kans. Erie, Pa.
WSMK	ак	200	С	Dayton, Ohio	WMAS	ak	100	C (.25)	Springfield, Mass.
1200					WMBC	ae	100	C (.25)	Detroit, Mich. Joplin, Mo.
1390	kil	locyc	:les (2	215.7)	WMBH WMFJ	lak	100 100	(.25)	Joplin, Mo.
					WNRA		100		Daytona Beach, Fla. Muscle Shoals. Ala.
CJRC CMJC	ck	100 150	F	Winnipeg, Man.	WPAD	ak	100	(.25) P	Paducah, Ky.
HIH	z ak	150	1395 Sa	Camaguey, Cuba in Ped. de Macoris, DR	WPAR	Z	100	P .	Parkersburg, W. Va.
KLRA	ae	1000	U (Z.5)	Liffle Rock Ark	WPRP	Z	100	P (.25)	Ponce, P. R.
KOY	ae	500	(1)	Phoenix, Ariz. Cleveland, Ohio	WWC XEAZ	z z	1000	P	Spartanburg, S. C.
WHK	ae	1000	C(2.5)	Cleveland, Ohio	XEFB	ak	10ó	1111	Guanjuato, Gto. Monterrey, N. L.
						Z	100		Hilo, T. H.
1400	kil	ocvo	eles (2	14.2)					
		-		•	1430	kil	ocvo	eles (2	09.7)
CMGC CMKR	Z	100	3000	Matanzas, Cuba Santiago, Cuba					
KLO	z ae	200 500	Ċ	Santiago, Cuba	CMJP	ak	100	(F) 17	Moron, Cuba
KTUL	ak	500	Č (1)	Ogden, Utah Tulsa, Okla.	KECA KGNF	ak ak	1000 1000	(5) N D	North Platte Neb
TGX	ak	150		Guatemala City, Gt.	KSO	ak	250	$\mathbf{B}$ (.5)	Los Angeles, Calif. North Platte, Neb. Des Moines, Iowa
WARD	ak	500	2	Brooklyn, N. Y.	WBNS	ae	500	$\mathbf{C}(1)'$	Columbus, Ohio
WBBC WIRE	ae ak	500 500	2 (1) R (1)	Brooklyn, N. Y.	WHEC	ae	500	B (.5) C (1) C (1) C (1)	Rochester, N. Y.
WLTH	ak	500 500	R (1)	Indianapolis, Ind. Brooklyn, N. Y.	WHP WNBR	ak ae	500 500	(1)	Harrisburg, Pa. Memphis, Tenn. Albany, N. Y.
	ak	500	2	Brooklyn, N. Y.	woko		500	C (1)	Albany, N. Y.
								- 、 ,	
1410	kil	ocve	les (2	12.6)	1440	ki1	OCVC	les (2	08.2)
					1110	1/11	Jeye	163 (2	00.2/
CHNC CKFC	ak	500	F (1)	New Carlisle, Que.	KDFN	ak	500	2	Casper, Wyo.
CALC	ak	50	5	Vancouver, B. C.	KLS	ae	250	D	Oakland, Calif.

KXYZ ak 1000 Houston, Texas TIFS z 7.5 (1441) Cartago, C. R. WBIG ae 500 C Greensboro, N. C. WCBA aj 500 a Allentown, Pa. WSAN aj 500 a Allentown, Pa. XEFI ae 250 Chihuahua, Chih.	KGFI ak 100 (.25)   Corpus Christi, Tex.
1450 kilocycles (206.8)	KREG ak 100 Santa Ana, Calif.
CFCT ae 75 Victoria, B. C. CHGS ae 50 F Summerside, P.E.I. KTBS ck 1000 N WGAR ak 500 B (1) WHOM ae 250 Cleveland, Ohio WHOM ae 250 Fall River, Mass. WTFI ak 500 Athens, Ga.	KXO
1460 kilocycles (205.4)	WKBZ ak 100 (.25) Muskegon, Mich. WKEU ak 100 Griffin, Ga.
CMKF z 50 Holquin, Cuba KSTP ae 10000 N (25) St. Paul, Minn. WJSV ak 10000 C Washington, D. C.	WMBQ ae   100   1   Brooklyn, N. Y.   WMEX ak   100   (.25)   Boston, Mass.   WNBF ae   100   C   Binghamton, N. Y.   WOPI ae   100     Bristol, Tenn.   WRDW ak   100     Augusta, Ga.
1470 kilocycles (204.0)	WRGA ak 100 (.25) Rome, Ga. WSYB ak 100 Rutland, Vt.
CMOK z 200 Havana, Cuba KGA ak 5000 N (2.5) Spokane, Wash. WLAC ak 5000 C Nashville, Tenn.	WTMV z 100 East St. Louis, III.  WWRL ak 100 1 (.25) Woodside, N. Y.  WWSW ae 100 (.25) Pittsburgh, Pa.  z 100 P St. Louis, Mo.  z 100 DP Brady, Texas
1480 kilocycles (202.6)	1510 kilocycles (198.6)
KOMA ak 5000 C Oklahoma City, Ok. WKBW ae 5000 C Buffalo, N. Y.	
1490 kilocycles (201.2)	1530 kilocycles (196.0)
KFBK ak 5000 C Sacramento, Calif. WCKY ae 5000 B Covington, Ky.	W1XBS z 1000 Waterbury, Conn. W9XBY z 1000 Kansas City, Mo.
1500 kilocycles (199.9)	1550 kilocycles (193.4)
CMCN z 150 Havana, Cuba KDB ak 100 C Santa Barbara, Calif,	W2XR z 1000 Long Isl. City, N. Y. W6XAI z 1000 Bakersfield, Calif.

### KEY TO SYMBOLS

As Shown in the index by Frequencies and Dial Numbers

Frequency is given in kilocycles; wavelength in meters. Night power is shown in watts in third column. Daytime power is shown in parenthesis in fourth column in kilowatts, thus (.25) indicating 250 watts. Some stations outside the United States use a "split frequency." Their exact frequency is shown in fourth column.

### Second Column Symbols

- Verifies reception for return postage
- Verifies only occasionally.
- Does not verify.
- Verification 10c: letter 25c ď
- Sends Ekko stamp for 10c.
- Sends Ekko stamp for 5c.
- Sends Ekko stamp for postage.  $\mathbf{g}$
- Sends own station stamp for 10c. ħ
- Sends own station stamp for 5c.
- Sends own station stamp for postage.
- Has no stamps.
- Verifies for 5c. 111
- Weather or time only.
- No information available.

- Fourth Column Symbols
  National "Blue" network.
- Columbia network.
- Day time only.
- Dn Day time with occasional evening hours.
  - Canadian Radio Brdestg. Commission. National "Red" and "Blue" networks.
- N
- Has construction permit only.
- R National "Red" network.
- S Sunday only.
- Synchronized.
- Has permit to increase power
- Has permit to change location
- Has permit to change frequency a-b-c. Small letters show stations using same trans-
- mitter. 1-2-3. Figures denote stations sharing time.
- ..... No information

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

			The state of the s
ALABAMA	Burbank KELW 780 500	Durango 100	Atlanta
Birmingham	Chico 780 500	KIUP 1370 100	WGST 890 500 C WJTL 1370 100
WAPI 1140 5000 N	KHSL 950 250	Grand Junction KFXJ 1200 100	WJTL 1370 100 WSB 740 50000 N
WBRC 930 1000 C	Del Monte	Greeley	Augusta
WSGN 1310 100	KFUH 1210 100	KFKA 880 500	WRDW 1500 100
Decatur WMFO 1370 100	El Centro	Lamar	Columbus
Dothan 1370 100	KXO 1500 100 Eureka	KIDW 1420 100 Pueblo	WRBL 1200 100 Griffin
WAGF 1370 100	KIEM 1210 100	KG1IF 1320 500	WKEU 1500 100
Gadsden	Fresno	Sterling	Macon
WJBY 1210 100	KMJ 580 1000 C	KGEK 1200 100	WMAZ 1180 1000
Mobile WALA 1380 500 C	Glendale		Rome
Montgomery	KIEV 850 250 Hollywood	CONNECTICUT	WRGA 1500 100
WSFA 1410 500 C	KFWB 950 1000	Bridgeport	Savannah WTOC 1260 1000 C
Muscle Shoals	KMTR 570 1000	WICC 600 500 C	Thomasville
WNRA 1420 100	KNX 1050 50000	Hartford	WPAX 1210 250
AL ACKA	Long Beach	WDRC 1330 1000 C	
ALASKA	KFOX 1250 1000 KGER 1360 1000	WTIC 1040 50000 R	HAWAII
Anchorage	Los Angeles	New Britain WNBC 1380 250	Hilo
KFQD 780 250	KECA 1430 1000 N	New Haven	1420 100
Juneau	KEHE 780 500	WMFI 900 500	Honolulu
KINY 1310 100	KFAC 1300 1000	Storrs	KGMB 1320 1000 C
Ketchikan KGBU 900 500	KFI 640 50000 N KFSG 1120 1000	WCAC 600 500	KGU 750 2500 N
2000 700 300	KFVD 1000 250	Waterbury WAT'R 1190 100	IDAHO
ARIZONA	KGFJ 1200 100	W1XBS 1530 1000	- IDANO
	KHJ 900 1000 C	1000	Boise
Jerome KCRJ 1310 100	KRKD 1120 1000	DELAWARE	KIDO 1350 1000
KCRJ 1310 100 Lowell	Modesto KTRB 740 250	34(14	Idaho Falls KID 1320 250
KSUN 1200 100	Oakland	Wilmington WDEL 1120 250	KID 1320 250 Lewiston
Phoenix	KLS 1440 250	WILM 1420 100	KRLC 1420 100
KOY 1390 500	KLX 880 1000		Nampa
KTAR 620 1000 N	KROW 930 1000	DISTRICT OF	KFXD 1200 100
Prescott KPJM 1500 100	Pasadena KPPC 1210 50	COLUMBIA	Pocatello KSEI 900 250
Tucson	Sacramento	Washington	KSEI 900 250 Twin Falls
KGAR 1370 100	KFBK 1490 5000 C	WJSV 1460 10000 C	KTFI 1240 1000
KVOA 1260 500	San Bernardino	WMAL 630 250 B	
Yuma KUMA 1420 100	KFXM 1210 100	WOL 1310 100	ILLINOIS
KUMA 1420 100	San Diego KFSD 600 1000 N	WRC 950 500 R	Bloomington
ARKANSAS	KGB 1330 1000 C	FLORIDA	WJBC 1200 100
	San Francisco	TEORIDA	Carthage
Blytheville	KFRC 610 1000 C	Clearwater	WCAZ 1070 100
KLCN 1290 100 El Dorado	KGGC 1420 100	WFLA 620 1000 N	Chicago
KELD 1370 100	KGO 790 7500 N KJBS 1070 500	Daytona Beach WMFJ 1420 100	WAAF 920 500
Fayetteville	KPO 680 50000 N	Gainesville	WBBM 770 50000 C
KUOA 1260 1000	KSFO 560 1000	WRUF 830 5000	WCFL 970 1500 B
Fort Smith	KYA 1230 1000 N	Jacksonville	WCRW 1210 100 WEDC 1210 100
KFPW 1210 100 Hot Springs	San Jose KOW 1010 1000	WJAX 900 1000 N	WENR 870 50000 N
KTHS 1060 10000 N	Santa Ana	WMBR 1370 100 C	WGES 1360 500
Jonesboro	KREG 1500 100	WIOD 1300 1000 N	WGN 720 50000
KBTM 1200 100	Santa Barbara	WQAM 560 1000 C	WJJD 1130 20000 WLS 870 50000 N
Little Rock KARK 890 250	KDB 1500 100 C	Orlando	WMAQ 670 50000 N
KGHI 1200 100	Stockton	WDBO 580 1000 C Pensacola	WMBI 1080 5000
KLRA 1390 1000 C	KGDM 1100 1000	WCOA 1340 500 C	WSBC 1210 100
Pine Bluff	KWG 1200 100 C	St. Petersburg	Cicero
KOTN 1500 100			WEHS 1420 100
	COLORADO	WOUN DZB IBBB I	
Texarkana	COLORADO	WSUN 620 1000 N	WHFC 1420 100
	Alamosa	Tallahassee WTAL 1310 100	WKBI 1420 100
Texarkana	Alamosa KGIW 1420 100	Tallahassee WTAL 1310 100	
Texarkana KCMC 1420 100	Alamosa KGIW 1420 100 Colorado Springs	Tallahassee	WKBI 1420 100 Decatur
Texarkana KCMC 1420 100 CALIFORNIA Bakersfield	Alamosa KGIW 1420 100 Colorado Springs KVOR 1270 1000 C	Tallahassee WTAL 1310 100 Tampa	WKBI 1420 100 Decatur WJBL 1200 100
Texarkana KCMC 1420 100  CALIFORNIA  Bakersfield KERN 1370 100 C	Alamosa KGIW 1420 100 Colorado Springs KVOR 1270 1000 C Denver	Tallahassee WTAL 1310 100 Tampa	WKBI 1420 100 Decatur WJBL 1200 100 East Dubuque WKBB 1500 100 East St. Louis
Texarkana KCMC 1420 100  CALIFORNIA  Bakersfield KERN 1370 100 C W6XAI 1550 1000	Alamosa KGIW 1420 100 Colorado Springs KVOR 1270 1000 C Denver KFEL 920 500	Tallahassee WTAL 1310 100 Tampa WDAE 1220 1000 C GEORGIA	WKBI 1420 100 Decatur WJBL 1200 100 East Dubuque WKBB 1500 100 East St. Louis WTMV 1500 100
Texarkana KCMC 1420 100  CALIFORNIA  Bakersfield KERN 1370 100 C	Alamosa KGIW 1420 100 Colorado Springs KVOR 1270 1000 C Denver KFEL 920 500 KLZ 560 1000 C	Tallahassee WTAL 1310 100 Tampa WDAE 1220 1000 C GEORGIA Albany	WKBI 1420 100 Decatur WJBL 1200 100 East Dubuque WKBB 1500 100 East St. Louis WTMV 1500 100 Harrisburg
Texarkana KCMC 1420 100  CALIFORNIA  Bakersfield KERN 1370 100 C W6XAI 1550 1000 Berkeley KRE 1370 100 Beverly Hills	Alamosa KGIW 1420 100 Colorado Springs KVOR 1270 1000 C Denver KFEL 920 500 KLZ 560 1000 C KOA 830 50000 N KPOF 880 500	Tallahassee WTAL 1310 100 Tampa WDAE 1220 1000 C GEORGIA	WKBI 1420 100 Decatur WJBL 1200 100 East Dubuque WKBB 1500 100 East St. Louis WTMV 1500 100
Texarkana KCMC 1420 100  CALIFORNIA  Bakersfield KERN 1370 100 C W6XAI 1550 1000 Berkeley KRE 1370 100	Alamosa KGIW 1420 100 Colorado Springs KVOR 1270 1000 C Denver KFEL 920 500 KLZ 560 1000 C KOA 830 50000 N	Tallahassee WTAL 1310 100 Tampa WDAE 1220 1000 C GEORGIA Albany WGPC 1420 100	WKBI 1420 100 Decatur WJBL 1200 100 East Dubuque WKBB 1500 100 East St. Louis WTMV 1500 100 Harrisburg WEBQ 1210 100

NORTH	AMERICAN B. C.	STATIONS BY LOC	ATIONS
Peoria	Coffeyville	Frederick	WTGN 1250 1000
WMPD 1440 500 C	KGGF 1010 1000	WFMD 900 500	Moorhead
Quincy	Dodge City	Hagerstown	KGFK 1500 100
WTAD 900 500	KGNO 1340 250	WJEJ 1210 100	Northfield
Rockford	Garden City	Rockville 1140 250	WCAL 1250 1000 Rochester
WROK 1410 500 Rock Island	KIUL 1210 100 Hutchinson	1140 250	KROC 1310 100
WHBF 1210 100	KWBG 1420 100	MASSACHUSETTS	St. Paul
Springfield	Kansas City		KSTP 1460 10000 N
WCBS 1420 100	WLBF 1420 100	Babson Park	
WTAX 1210 100	Lawrence	WBSO 920 500	MISSISSIPPI
Tuscola	KFKU 1220 1000	Boston WAAB 1410 500 C	Clarksdale
WDZ 1020 250 Urbana	WREN 1220 1000 B Manhattan	WBZ 990 50000 B	WMFN 1210 100
WILL 890 1000	KSAC 580 500	WEEL 590 1000 R	Hattiesburg
Waukegan _	Topeka	WHDH 830 1000	WPFB 1370 100
WCBD 1080 5000	WIBW 580 1000 C	WMEX 1500 100	Jackson
	Wichita	WMFH 1120 500	WJDX 1270 1000 N
INDIANA	KFH 1300 1000 C	WNAC 1230 1000 C	Kosciusko
	WENTHOWY.	Fall River WSAR 1450 250	WHEF 1500 100 Laurel
Anderson WHBU 1210 100	KENTUCKY	Lowell	WAML 1310 100
Elkhart	Ashland	WLLH 1370 100	Meridian
WTRC 1310 50	WCMI 1310 100	New Bedford	WCOC 880 500
Evansville	Covington	WNBH 1310 100 C	Mississippi City
WGBF 630 500	WCKY 1490 5000 B	Springfield	WGCM 1120 500
Fort Wayne	Lexington	WBZA 990 1000 B	Vicksburg
WGL 1370 100 C	WLAP 1420 100	WMAS 1420 100 C	WQBC 1360 1000
WOWO 1160 10000 C	Louisville WAVE 940 1000 N	Worcester WORG 1280 500 C	MISSOURI
Gary WIND 560 1000	WHAS 820 50000 C	WTAG 580 500 R	
Hammond	Paducah		Cape Girardeau
WWAE 1200 100	WPAD 1420 100	MICHIGAN	KFVS 1210 100
Indianapolis			Columbia
WFBM 1230 1000 C	LOUISIANA	Battle Creek WELL 1420 100	KFRU 630 500
WIRE 1400 500 R	Alexandria	Bay City	Jefferson City WOS 630 500
Muncie WLBC 1310 50	KALB 1420 100	WBCM 1410 500	Joplin Joplin
Richmond	Baton Rouge	Calumet	WMBH 1420 100
WKBV 1500 100	WJBO 1420 100	WHDF 1370 100	Kansas City
South Bend	Lafayette	Detroit	KMBC 950 1000 C
WFAM 1200 100	KVOL 1310 100	WJBK 1500 100	KWKC 1370 100   WDAF 610 1000 R
WSBT 1360 500 C	Lake Charles KPLC 1500 100	WJR 750 50000 C WMBC 1420 100	WDAF 610 1000 R WHB 860 1000
Terre Haute WBOW 1310 100	Monroe 1500 100	WWJ 920 1000 R	W9XBY 1530 1000
West Lafayette	KMLB 1200 100	WXYZ 1240 1000	St. Joseph
WBAA 890 1000	New Orleans	East Lansing	KFEQ 680 2500
	WBNO 1200 100	WKAR 1040 1000	St. Louis
IOWA	WDSU 1250 1000 C	Flint WFDF 1310 100	KFUO 550 500 KMOX 1090 50000 C
Ames	WJBW 1200 100 WSMB 1320 1000 N	WFDF 1310 100 Grand Rapids	KMOX 1090 50000 C   KSD 550 1000 R
WOI 640 5000	WSMB 1320 1000 N WWL 850 10000	WASH 1270 500	KWK 1350 1000 B
Boone	Shreveport	WOOD 1270 500	WEW 760 1000
KFGQ 1370 100	KRMD 1310 100	Ironwood	WIL 1200 100
Cedar Rapids	KTBS 1450 1000 N	WJMS 1420 100	1500 100
WMT 600 1000 B Council Bluffs	KWEA 1210 100	Jackson 100	Springfield KGBX 1230 500
KOIL 1260 1000 B	KWKH 850 10000 C	WIBM 1370 100	KGBX 1230 500 KWTO 560 5000
Davenport	MAINE	WKZO 590 1000	KW10 300 3000
WOC 1370 100 C		Lansing	MONTANA
Decorah	Augusta	WJIM 1210 100	
KGCA 1270 100	WRDO 1370 100	Lapeer	Billings
KWLC 1270 100	Bangor	WMPC 1200 100	KGHL 780 1000 N
Des Moines KRNT 1320 500 C	WABI 1200 100	Marquette	Butte   KGIR 1340 1000 N
KSO 1430 250 B	WLBZ 620 500 C	WBEO 1310 100	KGIR 1340 1000 N Great Falls
WHO 1000 50000 R	Port  and	Muskegon WKBZ 1500 100	KFBB 1280 1000
Iowa City	WCSH 940 1000 R	Royal Oak	Kalispell
WSUI 880 500	Presque Isle	WEXL 1310 50	KGEZ 1310 100
Marshalltown	WAGM 1420 100		Missoula
KFJB 1200 100		MINNESOTA	KGVO 1260 1000 Wolf Point
Shenandoah KFNF 890 500	MARYLAND	Farmer Falls	
KMA 930 1000	Baltimore	Fergus Falls KGDE 1200 100	KGCX 1310 100
Sioux City	WBAL 1060 10000 B	Hibbing	NEBRASKA
KSCJ 1330 1000 C	WCAO 600 500 C	WMFG 1210 100	
***************************************	WCBM 1370 100	Minneapolis	Clay Center
KANSAS	WFBR 1270 500 R	WCCO 810 50000 C	KMMJ 740 1000
Abilene	Cumberland	WDGY 1180 1000 WLB 1250 1000	Kearney KGFW 1310 100
KFBI 1050 5000	WTBO 800 250	WLB 1250 1000	KGFW 1310 100
		T 10000	

NORTH	AMERICAN B. C.	STATIONS BT LOC	ATIONS
Lincein	Buffalo	Devils Lake	Marshfield
KFAB 770 10000 C	WBEN 900 1000 R	KDLR 1210 100	KOOS 1200 250
KFOR 1210 100 C	WEBR 1310 100	Fargo	Medford
Norfolk	WGR 550 1000 C	WDAY 940 1000 N	KMED 1310 100
WJAG 1060 1000	WKBW 1480 5000 C	Grand Forks	Portland
North Platte	WSVS 1370 50	KFJM 1370 100	KALE 1300 500 C
KGNF 1430 1000	Canton	Mandan	KBPS 1420 100
Omaha	WCAD 1220 500	KGCU 1240 250	KEX 1180 5000 N
WAAW 660 500	Chester	Minot	KFJR 1300 500
WOW 590 1000 R	WGNY 1210 100	KLPM 1240 250	KGW 620 1000 N
Scottsbluff	Elmira		KOIN 940 1000 C
KGKY 1500 100	WESG 850 1000 C	оніо	KWJJ 1040 500
York	Freeport WGBB 1210 100	A1	KXL 1420 100
KGBZ 930 1000		Akren WADC 1320 1000 C	Salem KSLM 1370 100
NEVADA	Jamestown WOCL 1210 50	WJW 1210 100	KSLM 1370 100
NEVADA	Long Island City	Canton	PENNSYLVANIA
Reno	W2XR 1550 1000	WHBC 1200 100	TEMMSTEVANIA
KOH 1380 500 C	New York	Cincinnati	Allentown
	WABC 860 50000 C	WFBE 1200 100	WCBA 1440 500
NEW HAMPSHIRE	WBNX 1350 250	WKRC 550 1000 C	WSAN 1440 500
	WBOQ 860 50000	WLW 700 500000N	Altoona
Laconia	WEAF 660 50000 R	WSAI 1330 1000 R	WFBG 1310 100
WLNH 1310 100	WEVD 1300 1000	Cleveland	Erie
Manchester	WFAB 1300 1000	WGAR 1450 500 B	WLEU 1420 100
WFEA 1340 500 C	WHN 1010 1000	WHK 1390 1000 C	Glenside
Portsmouth	WINS 1180 1000	WJAY 610 500	WIBG 970 100
WHEB 740 250	WJZ 760 50000 B	WTAM 1070 50000 R	Greensburg
	WLWL 1100 5000 WMCA 570 500	Columbus WAIU 640 500	WHJB 620 250
NEW JERSEY	WMCA 570 500 WNYC 810 1000	WAIU 640 500 WBNS 1430 500 C	Grove City WSAJ 1310 100
Asbury Park	WOV 1130 1000	WCOL 1210 100	WSAJ 1310 100 Harrisburg
WCAP 1280 500	Olean	WOSU 570 750	WHP 1430 500 C
Atlantic City	WHDL 1420 100	Dayton 730	WKBO 1200 100
WPG 1100 5000 C	Plattsburg	WHIO 1260 1000 R	Hazleton
Camden	WMFF 1310 100	WSMK 1380 200 C	WAZL 1420 100
WCAM 1280 500	Rochester	Portsmouth	Johnstown
Jersey City	WHAM 1150 50000 B	WPAY 1370 100	WJAC 1310 100
WAAT 940 500	WHEC 1430 500 C	Toledo	Lancaster
WHOM 1450 250	Saranac Lake	WSPD 1340 1000 C	WGAL 1500 100
Newark	WNBZ 1290 100	Youngstown	WKJC 1200 100
WHBI 1250 1000	Schenectady	WKBN 570 500 C	Philadelphia
WNEW 1250 1000	WGY 790 50000 R	Zanesville	KYW 1020 10000 R
WOR 710 50000	Syracuse	WALR 1210 100	WCAU 1170 50000 C
Red Bank	WFBL 1360 1000 C		WDAS 1370 100
WBRB 1210 100	WSYR 570 250 B	OKLAHOMA	WFIL 560 1000 B
Trenton WTNJ 1280 500	Troy WHAZ 1300 500	Ada	WHAT 1310 100   WIP 610 500
Zarephath 500	Utica 300 500	KADA 1200 100	WIP 610 500 WPEN 920 250
WAWZ 1350 500	WIBX 1200 100 C	Ardmore	WRAX 920 250
WAWE 1330 300	White Plains	KVSO 1200 100	WTEL 1310 100
NEW MEXICO	WFAS 1210 100	Elk City	Pittsburgh
	Woodside	KASA 1210 100	KDKA 980 50000 B
Albuquerque	WWRL 1500 100	Enid	KQV 1380 500
KGGM 1230 250		KCRC 1360 250	WČAE 1220 1000 R
KOB 1180 10000	NORTH CAROLINA	Norman	WJAS 1290 1000 C
Clovis		WNAD 1010 1000	WWSW 1500 100
KICA 1370 100	Asheville WWNC 570 1000 N	Okiahoma City	Reading
Roswell	Charlotte	KFXR 1310 100	WEEU 830 1000
KGFL 1370 100	WBT 1080 50000 C	KGFG 1370 100	WRAW 1310 100
Santa Fe	WSOC 1210 100 N	KOMA 1480 5000 C	Scranton
KIUJ 1310 100	Durham	WKY 900 1000 N	WGBI 880 500
NEW Y	WDNC 1500 100 C	Ponca City WBBZ 1200 100	WQAN 880 250
NEW YORK	Greensboro	WBBZ 1200 100 Shawnee	Sunbury
Albany	WBIG 1440 500 C	KGFF 1420 100	WKOK 1210 100 Wilkes-Barre
WABY 1370 100	High Point	Tulsa	WIRES-Barre WBAX 1210 100
WOKO 1430 500 C	WMFR 1200 100	KTUL 1400 500 C	
Auburn	Raleigh	KVOO 1140 25000 N	WBRE 1310 100 Williamsport
WMBO 1310 100	WPTF 680 1000 N		WRAK 1370 100
Binghamton	Rocky Mount	OREGON	York
WNBF 1500 100 C	WEED 1420 100		WORK 1320 1000
Brooklyn	Wilmington	Astoria	
WARD 1400 500	WMFD 1370 100	KAST 1370 100	PUERTO RICO
WBBC 1400 500	Winston-Salem WSJS 1310 100 C	Corvallis	
	WSJS 1310 100 C	KOAC 550 1000	Ponce
WBBR 1300 1000			
WCNW 1500 100	NORTH SAVOTA	Eugene	WPRP 1420 100
WCNW 1500 100   WLTH 1400 500	NORTH DAKOTA	KORE 1420 100	San Juan
WCNW 1500 100	NORTH DAKOTA Bismarck KFYR 550 1000 N		

HORT	I AMERICAN B. C.	STATIONS BY LO	CATIONS
RHODE ISLAND	- KRLD 1040 10000 C	Norfolk	Milwaukee
Newport	WFAA 800 50000 N	WTAR 780 500 N	WISC 1310 100
WNRI 1200 100	WRR 1280 500	Petersburg WPHR 880 500	WISN 1120 250 C
Providence	Dublim	WPHR 880 500 Richmond	WTMJ 620 1000 !
WEAN 780 500 C		WBBL 1210 100	Poynette WIBU 1210 100
WJAR 890 500 F	El Paso	WMBG 1210 100 C	Racine
WPP.O 630 250	KTSM 1310 100	WRVA 1110 5000 N	WRJN 1370 100
	-   WDAH 1310 100	Roanoke	Sheboygan
SOUTH CAROLINA	Fort Worth	WDBJ 930 1000 C	WHBL 1410 500
	KFJZ 1370 100	WRBX 1410 250	Stevens Point
Anderson	KTAT 1240 1000 C		WLBL 900 2500
WAIM 1200 100	WBAP 800 50000 N	WASHINGTON	Superior
Charleston WCSC 1360 500	Galveston		WEBC 1290 1000 N
WCSC 1360 500 Columbia	KLUF 1370 100 Houston	Aberdeen	
WIS 1010 500 N		KXRO 1310 100	WYOMING
Greenville	KTRH 1290 1000 C	Beilingham KVOS 1200 100	
WFBC 1300 1000	KXYZ 1440 1000	KVOS 1200 100 Everett	Casper KDFN 1440 500
Spartanhum	Longview	KRKO 1370 50	
WSPA 920 1000	KFRÖ 1370 100	Olympia 50	Sheridan KWYO 1370 100
WWC 1420 1000	Lubbeck	KGY 1210 100	KWYO 1370 100
	KFYO 1310 100	Pullman	CANADA
SOUTH DAKOTA	Pecos	KWSC 1220 1000	CANADA
	KIUN 1420 100	Seattle	
Aberdeen	Port Arthur	KJR 970 5000 N	ALBERTA
KABR 1420 100	KPAC 1260 500	KOL 1270 1000 C	C-1
Brookings	San Angelo	KOMO 920 1000 N	CFAC 930 100 F
KFDY 780 1000	KGKL 1370 100	KPCB 710 250	CFAC 930 100 F CFCN 1030 10000 F
Huron	San Antonio	KRSC 1120 100	CJCJ 690 100 F
KGDY 1340 250	KABC 1420 100	KTW 1220 1000	Edmonton
Plerre	KMAC 1370 100	KVL 1370 100	CFRN 1260 100
KGFX 630 200	KONO 1370 100	KXA 760 250	CJCA 730 1000 F
Rapid City WCAT 1200 100	KTSA 550 1000 C WOAI 1190 50000 N	Spokane	CKUA 580 500
		KFIO 1120 100	Lethridge
Sioux Falls KSOO 1110 2500	Tyler KGKB 1500 100	KFPY 890 1000 C	CJOC 1230 100 F
Vermillion	Waco 100	KGA 1470 5000 N KHO 590 1000 N	
KUSD 890 500	WACO 1420 100 C	KHQ 590 1000 N Tacoma	BRITISH COLUMBIA
Watertown	Weslaco	KMO 1330 250	
KWTN 1210 100	KRGV 1260 500	KVI 570 1000 C	Chilliwack
Yankton	Wichita Falls	Walla Walla	CHWK 780 100 F
WNAX 570 1000 C	KGKO 1240 1000 C	KUJ 1370 100	Kamloops
		Wenatchee	CFJC 880 100 F
TENNESSEE	UTAH	KPQ 1500 100	Kelowna CKOV 630 100 F
		Yakima	Prince Rupert
Bristol	Ogden	KIT 1310 100	CFPR 580 50
WOPI 1500 100	KLO 1400 500 C		Trail
Chattanooga WDOD 1280 1000 C	Salt Lake City	WEST VIRGINIA	CJAT 910 250 F
	KDYL 1290 1000 N KSL 1130 50000 C		Vancouver
Jackson WTJS 1310 100	KSL 1130 50000 C	Bluefield	CJOR 600 500
Knoxville	VERMONT	WHIS 1410 250 Charleston	CKCD 1010 100
VNOX 560 1000 C	- LAMON I	WCHS 580 500	CKFC 1410 50
VROL 1310 100	Burlington	Fairmont	CKMO 1410 100 F
Memphis	WCAX 1200 100	WMMN 890 500	CKWX 1010 100 F
VHBQ 1370 100	Rutland	Huntington	CRCV 1100 1000 F
VMC 780 1000 N	WSYB 1500 100	WSAZ 1190 1000	Victoria CFCT 1450 75
VNBR 1430 500	St. Albans	Parkersburg	GFG1 1450 75
REC 600 1000 C	WQDM 1370 100	WPAR 1420 100	MANITOBA
Nashville	Springfield	Wheeling	- MANITODA
VLAC 1470 5000 C VSM 650 50000 N	WNBX 1260 1000	WWVA 1160 5000 C	Brandon
VSM 650 50000 N Springfield	Waterbury WDEV 550 500	141100011111	CKX 1120 100 F
VSIX 1210 100	WDEY 550 500	WISCONSIN	Winnipeg
75171 1210 100	VIRGINIA	Eau Claire	CJRC 1390 100 F
TEXAS		WTAQ 1330 1000	CKY 960 15000 F
	Arlington	Fond du Lac	
Amarillo	NAA 690 1000	KFIZ 1420 100	NEW BRUNSWICK
GNC 1410 1000	Charlottesville	Green Bay	F4-1-4
Austin	WEHC 1420 100	WHBY 1200 100	Fredericton CFNB 550 500 F
NOW 1500 100	Danville	Janesville	Moncton
Beaumont	WBTM 1370 100	WCLO 1200 100	CKCW 1370 100 F
FDM 560 500	Harrisonburg	LaCrosse	St. John
Brady	WSVA 550 500	WKBH 1380 1000	CHSJ 1120 500 F
1500 100	Lynchburg	Madison	
College Station /TAW 1120 500	WLVA 1200 100	WHA 940 2500	N. W. TERRITORY
Corpus Christi	Newport News	WIBA 1280 1000 N	
GFI 1500 100	WGH 1310 100	Manitowoc WOMT 1210 100	Aklavik CJCU 1210 50
2000 200		WOM 1 1210 100	GJGU 1210 50
	1		

NOVA SCOTIA	Montreal	Ensenada	NUEVO LEON
	CFCF 600 400 N	XEG 1270 500	
Glace Bay VAS 685 2000	CHLP 1120 100	Mexicali	Monterrey
VAS 685 2000 Halifax	CKAC 730 5000 C CRCM 910 5000 F	XEAA 920 200	XEFB 1420 100   XEFJ 1230 100
CHNS 930 1000 F	New Carlisle	XEAO 560 250	XEFJ 1230 100   XEH 1150 250
Sydney	CHNC 1410 500 F	Tijuana	XET 690 500
CJCB 1240 1000 F	Quebec	XEC 1270 50	XEX 1310 125
Wolfville	CHRC 580 100 F	XEFL 1150 5000	
CKIC 1010 50	CKCV 1310 100 F	XEMO 865 2500 XEOK 765 2500	OAXACA
Yarmouth	CRCK 1050 1000 F	AEOK 703 2300	
CJLS 1310 100	SASKATCHEWAN	CHIHUAHUA	Oaxaca XEAJ 1310 15
ONTARIO			
	Moose Jaw	Chihuahua	PUEBLA
Brantford	CHAB 1200 100 F	XEFI 1440 250	
CKPC 930 100 F	CJRM 540 1000 F	Juarez	Puebla VETU 1210 100
Chatham CFCO 630 100 F	Prince Albert CKBI 1210 100 F	XEFV 1210 100	XETH 1210 100
Cobalt	Regina	XEJ 1020 1250	SAN LUIS POTOSI
CKMC 1210 50	CHWC 1010 500 F		2013 F01031
Fort William	CKCK 1010 500 F	COAHUILA	San Luis Potosi
CKPR 930 100 F	Saskatoon		XEZZ 1370 100
Hamilton	CFQC 840 1000 F	Piedras Negras	
HML 1010 50 F	Yorkton	XELO 1110 10000 XEPN 590 50000	SONORA
KOC 1120 500 F	CJGX 630 500 F		
Kingston	NEW FOLIA	Saltillo	Nogales
CFRC 1510 100 Kirkland Lake	NEWFOUNDLAND	XELA 1240 50 XEOX 640 250	XEAF 980 250
CJKL 530 1000	St. John's		TAMAULIPAS
London	VOAC 1065 40	Torreon	AMAULIPAS
CFPL 730 100 F	VOAS 940 100	XETB 1310 125	Nuevo Laredo
North Bay	VOGY 840 400	D. F.	XEAM 960 50
CFCH 930 100 F	VONF 1190 5000	D. F.	XEFE 920 250
Ottawa	VOWR 681 500	Mexico City	XENT 910 60000
CKCO 1010 100		XEAI 1240 100	Reynosa
CRCO 880 1000 F	MIQUELON	XEB 1030 10000	XEAW 960 10000
Prescott CFLC 930 100	CA Div	XECW 1310 10	Tampico
CFLC 930 100 St. Catherines	St. Pierre FQN 609 250	XEFA 1180 500	XEFW 1310 250
KTB 1200 100 F	1 214 009 250	XEFG 1100 250	XEMA 1080 50 XES 990 250
Sault Ste. Marie		XEFO 940 5000	AES 990 250
CJIC 890 100	CENTRAL	XEFZ 1370 100 XEK 990 100	VERACRUZ
Stratford	AMERICA	XEK 990 100   XELC 740 100	
JCS 1210 50		XEMX 1280 12	Jalapa
Sudbury 700 1000	COSTA RICA	XEN 710 1000	XFB   1270   250
CKSO 780 1000		XEO 940 5000	Orizaba
Timmins CKGB 1420 100	Cartago	XEP 840 500	XFD 1340 350
Toronto	TIFS 1441 7.5	XETW 820 500	Veracruz XETF 1220 12
CFRB 690 10000 C	TIGA 1014 30	XEW 890 50000	XEU 1010 250
CKCL 580 100 F	San Jose TIEP 850 500	XEWZ 1150 100 XEXX 845 500	1010 230
KNC 1420 100 F	TIFA 1050 75	XEYZ 780 10000	YUCATAN
RCT 840 5000 N	TIGH 1000 500	XFX 610 1000	
Waterloo	TIRC 1100 75		Merida
KCR 1510 100	TIRH 930 50	DURANGO	XEFC 1310 100
Windsor KLW 1030 5000			XEZ 630 500
RCW 600 500 F	GUATEMALA	Durango	WEST INDIES
Wingham	Customat- Otto	XEE 1210 50	MESI INDIES
KNX 1200 50	Guatemala City TGW 565 10000	Mineral del Monte	CUBA
	TGX 1400 150	XELM 1310 15	
PRINCE EDWARD	100 100	CHANGES	Caibarien
ISLAND	EL SALVADOR	GUANJUATO	CMHD 1270 250
01 111		Guaniuato	Camaguey
Charlottetown CFCY 630 1000 F	San Salvador	XEAZ 1420 7	CMJC 1390 150 CMJE 1220 50
CFCY 630 1000 F CHCK 1310 50	RDN 706 500	Leon	CMJE 1220 50   CMJF 1150 200
Summerside		XEKL 1240 500	CMJG 1010 50
			CMJK 780 150
	MEXICO		
		JALISCO	CMJL 1340 75
	AGUASCALIENTES		Cardenas
CHGS 1450 50 F	AGUASCALIENTES	Guadalajara	Cardenas CMGE 1370 50
QUEBEC Chicoutimi	AGUASCALIENTES Aguascalientes	Guadalajara XEA 1060 125	Cardenas CMGE 1370 50 Ciego de Avila
QUEBEC Chicoutimi	AGUASCALIENTES	Guadalajara	Cardenas CMGE 1370 50 Ciego de Avila CMJH 1360 50
QUEBEC  Chicoutimi RCS 950 100 F Hull	AGUASCALIENTES  Aguascalientes XFC 810 350	Guadalajara XEA 1060 125 XED 1160 500	Cardenas CMGE 1370 50 Ciego de Avila CMJH 1360 50 CMJI 1130 50
QUEBEC  Chicoutimi RCS 950 100 F Hull	AGUASCALIENTES Aguascalientes	Guadalajara XEA 1060 125	Cardenas CMGE 1370 50 Clego de Avila CMJH 1360 50 CMJI 1130 50 CMJO 1180 50
QUEBEC  Chicoutimi RCS 950 100 F Hull	AGUASCALIENTES  Aguascalientes XFC 810 350	Guadalajara XEA 1060 125 XED 1160 500  MICHOACAN	Cardenas   CMGE   1370   50   Ciego de Avila   CMJH   1360   50   CMJI   1130   50   CMJO   1180   50   Cienfuegos   Cardenas   CMJC   Cienfuegos   Cardenas   CMJC   CM
CHicoutimi CRCS 950 100 F Hull CKCH 1210 100 F	AGUASCALIENTES Aguascalientes XFC 810 350 BAJA CALIFORNIA	Guadalajara XEA 1060 125 XED 1160 500	Cardenas   CMGE   1370   50   Ciego de Avila   CMJH   1360   50   CMJI   1130   50   CMJO   1180   50   Cienfuegos   Cardenas   CMJC   Cienfuegos   Cardenas   CMJC   CM

CMHX 760	150		30 100	CMW 600	1000	Santia		
Colon			60 200	CMX 920	500	CMKC	1250	150
CMGI 1420	50		15 250	Holquin		CMKD	1050	250
Cruces		CMCG 12		CMKF 1460	50	CMKR	1400	200
CMHK 1330	250	CMCJ 12	00 350	Manzanillo		LCMKV	1190	50
Guantanamo		CMCN 15	00 150	CMKM 1120	50			
CMKJ 1300	20	CMCO 11	10 150	Matanzas		DO	MINIC	AN
Havana		CMCP 12	70 150	CMGC 1400	100		EPUBLI	
CMAF 730	250	CMCO 6	80 250	CMGF 1120	100			
CMBC 940	200	CMCR 14		CMGH 1040	15	San Pe	dro de P	Marcoris
CMBD 1170	150	CMCU 12		Moron	10	LIHH	1395	15
CMBG 1140	300		50 125	CMJP 1430	100	Santo	Domina	10
CMBN 880	150		60 150			î HIJ	1195	1.5
CMBS 770	120	CMCY 10		Sagua la Grand		LHIX	1270	1000
	150			CMHA 1070	50	HIZ	1300	10
				San Spiritus		1112	1.500	10
CMBY 640	125		90 75	CMHB 1240	50			
CMBZ 1000	150	CMOK 14		CMIIID 1240	.,0		HAITI	
CMC 835	500	CMOX 13.	20 250	Santa Clara		Port-ar	u-Prince	e
CMCA 1350	450	CMO 8	40 500	CMHI 1210	150	HHK	920	1000

### NORTH AMERICAN B. C. STATIONS BY CALLS

CFAC 930 100 Calgary, Alta.	CHWC 1010 500 Regina, Sask.
Calgary Herald, Southam Bldg.	R. H. Williams & Sons, Kitchener Hotel
CFCF 600 400 Montreal, Que. Mt. Royal Hotel	CHWK 780 100 Chilliwack, B. C. Wellington Ave.
CFCH 930 100 North Bay, Ont.	CJAT 910 250 Trail, B. C. Kootenay Brdestg. Co.
CFCN 1030 10000 Calgary, Alta. Toronto Gen. Trust Bldg.	CJCA 730 1000 Edmonton, Alta.
CFCO 630 100 Chatham, Ont.	CJCB 1240 1000 Sydney, N. S.
Wm. Pitt Hotel	318 Charlotte St.
CFCT 1450 75 Victoria, B. C. 620 View St.	CJCJ 690 100 Calgary, Alta. New Albertan Bldg.
CFCY 630 1000 Charlottetown, P.E.I.	CJCS 1210 50 Stratford, Ont.
143 Great George St.	M. I. Higgins, 151 Ontario St.
CFJC 880 100 Kamloops, B. C.	CJCU 1210 50 Aklavik, N. W. T.
Wilcox-Hall Bldg.	Dr. J. A. Urquahart, Dept. of Interior
CFLC 930 100 Prescott, Ont.	CJGX 630 500 Yorkton, Sask.
Hoy Bidg., 307 George St.	188 Grain Exchange Bldg. (Winnipeg)
CFNB 550 500 Fredericton, N. B.	CJIC 890 100 S. Ste. Marie, Ont.
York St.	Windsor Hotel
CFPL 730 100 London, Ont. Richmond St.	CJKL 530 1000 Kirkland Lake, Ont. O. J. Thorpe
CFPR 580 50 Prince Rupert, B. C.	CJLS 1310 100 Yarmouth, N. S.
Felix E. Batt	Laurie L. Smith, Grand Hotel
CFQC 840 1000 Saskatoon, Sask.	CJOC 1230 100 Lethbridge, Alta.
216 First Ave., No.	Marquis Hotel
CFRB 690 10000 Toronto, Ont. 37 Bloor St. W.	CJOR 600 500 Vancouver, B. C. G. C. Chandler, Hotel Grosvenor
CFRC 1510 100 Kingston, Ont.	CJRC 1390 100 Winnipeg, Man.
Queens University, Fleming Hall	Royal Alexandra Hotel
CFRN 1260 100 Edmonton, Alta.	CJRM 540 1000 Moose Jaw, Sask.
Birks Bldg.	311 Main St. No.
CHAB 1200 100 Moose Jaw, Sask. P. O. Box 26	CKAC 730 5000 Montreal, Que. 980 St. Catherine St. W.
CHCK 1310 50 Charlottetown, P.E.I.	CKBI 1210 100 Prince Albert, Sask
36 Upper Hillsboro St.	Canada Bldg.
CHGS 1450 50 Summerside, P.E.I.	CKCD 1010 100 Vancouver, B. C.
190 Water St.	142 Hastings St. W.
CHLP 1120 100 Montreal, Que.	CKCH 1210 100 Hull, Que.
Sun Life Bldg.	Standish Hall Hotel
CHML 1010 50 Hamilton, Ont. Pigott Bldg.	CKCK 1010 500 Regina, Sask. 1853 Hamilton St.
CHNC 1410 500 New Carliste, Que.	CKCL 580 100 Toronto, Ont.
Gaspesian Radio Brdestg. Co.	444 University Ave.
CHNS 930 1000 Halifax, N. S.	CKCO 1010 100 Ottawa, Ont.
Lord Nelson Hotel	272 Somerset St. W.
CHRC 580 100 Quebec, Que.	CKCR 1510 100 Waterloo, Ont.
CHRC, Ltd., Victoria Hotel	24 King St. So.
CHSJ 1120 500 St. John, N. B. Admiral Beatty Hotel	CKCV 1310 100 Quebec, Que.

	CKCW 1370 100 Moneton, N. B. Moneton Brdestg. Co., Ltd., K. of P. Hall	CMCN 1500 150 Havana, Cuba Reina y Ave. Buen Ritiroe, Marianao
	CKFC 1410 50 Vancouver, B. C.	CMCO 1110 150 Havana Cuba
	Hemlock & 12th Ave.	Oficios 116, Enrique Lasanta
1	CKGB 1420 100 Timmins, Ont.	CMCP 1270 150 Havana Cuba
	R. H. Thompson, Press Bldg.  CKIC 1010 50 Wolfville, N. S.	Calzada de Luyane No. 132 CMCQ 680 250 Hayana Cuba
	Acadia University	CMCQ 680 250 Havana, Cuba Vista Alegre No. 80, Vibora
	CKLW 1030 5000 Windsor, Ont.	CMCR 1410 150 Havana Cuba
	Guaranty Trust Bldg.	Milagros No. 35, Vibora
	CKMC 1210 50 Cobalt, Ont. R. L. MacAdam	CMCU 1280 150 Havana, Cuba San Francisco No. 13, Vibora
	CKMO 1410 100 Vancouver, B. C.	CMCW 750 125 Havana Cuba
	1604 Bekins Bldg.	San Lazaro No. 113
	CKNC 1420 100 Toronto, Ont. 805 Davenport Road	CMCX 660 150 Havana, Cuba Maceo No. 7, Guanbacoa
	CKNX 1200 50 Wingham, Ont.	CMCY 1030 1000 Havana, Cuba
	Wingham Radio Club	Manuel D. Autran, Calle G 215, Vedado
	CKOC 1120 500 Hamilton, Ont.	CMGC 1400 100 Matanzas, Cuba
-	CKOV 630 100 Kelowna, B. C.	Independencia No. 56 CMGE 1370 50 Cardenas, Cuba
	Okanagan Broadcasters, Ltd., Box 243	Genaro Sebater, Cespedes No. 180
	CKPC 930 100 Brantford, Ont.	CMGF 1120 100 Matanzas, Cuba
-	Arcade Bldg. CKPR 930 100 Fort William, Ont.	G. Betancourt No. 51 CMGH 1040 15 Matanzas, Cuba
1	Royal Edward Hotel	CMGH 1040 15 Matanzas, Cuba B. Byrne No. 113
	CKSO 780 1000 Sudbury, Ont.	CMGI 1420 50 Colon, Cuba
	W. E. Mason, Grand Theatre Bldg. CKTB 1200 100 St. Catherines, Ont.	Armando Lizama Mart No. 35
	E. T. Sandell, Welland House	CMHA 1070 50 Saguala Grande, Cuba Abelardo Menocal, Carrillo No. 31
	CKUA 580 500 Edmonton, Alta.	CMHB 1240 50 San Spiritus, Cuba
	University of Alberta	Independencia No. 33
	CKWX 1010 100 Vancouver, B. C. Hotel Georgia	CMHD 1270 250 Caibarlen, Cuba Manuel Alvarez, M. Escobar 17
	CKX 1120 100 Brandon, Man,	CMHI 1210 150 Santa Clara, Cuba
	Rosser Ave.	Lavis y Paz, Independencia No. 34
	CKY 960 15000 Winnipeg, Man. Sherbrooke St.	CMHJ 1160 100 Cienfuegos, Cuba
	CMAF 730 250 Havana, Cuba	Romoualde Ugaide, Sta. Elena 184 CMHK 1330 250 Cruces, Cuba
	1 y 8 Rept. Miramar	Heredia No. 61
	CMBC 940 200 Havana, Cuba Domingo Fernandez, Maximo Gomez No. 139	CMHW 810 100 Cienfuegos, Cuba
	CMBD 1170 150 Havana, Cuba	Arguelles No. 200, Ramon Gonzalles CMHX 760 150 Cienfuegos, Cuba
	Luis Perez Garcia, Calle 17 No. 3, Vedado	F. Chavarry, Castillo 168
	CMBG 1140 300 Havana, Cuba	CMJC 1390 150 Camaguey, Cuba
	John L. Stowers, Hospital No. 100 CMBN 880 150 Havana, Cuba	Cisneros y G. Gomez CMJE 1220 50 Camaguey, Cuba
	Pozos Dulas No. 3	Manuel Fernandez, Hnos. Aguere No. 2
	CMBS 770 120 Havana, Cuba	CMJF 1150 200 Camaguey, Cuba
	Calzada y H. St., Vedado CMBX 1380 150 Havana, Cuba	John L. Stowers, Republica No. 88  CMJG 1010 50 Camaguey, Cuba
	Alberto Alvarez, San Miguel 194	Maceo No. 1, Rafael Valdes
	CMBY 640 125 Havana, Cuba	CMJH 1360 50 Ciego de Avila, Cuba
-	Infanta 132 Callejas Estefani CMBZ 1000 150 Havana, Cuba	Luis Marauri, H. Castilla 37 CMJI 1130 50 Ciego de Avila, Cuba
	Manuely G. Salas, San Rafael No. 14	Gilberto Gessa Lopez, Independencia 95
	CMC 835 500 Havana, Cuba	CMJK 780 150 Camaguey, Cuba
	Aguila y Dragones	Cia. Nacional de Radio, Finlay No. 3
	CMCA 1350 450 Havana, Cuba Galiano No. 102	M. Caymares, Republica 181
	CMCB 1230 100 Havana, Cuba	CMJO 1180 50 Ciego de Avila, Cuba
	O'Reilly y Aguacate	C. Central & Maceo
	CMCD 960 200 Havana, Cuba Calle G y 25, Vedado	CMJP 1430 100 Moron, Cuba Cesar Canall, Callejas No. 28
	CMCF 815 250 Havana, Cuba	CMK 1060 1500 Havana, Cuba
	Cuban Brdestg. Co., Paseo de Marti No. 9	llotel Plaza
	CMCG 1255 150 Havana, Cuba Malecon No. 340 Altos	CMKC 1250 150 Santiago, Cuba J. A. Saco, Alta 23
	CMCJ 1200 350 Havana, Cuba	CMKD 1050 250 Santiago, Cuba
	Rafael Rodriquez, Estevez No. 4	Celda y Marte
	CMCK 1320 100 Havana, Cuba	CMKF 1460 50 Holquin, Cuba
	Manuel Autran G., Vedado	Libertad esq. Arias

	CMKJ 1300 20 Guantanamo, Cuba	KDB 1500 100 Santa Barbara, Calif.
	CMKJ 1300 20 Guantanamo, Cuba Luis Morlote, East Giro 11	KDB 1500 100 Santa Barbara, Calif. 15-17 E. Haley St.
	CMKM 1120 50 Manzanillo, Cuba	KDFN 1440 500 Casper, Wyo.
-	Merchan P. Figeredo CMKR 1400 200 Santiago, Cuba	Donald Lewis Hathaway  KDKA 980 50000 Pittsburgh, Pa.
	B. Maso alta 71	Hotel Wm. Penn
	CMKV 1190 50 Santiago, Cuba	KDLR 1210 100 Devils Lake, N. D.
	Oscar Vidal, Palma Soriano CMOA 790 75 Havana, Cuba	KDLR, Inc., 1025 3rd Street  KDYL 1290 1000 Salt Lake City, Utah
	Juan Fernandez, Agular 126 Altes	Ezra Thompson Bldg.
	CMOK 1470 200 Havana, Cuba	KECA 1430 1000 Los Angeles, Calif. 1000 S. Hope St.
	Rafael Valdez, Marques Gonzales 52 CMOX 1320 250 Havana, Cuba	KEHE 780 500 Los Angeles, Cal.
	10 entre 17 y 19, Vedado	214 S. Vermont St.
	CMQ 840 500 Havana, Cuba 25 Numero 445, Vedado	KELD 1370 100 El Dorado, Ark. T. H. Barton
	CMW 600 1000 Havana, Cuba	KELW 780 500 Burbank, Calif.
	Troncoso Gil, Prado 103	3702 Magnolia Park Blvd.
	CMX 920 500 Havana, Cuba Casa "Lavin," Ave. del a Republica 99A	KERN 1370 100 Bakersfield, Catif. Elk's Club
	CRCK 1050 1000 Quebec. Que.	KEX 1180 5000 Portland, Ore.
	Chateau Frontenac Hotel	Oregonian Bldg.
	CRCM 910 5000 Montreal, Que. 1231 St. Catherine St. W.	KFAB 770 10000 Lincoln, Neb. Cornhusker Hotel
	CRCO 880 1000 Ottawa, Ont.	KFAC 1300 1000 Los Angeles, Calif.
	Chateau Laurier Hotel	E. L. Cord, 645 So. Mariposa
	CRCS 950 100 Chicoutimi, Que. 4 Rue Larouche	KFBB 1280 1000 Great Falls, Mont. Buttrey Broadcast., Inc.
	CRCT 840 5000 Toronto, Ont.	KFBI 1050 5000 Abilene, Kans.
	805 Davenport Road CRCV 1100 1000 Vancouver, B. C.	Box 345 KFBK 1490 5000 Sacramento, Calif.
	C. N. R. Station Bldg.	Sacramento Bee
	CRCW 600 500 Windsor, Ont.	KFDM 560 500 Beaumont, Texas
	Guaranty Trust Bldg. FQN 609 250 St. Pierre, Miq.	Beaumont Hotel, P. O. Box 2950 KFDY 780 1000 Brookings, S. D.
		South Dakota State College
	HHK 920 1000 Port-zu-Prince, Haiti Haitian Government	KFEL 920 500 Denver, Colo. Albany Hotel
	HIH 1395 15 San Pedro de M., D.R.	KFEQ 680 2500 St. Joseph, Mc.
	Domingo Dominguez  HIJ 1195 15 Santo Domingo, D.R.	Schneider Bldg., KFEQ, Inc. KFGQ 1370 100 Boone, Iowa
	Tuto Baez, Hostos 34	924 W. 2nd St.
	HIX 1270 1000 Santo Domingo, D. R.	KFH 1300 1000 Wichita, Kans.
	J. R. Saladin, Director General  HIZ 1300 10 Santo Domingo, D. R.	124 1/2 S. Market St. KFI 640 \$0000 Los Angeles, Calif.
	Abbes and Garcia	1000 S. Hope St.
	KABC 1420 100 San Antonio, Texas Texas Theatre Bldg.	KFIO 1120 100 Spokane, Wash. 213 Riverside Ave.
	KABR 1420 100 Aberdeen, S. Dak.	KFIZ 1420 100 Fend du Lac, Wis.
	Aberdeen Broadcast Co.	18 W. 1st St.
	KADA 1200 100 Ada, Okla. C. C. Morris	KFJB 1200 100 Marshalltown, Iowa 1603 W. Main St.
	KALB 1420 100 Alexandria, La,	KFJI 1210 100 Klamath Falls, Ore.
	Alexandria Brdcstg. Co:	KFJ1 Broadcasters, Inc., Willard Hotel KFJM 1370 100 Grand Forks, N. D.
	KALE 1300 500 Portland, Ore. Kale, Inc., New Heathman Hotel	KFJM 1370 100 Grand Forks, N. D. University of North Dakota
	KARK 890 250 Little Rock, Ark.	KFJR 1300 500 Portland, Ore.
	N. S. L. Bldg.	622 Lumberman's Bldg.  KFJZ 1370 100 Fort Worth, Texas
	KASA 1210 100 Elk City, Okia. E. M. Woody, Casa Grande Hotel	Texas Hotel
	KAST 1370 100 Astoria, Ore.	KFKA 880 500 Greeley, Colo.
	Abraham Shapiro KBPS 1420 100 Portland, Ore.	Box 735 KFKU 1220 1000 Lawrence, Kans.
	E. 12th & Hoyt Sts.	University of Kansas
	KBTM 1200 100 Jonesboro, Ark.	KFNF 890 500 Shenandoah, Iowa 407 Sycamore St.
-	Jay P. Beard KCMC 1420 100 Texarkana, Ark.	KFOR 1210 100 Lincoln, Neb.
	Box 865	Howard Shuman, Hotel Lincoln
	KCRC 1360 250 Enid, Okla. Enid Radiophone Co., Oxford Hotel	KFOX 1250 1000 Long Beach, Calif. 220 E. Anaheim St.
	KCRJ 1310 100 Jerome, Ariz.	KFPL 1310 100 Dublin, Texas
	Chas. C. Robinson, Drawer D.	C. C. Bayter, Boy 176

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G	Goldman Hotel	Fort Smith, Ark.	Eas	gle Broadcasting	Corpus Christi, Texas Co., Inc., P.O. Box 1508
	(FPY 890 1000 ymons Bldg.	Spokane, Wash.			Los Angeles, Calif. 1417 S. Figueros.
	(FQD 780 250	Anchorage, Alaska	KG	FK 1500 100	Moorhead, Minn.
	11—4th Ave.		722	Center Ave.	Roswell, N. M.
	(FRC 610 1000 000 Van Ness Ave.	San Francisco, Calif.	KG	FL 1370 100 FL, Inc., 507 N.	Main St.
		Longview, Texas	KG	FW 1310 100 lway Hotel	Kearney, Neb.
	oice of Longview	Columbia, Mo.	KG	FX 630 200	Pierre, S. D.
	FRU, Inc., 9th and			na McNell, 510 S GC 1420 100	ummit Ave.  San Francisco, Calif.
	(FSD 600 1000 J. S. Grant Hotel	San Diego, Calif.	230	Eddy St.	,
		Los Angeles, Calif.		<b>GF 1010 1000</b> Ifeyville Journal	Coffeyville, Kans.
	100 Glendale Blvd. <b>(FUH 1210 100</b>	Del Monte, Calif.	KG	GM 1230 250	Albuquerque, N. M.
	Richard F. Lewis	CA Laura Ma		inciscan Hotel i <b>HF 1320 500</b>	Pueblo, Colo.
	(FUO 550 500 01 De Mun St.	St. Louis, Mo.	C.	P. Ritchie, 113 B	roadway
		Los Angeles, Calif.			Little Rock, Ark. Co., Marion Hotel
	E. L. Cord, 645 S. M: <b>(FVS 1210 100</b>	Cape Girardeau, Mo.	KG	HL 780 1000	Billings, Mont.
	scar C. Hirsch, Box			& N. Broadway	Butte, Mont.
	<b>(FWB 950 1000</b> Varner Bros. Motion	Hollywood, Calif, Pictures, Inc.	KG	IR, Inc., 121 W.	Broadway
	Frank E. Hurt, 1024	Nampa, Idaho			Alamosa, Colo. 326 N. Commercial
		Grand Jct., Colo.	KG	KB 1500 100	Tyler, Texas
	lillcrest Manor			S. College KL 1370 100	San Angelo, Texas
	KFXM 1210 100 California Hotel	San Bernardino, Calif.	KG	KL, Inc., St. An	gelus Hotel
		Oklahoma City, Okla.		KO 1240 1000 St. & Indiana A	Wichita Falls, Texas
	41 Hightower Bldg. <b>(FYO 1310 100</b>	Lubbock, Texas	KG	KY 1500 100	Scottsbluff, Neb.
	Cirksey Bros., Hotel				517 1/2 Broadway Honolulu, T. H.
	(FYR 550 1000 20 Broadway	Bismarck, N. D.	110	notulu Broadcast	ing Co., Box 2663
	<b>(GA 1470 5000</b> 023 W. Riverside Av	Spokane, Wash.		NC 1410 1000 ins Radio Brdest	Amarillo, Texas
K	GAR 1370 100	Tucson, Ariz.	KG	NF 1430 1000	North Platte, Neb.
	42 S. 6th Ave.	San Diego, Calif.			casting Co., W. 12th St. Dodge City, Kans.
1	012-1st St.		Fir	st Natl. Bank Blo	dg.
	KGBU 900 500 Lille 5, Wards Cove I	Ketchikan, Alaska	<b>KG</b>	O 790 7500 Sutter St.	San Francisco, Calif.
	GBX 1230 500	Springfield, Mo.	KG		Honolulu, T. H.
	GBX, Inc., C. of C	, Bldg. York, Neb.		piolani at South i VO 1260 1000	Missoula, Mont.
	GBZ Broadcasting	Co., 715 Grant Ave.		sbys, Inc., 240 N	
	KGCA 1270 100 Charles W. Greenley	Decorah, towa 201 Water St.	KG 325	W 620 1000 Adler St.	Portland, Ore.
H	KGCU 1240 250	Mandan, N. D.	KG		Olympia, Wash.
	.04 W. Main St.	Wolf Point, Mont.	KH KH	Y, Inc., 11th and 1000	Los Angeles, Calif.
E	E. E. Krebsbach	_	7th	at Bixel	Spokane, Wash.
	KGDE 1200 100 C. L. Jaren	Fergus Falls, Minn.	Spr	ague Ave. & Pos	t St.
H	KGDM 1100 1000	Stockton, Calif.		ISL 950 250 Iden Empire Brd	Chico, Calif.
	E. F. Peffer, 42 S. C: (GDY 1340 250	Huron, S, D.	KI	CA 1370 100	Clovis, N. M.
v	Voice of S. D., Inc.,	347 Dakota Ave.	Sou	thwest Broadcas	sting Co.  Idaho Falls, Idaho
1	KGEK 1200 100 Elmer G. Beehler, 10	Sterling, Colo. 9 W. 2nd St.	Pai	rk Ave. & Broad	way
H	KGER 1360 1000	Long Beach, Calif.		DO 1350 1000 tel Boise	Boise, Idaho
	35 Pine Ave. <b>(GEZ 1310 100</b>	Kalispell, Mont.	KII	DW 1420 100	Lamar, Colo.
I	Donald C. Treloar, E	ox 1	Lai	mar Broadcasting	g Co., Box 688 Eureka, Calif.
	KGFF 1420 100 th & Bell Sts.	Shawnee, Okla.	Re	dwood Brdestg.	Co., Vance Hotel
H	KGFG 1370 100	Oklahoma City, Okla.	KU	FV 850 250	Glendale, Calif. d., Glendale Hotel
	okia. Broadeasting C	co., 1113 N. Broadway	Ca	muun ayatem, ht	

	KINY 1310 100 Juneau, Alaska	KOMA 1480 5000 Oklahema City, Okla.
	Northwest Advertising Co.  KIT 1310 100 Yakima, Wash.	Biltmore Hotel KOMO 920 1000 Seattle, Wash.
	109 1/2 E. Yakima Ave.	Skinner Bldg.
	KIUJ 1310 100 Santa Fe, N. Mex.	KONO 1370 100 San Antonio, Texas
-	W. C. Irvin KIUL 1210 100 Garden City, Kans.	Mission Broadcast. Co., St. Anthony Hotel KOOS 1200 250 Marshfield, Ore.
	Garden City Brdcstg. Co.	H. H. Hanseth, Hall Bldg.
	KIUN 1420 100 Pecos, Texas J. H. Hawkins & B. H. Hubbs	KORE 1420 100 Eugene, Ore. 733 Willamette St.
	KIUP 1370 100 Durango, Colo.	KOTN 1500 100 Pine Bluff, Ark.
	C. Guy Shepard  KJBS 1070 500 San Francisco, Calif.	Universal Brdcstg. Corp., Hotel Pines KOY 1390 500 Phoenix, Ariz.
	1380 Bush St.	621 N. Central Ave. KPAC 1260 500 Port Arthur, Texas
	KJR 970 5000 Seattle, Wash. Skinner Bldg.	Port Arthur College
	KLCN 1290 100 Blytheville, Ark.	KPCB 710 100 Seattle, Wash. Tower Bldg.
-	C. L. Lintzenich, Main and Division St.  KLO 1400 500 Ogden, Utah	KPJM 1500 100 Prescott, Ariz.
	405—25th St.	Scott & Sturm, P. O. Box 782
	KLPM 1240 250 Minot, N. D. John B. Cooley, Box 707	KPLC 1500 100 Lake Charles, La. Calcasieu Brdestg. Co.
	KLRA 1390 1000 Little Rock, Ark. Arkansas Broadcasting Co., Box 550	KPO 680 50000 San Francisco, Calif.
	KLS 1440 250 Oakland, Calif.	KPOF 880 500 Denver, Colo.
	Warner Bros., 2201 Telegraph Ave.	Pillar of Fire, 1845 Champa St.  KPPC 1210 50 Pasadena, Calif.
	KLUF 1370 100 Galveston, Texas Geo. R. Clough, Buccaneer Hotel	585 E. Colorado St.
	KLX 880 1000 Oakland, Calif.	KPQ 1509 100 Wenatchee, Wash.
	Tribune Tower  KLZ 560 1000 Denver, Colo.	KPRC 920 1000 Houston, Texas
	Shirley-Savoy Hotel KMA 930 1000 Shenandoah, Iowa	2204 Shell Bldg. KQV 1380 500 Pittsburgh, Pa.
	Earl E. May Seed & Nursery Co.	KQV Broadcasting Co., Investment Bldg.
	KMAC 1370 100 San Antonio, Texas W. W. McAllister, Blue Bonnet Hotel	KQW 1010 1000 San Jose, Calif. 87 E. San Antonio St.
	KMBC 950 1000 Kansas City, Mo.	KRE 1370 100 Berkeley, Calif.
-	Pickwick Hotel KMED 1310 100 Medford, Ore.	2345 Channing Way KREG 1500 100 Santa Ana, Calif.
	Mrs. W. J. Virgin, Sparta Bldg.	3rd & Sycamore Sts.
	KMJ 580 1000 Fresno, Calif. Van Ness & Calaveras Sts.	KRGV 1260 500 Weslaco, Texas KRGV Inc.
	KMLB 1200 100 Monroe, La.	KRKD 1120 1900 Los Angeles, Calif.
	Francis Hotel KMMJ 740 1000 Clay Center, Neb.	815 Spring Arcade Bldg. KRKO 1370 50 Everett, Wash.
	The M. M. Johnson Co.	Lee Mudgett, 2814 Rucker Ave.
	KMO 1330 250 Tacoma, Wash. KMO, Inc., Hotel Winthrop	KRLC 1420 100 Lewiston, Idaho H. E. Studebaker
	KMOX 1090 50000 St. Louis, Mo.	KRLD 1040 10000 Dallas, Texas KRLD Radio Corp., Adolphus Hotel
	401 S, 12th St.  KMPC 710 500 Beverly Hills, Calif.	KRMD 1310 100 Shreveport, La.
	9631 Wiltshire Blvd.	Jefferson Hotel KRNT 1320 500 Des Moines, Iowa
	KMTR 570 1000 Hollywood, Calif. KMTR Radio Corp., 915 N. Formosa Ave.	Des Moines Register Tribune
	KNOW 1500 100 Austin, Texas	KROC 1310 100 Rochester, Minn. Southern Minnesota Broadcasting Co.
	Norwood Building KNX 1050 50000 Hollywood, Calif.	KROW 930 1000 Oakland, Calif.
	West, Broadcast Co., Inc., 1558 N. Vine St.	1803 Franklin St.  KRSC 1120 100 Seattle, Wash.
	KOA 830 50000 Denver, Colo. General Electric Co., 1370 Krameria St.	Radio Sales Corp., Washington Athletic Club
	KOAC 550 1000 Corvallis, Ore. Oregon State Agricultural College	KSAC 580 500 Manhattan, Kans. State College of Agriculture
-	KOB 1180 10000 Albuquerque, N. M.	KSCJ 1330 1000 Sioux City, Iowa
	Albuquerque Journal, Box 667  KOH 1380 500 Reno, Nev.	Perkins Bros. Co., 415 Douglas St. KSD 550 1000 St. Louis, Mo.
	440 N. Virginia St.	12th & Olive Sts.
	KOIL 1260 1000 Council Bluffs, Iowa Mona Motor Oil Co.	KSEI 900 250 Pocatello, Idaho Radio Service Corp., 141 S. 6th Ave.
	KOIN 940 1000 Pertland, Ore.	KSFO 560 1000 San Francisco, Calif.
	KOIN, Inc., New Heathman Hotel  KOL 1270 1000 Seattle, Wash.	5th & Mission Sts.  KSL 1130 50000 Salt Lake City, Utah
	Northern Life Tower	Vermont Bldg.

KSLM 1370 100 Salem, Ore. Oregon Radio, Inc.	KWLC 1270 100 Decorah, Iowa Luther College
KSO 1430 250 Des Moines, Iowa	KWSC 1220 1000 Pullman, Wash.
Des Moines Register & Tribune	State College of Washington
KSOO 1110 2500 Sioux Falls, S. D. Sioux Falls Brdcst. Assn., Carpenter Hotel	KWTN 1210 100 Watertown, S. D. Citizens Bank Bldg.
KSTP 1460 10000 St. Paul, Minn.	KWTO 560 5000 Springfield, Mo.
St. Paul Hotel	KGBX Inc.
KSUN 1200 100 Lowell, Ariz. Copper Electrical Co., Drawer C	KWYO 1370 100 Sheridan, Wyo. Big Horn Brdcstg. Co.
KTAR 620 1000 Phoenix, Ariz.	KXA 760 250 Seattle, Wash.
116 N. Central Ave.	American Radio Tel. Co., 218 Bigelow Bidg.
KTAT 1240 1000 Fort Worth, Texas	KXL 1420 100 Portland, Ore. KXL Broadcasters, Multnomab Hotel
Ft. Worth Natl. Bank Bldg.  KTBS 1450 1000 Shreveport, La.	KXO 1500 100 El Centro, Calif.
Box 1642	F. M. Bowles, Box 140
KTFI 1240 1000 Twin Falls, Idaho Radio Broadcasting Corp., Box 521	KXRO 1310 100 Aberdeen, Wash. KXRO, Inc., Hotel Morck
KTHS 1060 10000 Hot Springs, Ark.	KXYZ 1440 1000 Houston, Texas
Chamber of Commerce, Box 886	Fannin & Rusk Sts.
KTRB 740 250 Modesto, Calif. McTammany & Bates	KYA 1230 1000 San Francisco, Calif.
KTRH 1290 1000 Houston, Texas	988 Market St.  KYW 1020 10000 Philadelphia, Pa.
KTRH Broadcasting Co., Rice Hotel	1622 Chesnut Street
KTSA 550 1000 San Antonio, Texas	NAA 690 1000 Arlington, Va.
Southwest Broadcasting Co., Plaza Hotel  KTSM 1310 100 El Paso, Texas	United States Navy RDN 706 500 San Salvador, E. S.
P. O. Box 1976	Republic of El Salvador
KTUL 1400 500 Tulsa, Okla.	TGW 565 10000 Guatemala, Gua.
National Bank of Tulsa Bldg.  KTW 1220 1000 Seattle, Wash.	Gobierno de Guatemala TGX 1400 150 Guatemala City
77th Ave. & Spring St.	
KUJ 1370 100 Walla Walla, Wash.	TIEP 850 500 San Jose, C. R.
KUJ, Inc., Marcus Whitman Hotel	TIFA 1050 75 San Jose, C. R.
Dr. A. H. Schermann, Box 267	
KUOA 1260 1000 Fayetteville, Ark.	TIFS 1441 7.5 Cartago, C. R.
KUOA, Inc., Washington Hotel KUSD 890 500 Vermillion, S. D.	TIGA 1014 30 Cartago, C. R.
University of South Dakota	
KVI 570 1000 Tacoma, Wash.	TIGH 1000 500 San Jose, C. R.
W. R. Rust Bldg.	TIRC 1100 75 San Jose, C. R.
KVL, Inc., 5th and Virginia St.	Perry Girton, Apdo. 225
KVOA 1260 500 Tucson, Ariz.	TIRH 930 50 San Jose, C. R.
Cons. Natl. Bank Bidg.  KVOD 920 500 Denver, Colo.	VAS 685 2000 Glace Bay, N. S.
Continental Oil Bldg.	Canadian Marconi Co., Ltd.
KVOL 1310 100 Lafayette, La.	VE9EK 1185 10 Montmagny, Que. J. A. Marquis, P. O. Box 52
Evangeline Brdcstg. Co.  KVOO 1140 25000 Tulsa, Okla.	VOAC 1065 40 St. John's, Nfld.
Wright Bldg.	
KVOR 1270 1000 Colorado Spg., Colo.	VOAS 940 100 St. John's, N. F. Ayre & Sons, Ltd., Water St.
Mining Exchange Bldg.  KVOS 1200 100 Bellingham, Wash.	VOGY 840 400 St. John's, N. F.
115 W. Magnolia St.	Newfoundland Hotel
KVSO 1210 100 Ardmore, Okla.	VONF 1190 5000 St. John's, N. F. Dominion Broadcasting Co., Ltd., Box 135
Ardmoreite Pub. Co., Inc.  KWBG 1420 100 Hutchinson, Kans.	VOWR 681 500 St. John's, N. F.
W. B. Greenwald	Wesley United Church, Box 157
KWEA 1210 100 Shreveport, La.	WAAB 1410 500 Boston, Mass. 21 Brookline Ave.
Spring & Fannin Sts., Times Pub. Co.  KWG 1200 100 Stockton, Calif.	WAAF 920 500 Chicago, III.
Medico-Dental Bldg.	Plamer House
KWJJ 1040 500 Portland, Ore.	WAAT 940 500 Jersey City, N. J. Bremer Broadcasting Corp., 50 Journal Sq.
622 S. W. Salmon St. KWK 1350 1000 St. Louis, Mo.	WAAW 660 500 Omaha, Neb.
Thomas Patrick, Inc., Hotel Chase	Omaha Grain Exchange
XWKC 1370 100 Kansas City, Mo.	WABC 860 50000 New York, N. Y. 485 Madison Ave.
CWKH 850 10000 Shreveport, La.	WABI 1200 100 Banger, Maine
S. ing & Fannin Sts., Times Pub. Co.	Community Brdestg. Service

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	WABY 1370 100 Albany, N. Y. Strand Theatre Bldg.		WBRC 930 1000 Birmingham, Ala. Bankhead Hotel
	WACO 1420 100 Waco, Texas Amicable Bldg.		WBRE 1310 100 Wilkes-Barre, Pa. Louis G. Baltimore, 16 N. Main
	WADC 1320 1000 Akron, Ohio Allen T. Simmons, P. O. Box 29	-	WBSO 920 500 Babson Park, Mass.
	Allen T. Simmons, P. O. Box 29 WAGF 1370 100 Dothan, Ala.		Drawer B
	Houston Hotel		WBT 1080 50000 Charlotte, N. C. Station WBT, Inc., Wilder Bldg.
	WAGM 1420 100 Presque Isle, Me. Aroostook Broadcasting Corp., Main St.		WBTM 1370 100 Danville, Va. Miller Bldg.
	WAIM 1200 100 Anderson, S. C. Wilton E. Hall		WBZ 990 50000 Boston, Mass.
	WAIU 640 500 Columbus, Ohio Deshier-Wallick Hotel		WBZA 990 1000 Springfield, Mass.
	WALA 1380 500 Mobile, Ala.		Hotel Kimball WCAC 600 500 Storrs, Conn.
	Pape Brdcstg, Corp., 106 St. Joseph St. WALR 1210 100 Zanesville, Ohio		Connecticut State College WCAD 1220 500 Canton, N. Y.
	First Trust & Savings Bank Bldg.		St. Lawrence University
	WAML 1310 100 Laurel, Miss. Southland Radio Corp., Box 26		WCAE 1220 1000 Pittsburgh, Pa. 6th Ave. & Smithfield St.
	WAPI 1140 5000 Birmingham, Ala.		WCAL 1250 1000 Northfield, Minn.
	Protective Life Bidg. WARD 1400 500 Brooklyn, N. Y.		St. Olaf College WCAM 1280 500 Camden, N. J.
-	427 Flatbush Ave., Ext.		City of Camden, City Hall
	WASH 1270 500 Grand Rapids, Mich. Grand Rapids Natl. Bank Bldg.		WCAO 600 500 Baltimore, Md. 811 W. Lanvale St.
	WATR 1190 100 Waterbury, Conn. WATR Co. Inc., 47 Grand St.		WCAP 1280 500 Asbury Park, N. J.
	WAVE 940 1000 Louisville, Ky.		Convention Hall WCAT 1200 100 Rapid City, S. D.
	WAVE, Inc., 1525 Brown Hotel WAWZ 1350 500 Zarephath, N. J.		South Dakota State School of Mines WCAU 1170 50000 Philadelphia, Pa.
	Pillar of Fire		WCAU Broadcasting Co., 1622 Chestnut
	WAZL 1420 100 Hazleton, Pa. Hazleton Broadcasting Service, Inc.		WCAX 1200 100 Burlington, Vt. 203 College St.
	WBAA 890 1000 West Lafayette, Ind. Purdue University		WCAZ 1070 100 Carthage, III. 97 1/2 Adams St.
	WBAL 1060 10000 Baltimore, Md.	<u> </u>	WCBA 1440 500 Allentown, Pa.
	Lexington Bldg., Amer. Eadio News Corp.  WBAP 800 50000 Fort Worth, Texas		B. Bryan Musselman, 39-41 10th St.  WCBD 1080 5000 Waukegan, III.
	Blackstone Hotel WBAX 1210 100 Wilkes-Barre, Pa.		75 E. Wacker Drive, Chicago
-	John H. Stenger, Jr., 70 S. Main St.		Keith Theatre Bldg.
	WBBC 1400 500 Brooklyn, N. Y. 552-54 Atlantic Ave.	1	WCBS 1420 100 Springfield, III. WCBS, Inc., 208 1/2 S. 5th.
	WBBL 1210 100 Richmond, Va. 1627 Monument Ave.		WCCO 810 50000 Minneapolis, Minn. Nicollet Hotel
	WBBM 770 50000 Chicago, III.		WCFL 970 1500 Chicago, III.
	WBBM Broadcasting Corp., Wrigley Bldg. WBBR 1300 1000 Brooklyn, N. Y.		666 Lake Shore Drive WCHS 580 500 Charleston, W. Va.
	124 Columbia Heights		WOBU, Inc., Ruffner Hotel
	WBBZ 1200 100 Powca City, Okla. C. L. Carrell, 407 W. South Ave.		WCKY 1490 5000 Covington, Ky. 6th & Madison Sts.
	WBCM 1410 500 Bay City, Mich. James E. Davidson, Hotel Wenonah		WCLO 1200 100 Janesville, Wis. 200 E. Milwaukee St.
	WBEN 900 1000 Buffalo, N. Y.	-	WCLS 1310 100 Joliet, III.
	WBEN, Inc., Hotel Statler WBEO 1310 100 Marquette, Mich.		WCLS, Inc., 301 E. Jefferson St. WCMI 1310 100 Ashland, Ky.
	146 W. Washington St.		Ashland Broadcasting Co.
	WBIG 1440 500 Greensboro, N. C. Box 408		WCNW 1500 100 Brooklyn, N. Y. Arthur Faske, 1525 Pitkin Ave.
	WBNO 1200 100 New Orleans, La. Hotel New Orleans		WCOA 1340 500 Pensacola, Fla. San Carlos Hotel
	WBNS 1430 500 Columbus, O.		WCOC 880 500 Meridian, Miss.
	33 N. High St.  WBNX 1350 250 New York, N. Y.		Box 603  WCOL 1210 100 Columbus, Ohio
	260 E. 161st St. WBOQ 860 50000 New York, N. Y.		WCOL Inc., 30 N. High St. WCRW 1210 100 Chicago, III.
-	Atlantic Broadcasting Corp.		Clinton R. White, 2756 Pine Grove Ave.
	WBOW 1310 100 Terre Haute, Ind. Banks of Wabash, Inc., 19 Beach Block		WCSC 1360 500 Charleston, S. C. Francis Marion Hotel
	WBRB 1210 100 Red Bank, N. J. 63 Broad St.		WCSH 940 1000 Portland, Me. 579 Congress St.
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Tampa Times Co., Tampa Terrace   WDAF 510 1000 Kansas City, Mo.   1720 Grand Ave.   WDAF 510 1000 Fargo, N. D.   WFBE 130 100 Altona, Pa.   Gable Broadcasting Co., 12th Ave. & 18   WFBE 130 100 Altona, Pa.   Gable Broadcasting Co., 12th Ave. & 18   WFBE 130 100 Altona, Pa.   Gable Broadcasting Co., 12th Ave. & 18   WFBE 130 100 Altona, Pa.   Gable Broadcasting Co., 12th Ave. & 18   WFBE 130 100 Altona, Pa.   Gable Broadcasting Co., 12th Ave. & 18   WFBE 130 100 Altona, Pa.   Gable Broadcasting Co., 12th Ave. & 18   WFBE 130 1000 Syracuse, & 18   WFBE 1270 500 Baltimore, Md.   Times World Corn., P. O. Box 150   WFBE 1270 500 Baltimore, Md.   Times World Corn., P. O. Box 150   WFBE 1270 500 Baltimore, Md.   Times World Corn., P. O. Box 150   WFBE 1270 500 Baltimore, Md.   WFBE 130 1000 Prints, Minn.   UPDEL 1120 250 Wintington, Del.   WFBE 130 1000 Prints, Minn.   WFBE 130 1000 Minneapolis, in WFBE 130 1000 Prints, Minn.   WFBE 130 1000 Minneapolis, Minn.   WFBE 130 1000 Charlanoga, Tenn.   WFBE 130 1000 Prints, Minn.   WFBE 130 1000 Prints, Minn.   WFBE 130 1000 Minneapolis, Minn.   WFBE 130 1000 Minneapoli	
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WDAS 1370 100 Philadelphia, Pa.   WDAS Brideste, Co., Inc., Proadwood Hotel WDAY 940 1000 Fargo, N. D.   WDAY, Inc., Black Bidg., 11 B Broadway WDBJ 930 1000 Roanoke, Va.   Times World Corp., P. O. Box 150   WDBD, 150 N. Orange Ave   WDBJ 580 1000 Orlando, Fla.   S55 N. Orange Ave   WDBL, Inc., 10th and King Sts.   WDEL, Inc., 10th and King Sts.   WDEL, Inc., 10th and King Sts.   WDEL, Inc., 10th and King Sts.   WDDY 1580 500 Waterbury, Vt.   Harry C. Whitehill, Stowe St.   WDDY 1580 1000 Charlman, N. C.   Washington Duke Hotel   WDDD 1280 1000 Chattanooga, Tenn.   WDDD 1280 1000 Chattanooga, Tenn.   WDDD Broadcasting Corp., Hotel Patten   WDRC, Inc., Corning Bidg., 11 Asylum St.   WDSU Inc., Hotel Monteleone   WDSU 1000 Chattanooga, Inc., WDSU Inc., Hotel Monteleone   WDSU 1000 Chattanooga, Inc., WDSU Inc., Hotel Monteleone   WDSU 1000 New York, N. Y. 30 Rockefeler Plaza   WEAN 780 500 Providence, R. I   New Crown Hotel   WEBC 1290 1000 New York, N. Y. 30 Rockefeler Plaza   WEBN 210 000 Chicago, Ill.   Emil Denemark, 3860 Ogen Ave.   WEBB 1310 100 Buffalo, N. Y.   WEBR 1310 100 Rocky Mount, N. C.   WEBR 1310 100 Rocky Mount, N. C.   WEBR 1310 100 Rocky Mount, N. C.   WEBR 1310 100 Reading, Pa.   Berks Broadcasting Co., 533 Penn.   WEHC 1420 100 Chariottesville, Va. 7th & Main Sts.   WEHS 1420 100 Chariottesville, Va. 7th & Main Sts.   WEHS 1420 100 Chariottesville, Va. 7th & Main Sts.   WEHS 1420 100 Chariottesville, Va. 7th & Main Sts.   WEHS 1420 100 Clerco, Ill.   WEHS, Inc., 6138 W. Cermak Rd.   WEHS 1420 100 Clerco, Ill.   WEHS, Inc., 6138 W. Cermak Rd.   WEHS 220 N. Bank Drive   WESC 850 1000 Elmira, N. Y.   University of Wisconsin   WHAM 1155 50000 Rochester, N. Y. 100 Carlson Road   WHAS 220 50000 Louisville, Ky.   WHAM 1155 50000 Rochester, N. Y. 100 Carlson Road   WHAS 220 50000 Louisville, Ky.   WHAM 1155 50000 Rochester, N. Y. 100 Carlson Road   WHAS 220 50000 Louisville, Ky.   WHAM 1155 50000 Rochester, N. Y. 100 Carlson Road   WHAS 220 50000 Louisville, Ky.   WHAM 1155 50000 Rochester, N. Y. 10	
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WDBJ 930 1000 Roanoke, Va. Times World Corp., P. O. Box 130   WDBO \$80 1000 Orlando, Fla. 555 N. Orange Ave   WDBO \$80 1000 Orlando, Fla. 555 N. Orange Ave   WDEL line. 10th and King Sts.   WDEL, Inc., 10th and King Sts.   WFEA 1310 100 Philadelphia, Flat Store St.   WDEL, Inc., 10th and King Sts.   WFEA 1340 500 Manchester, N. Carpenter Hotel   WFIL Broadcasting Co., 80l Market   WFEA 620 1000 Clearwater, Fla Box 119   WFMD 900 1200 100 Durham, N. C. Washington Duke Hotel   WFMD 900 500 Frederick, Md. Monocacy Broadcasting Co. Hotel Patten WDRC 1330 1000 Hartlord, Conn. WDOD 1280 1000 Chattaneoga, Tenn. WDDD Broadcasting Corp., Hotel Patten WDRC, Inc., Corning Bidg., 11 Asylum St. WDSU 1nc., Hotel Monteleone   WGAL 1500 100 Lancaster, Pa. WGAR 1450 500 Cleveland, Ohit WGAR Broadcasting Co. Hotel Statl WGBI 1210 100 Freeport, N. Y. H. H. Carman, 64 S. Grove St.   WGAR 1450 500 Cleveland, Ohit WGAR Broadcasting Co. Hotel Statl WGBI 1210 100 Freeport, N. Y. H. H. Carman, 64 S. Grove St.   WGBF 630 500 Evansville, Ind. 519 Vine St.   WGBF 630 500 Evansville, Ind. 519 Vine St.   WGBF 630 500 Mississippi City Great Southern Golf Club WGES 1360 Soo Chicago, III.   128 N. Crawford Ave.   WGCM 1120 500 Mississippi City Great Southern Golf Club WGES 1360 Soo Chicago, III.   128 N. Crawford Ave.   WGCM 1120 100 Chicago, III.   128 N. Crawford Ave.   WGCM 120 100 Chicago, III.   WGRS 50 1000 Buffalo, N. Y. Berks Broadcasting Co., 533 Penn.   WGPC 1420 100 Charlottesville, Va. 7th & Main Sts.   WGPC 1420 100 Charlottesville, Va. 7th & Main Sts.   WGES 850 1000 Elmira, N. Y.   100 Carlson Road WHAS 820 S0000 Coliciago, III.   WEHS 140 100 Gaero, III.   WEHS 140 100 Gaero, III.   WGRS 50 1000 Elmira, N. Y.   100 Carlson Road WHAS 820 S0000 Louisville, Ky.   WGRS 50 S000 Louisville, Ky.   WGRS 50	nd.
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WDSU 1250 1000 New Orleans, La.   WGBB 1210 100 Freeport, N. Y.   WDSU Inc., Hotel Monteleone   H. H. Carman, 64 S. Grove St.   WGBF 630 500 Evansville, Ind.   519 Vine St.   WGBF 630 500 Evansville, Ind.   519 Vine St.   WGBF 630 500 Scranton, Pa.   30 Rockefeller Plaza   116 N. Washington Ave.   WGCM 1120 500 Mississippi City Great Southern Golf Club   WEBC 1290 1000 Superior, Wis.   Spaulding Hotel, Duluth, Minn.   128 N. Crawford Ave.   WGBG 1310 100 Harrisburg, Ill.   128 N. Crawford Ave.   WGL 1310 100 Newport News, 100 E. Popular St.   WGBF 1310 100 Chicago, Ill.   WGL 1370 100 Fort Wayne, In F. C. Zieg. 213 W. Main St.   WEED 1420 100 Rocky Mount, N. C.   WGN, Inc., Tribune Tower WGN, Inc., Tribune Tow	0
WDSU Inc. Hotel Monteleone  WDZ 1020 250 Tuscola, III.  James L Bush, Star Store Bidg.  WEAF 660 50000 New York, N. Y. 30 Rockefeller Plaza  WEAR 780 500 Providence, R. I New Crown Hotel  WEBC 1290 1000 Superior, Wis. Spaulding Hotel, Duluth, Minn.  WEBQ 1210 100 Harrisburg, III. 100 E. Popular St.  WEBR 1310 100 Buffalo, N. Y. Howel Broadcasting Co., Inc., 735 Main  WECC 1210 100 Chicago, III. Emil Denemark, 3860 Ogden Ave.  WEED 1420 100 Rocky Mount, N. C.  WEED 1420 100 Rocky Mount, N. C. WEED 1420 100 Rocky Mount, N. C. WEED 1420 100 Reading, Pa. Berks Broadcasting Co., 533 Penn.  WEHC 1420 100 Charlottesville, Va. 7th & Main Sts.  WEHS 1420 100 Cicero, III. WEHS, Inc., 6138 W. Cermak Rd. WELL 1420 100 Battle Creek, Mich. Enquirer News, 38 W. State St. WENS 870 50000 Chicago, III.  WENS 870 50000 Chicago, III.  WENS 8850 1000 Emira, N. Y.  WENS 850 1000 Emira, N. Y.  WENS 850 1000 Emira, N. Y.  WENS 850 1000 Louisville, Ky. WHAM 150 50000 Rochester, N. Y. INC. Avera Wynne, Box 250 50000 Chocago, III. WENS 850 1000 Emira, N. Y.  WHAM 150 50000 Rochester, N. Y. University of Wisconsin WHAM 150 50000 Rochester, N. Y. UNIVERS 850 1000 Emira, N. Y.	
WDZ 1020 250 Tuscola, III.   James L. Bush, Star Store Bldg.   S10 Vine St.   WGBF 630 5000 Evansville, Ind.   S10 Vine St.   WGBF 650 50000 New York, N. Y.   30 Rockefelier Plaza   I16 N. Washington Ave.   WEAN 780 500 Providence, R. I   New Crown Hotel   WEBC 1290 1000 Superior, Wis.   Spaulding Hotel, Duluth, Minn.   WEBQ 1210 100 Harrisburg, III.   100 E. Popular St.   WGBF 1310 100 Newport News, 2813 Washington Ave.   WGM 1310 100 Newport News, 2813 Washington Ave.   WGM 1310 100 Newport News, 2813 Washington Ave.   WGM 1370 100 Fort Wayne, In Fr. C. Zieg, 213 W. Main St.   WEDC 1210 100 Chicago, III.   WGN, Inc., Tribune Tower   WGM, Avera Wynne, Box 221   Peter Goelet (Orange County)   WEEI 590 1000 Boston, Mass.   I28 Tremont St.   WGPC 1420 100 Albany, Ga.   Rylander Theatre Bldg.   WGFS 550 1000 Batfalo, N. Y.   Rand Bldg.   WGFS 550 1000 Batfalo, N. Y.   Rand Bldg.   WGFS 550 1000 Batfalo, N. Y.   Rand Bldg.   WGFS 550 5000 Chicago, III.   WGN, Inc., Tribune Tower   WGPC 1420 100 Albany, Ga.   Rylander Theatre Bldg.   WGFS 550 1000 Batfalo, N. Y.   Rand Bldg.   WGFS 550 1000 Batfalo, N. Y.	
WEAF 660 50000 New York, N. Y. 30 Rockefeller Plaza	
30 Rockefeller Plaza	
WEAN 780 500 Providence, R. I New Crown Hotel  WEBC 1290 1000 Superior, Wis. Spaulding Hotel, Duluth, Minn.  WEBQ 1210 100 Harrisburg. III. 100 E. Popular St.  WEBR 1310 100 Buffalo, N. Y. Howel Broadcasting Co., Inc., 735 Main WEDC 1210 100 Chicago, III. Emil Denemark, 3860 Ogden Ave.  WEED 1420 100 Rocky Mount, N. C. WEBD 1420 100 Rocky Mount, N. C. WEBD 1420 100 Boston, Mass. 182 Tremont St.  WEEU 830 1000 Reading, Pa. Berks Broadcasting Co., 533 Penn.  WEHC 1420 100 Charlottesville, Va. 7th & Main Sts.  WEHS 1420 100 Cicero, III. WEHS, Inc., 6138 W. Cermak Rd. WELL 1420 100 Battle Creek, Mich. Enquirer News, 38 W. State St. Enquirer News, 38 W. State St. WENG 870 50000 Chicago, III. WENG 870 50000 Chicago, III. WENG 870 50000 Chicago, III. WENG 850 1000 Elmira, N. Y. WHAM 1150 50000 Rochester, N. Y. 100 Carlson Road WHAS 820 50000 Louisville, Ky.	
WEBC 1290 1000 Superior, Wis. Spaulding Hotel, Duluth, Minn.   128 N. Crawford Ave.   WGBQ 1210 100 Harrisburg, III.   100 E. Popular St.   WGBR 1310 100 Buffalo, N. Y.   Howel Broadcasting Co., Inc., 735 Main   F. C. Zieg, 213 W. Main St.   WGDC 1210 100 Chicago, III.   WGN, Inc., Tribune Tower   WGN, Inc., Tribun	y
Spaulding Hotel, Duluth, Minn.   128 N. Crawford Ave.	
WEBQ 1210 100 Harrisburg, III.   2813 Washington Ave.   WEBR 1310 100 Buffalo, N. Y.   Howel Broadcasting Co., Inc., 735 Main   WEDC 1210 100 Chicago, III.   WGN 720 50000 Chicago, III	
WEBR 1310 100 Buffalo, N. Y.   WGL 1370 100 Fort Wayne, In F. C. Zieg, 213 W. Main St.   WEDC 1210 100 Chicago, III.   Emil Denemark, 3860 Ogden Ave.   WGN 720 50000 Chicago, III.   WGN, Inc., Tribune Tower	٧a.
Howel Broadcasting Co., Inc., 735 Main   F. C. Zieg, 213 W. Main St.	
Emil Denemark, 3860 Ogden Ave.   WGN, Inc., Tribune Tower   WED 1420 100 Rocky Mount, N. C.   WGNY 1210 100 Chester, N. Y.   Peter Goelet (Orange County)   WGPC 1420 100 Albany, Ga.   Rylander Theatre Bidg.   Rylander Theatre Bidg.   Rylander Theatre Bidg.   WGPC 1420 100 Buffalo, N. Y.   Rand Bidg.   WGR 550 1000 Buffalo, N. Y.   Rand Bidg.   WGST 890 500 Atlanta, Ga.   Ansiey Hotel   WGST 890 500 Atlanta, Ga.   Ansiey Hotel   WGST 890 5000 Schenectady, N   River Road   WHA 940 2500 Madison, Wis.   University of Wisconsin   WHAM 1150 50000 Rochester, N. Y.   222 N. Bank Drive   WGSG 850 1000 Elmira, N. Y.   WHAM 120 50000 Louisville, Ky.   WGSS 850 1000 Elmira, N. Y.   WHAM 820 50000 Louisville, Ky.   WGSG 850 1000 Elmira, N. Y.   WGSG 850 100	
WEED 1420 100 Rocky Mount, N. C.   WGNY 1210 100 Chester, N. Y.   Wm. Avera Wynne, Box 221   Peter Goelet (Orange County)   WEEI 590 1000 Boston, Mass.   182 Tremont St.   WGPC 1420 100 Albany, Ga.   Rylander Theatre Bldg.   Rylander Theatre Bldg.   WGR 550 1000 Buffalo, N. Y.   Berks Broadcasting Co., 533 Penn.   Rand Bldg.   WGST 890 500 Atlanta, Ga.   Ansiey Hotel   WGY 790 50000 Schenectady, N   River Road   WEHS 1420 100 Cicero, III.   WGY 790 50000 Schenectady, N   River Road   WHA 940 2500 Madison, Wis.   University of Wisconsin   WENR 870 50000 Chicago, III.   222 N. Bank Drive   WGSG 850 1000 Elmira, N. Y.   WHAS 820 50000 Louisville, Ky.	
Wm. Avera Wynne, Box 221   Peter Goelet (Orange County)	
WEEL 590 1000 Boston, Mass. 182 Tremont St.   WGPC 1420 100 Albany, Ga. Rylander Theatre Bidg.   WGR 550 1000 Buffalo, N. Y. Berks Broadcasting Co., 533 Penn.   Rand Bidg.   WGST 830 500 Atlanta, Ga. 7th & Main Sts.   WGST 830 500 Atlanta, Ga. Ansiey Hotel   WGST 830 500 Schenectady, N I River Road   WELL 1420 100 Battle Creek, Mich. Enquirer News, 38 W. State St.   WENR 870 50000 Chicago, III.   WGM 1150 50000 Rochester, N. Y. 222 N. Bank Drive   WESG 850 1000 Elmira, N. Y.   WHAS 820 50000 Louisville, Ky.	
WEEU 830 1000 Reading, Pa. Berks Broadcasting Co., 533 Penn.   Rand Bidg.	
Berks Broadcasting Co., 533 Penn.   Rand Bidg.	
7th & Main Sts.  WEHS 1420 100 Cicero, III.  WEHS, Inc., 6138 W. Cermak Rd.  WELL 1420 100 Battle Creek, Mich.  Enquirer News, 38 W. State St.  WENR 870 50000 Chicago, III.  222 N. Bank Drive  WESG 850 1000 Elmira, N. Y.  Ansiey Hotel  WGY 790 50000 Schenectady, N 1 River Road  WHA 940 2500 Madison, Wis.  University of Wisconsin  WHAM 1150 50000 Rochester, N. Y 100 Carlson Road  WHAS 820 50000 Louisville, Ky.	
WEHS 1420 100 Cicero, III.   WGY 790 50000 Schenectady, N   I River Road   I River Road   I River Road   WHA 940 2500 Madison, Wis.   Enquirer News, 38 W. State St.   University of Wisconsin   WENR 870 50000 Chicago, III.   WHAM 1150 50000 Rochester, N. Y 222 N. Bank Drive   WESG 850 1000 Elmira, N. Y.   WHAS 820 50000 Louisville, Ky.	
WELL 1420 100 Battle Creek, Mich. Enquirer News, 38 W. State St.   University of Visconsin   WENR 870 50000 Chicago, III.   222 N. Bank Drive   WESG 850 1000 Elmira, N. Y.   WHAS 820 50000 Louisville, Ky.	v
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222 N. Bank Drive   100 Carlson Road   WESG 850 1000 Elmira, N. Y.   WHAS 820 50000 Louisville, Ky.	<i>r</i> .
Mark Twain Hotel 300 W. Liberty St.	
Mark Twain Hotel 300 W. Liberty St. WEVD 1300 1000 New York, N. Y. WHAT 1310 100 Philadelphia, P	a.
Jewish Daily Forward, Hotel Claridge Public Ledger Bldg.	
WEW 760 1000 St. Louis, Mo. St. Louis University, 221 N. Grand Blvd.  WHAZ 1300 500 Troy, N. Y. Sth. St.	
St. Louis University, 221 N. Grand Blvd.  WEXL 1310 50 Royal Oak, Mich.  8th St.  WHB 860 1000 Kansas City, M	lo.
212 W. 6th St. WHB Broadcasting Co., Scarritt Bldg	
WFAA 800 50000 Dallas, Texas  WHBC 1200 100 Canton, Ohio Edw. P. Graham, 319 Tusc. St., W.	
WFAB 1300 1000 New York, N. Y. WHBF 1210 100 Rock Island, III	١.
Fifth Avenue Broadcasting Corp. Hotel Harms	
WFAM 1200 100 South Bend, Ind. South Bend Tribune, 225 W. Colfax Ave. WHBI 1250 1000 Newark, N. J.	
South Bend Tribune, 225 W. Colfax Ave. 100 Shipman St. WHAS 1210 100 White Plains, N. Y. WHBL 1410 500 Sheboygan, Wi	s.
Hotel Roger Smith Press Publishing Co., Press Bldg.	

WHRQ 1370 100 Memphis, Tenn.   Bridesky, Stak WNBQ, Inc., Hotel Clarking   WHRQ 1210 100 Anderson, Ind.   Anderson Broadcasting Corp., Box 816   WHRQ 1200 100 Green Bay, Wis.   WHRQ 1200 100 Green Bay, Wis.   WHRQ 1200 100 Green Bay, Wis.   WHRQ 1200 100 Boxton, Mass.   WHRQ 1300 100 Green, N.Y.   Exchange Nath Bank Bidg.   WHRQ 140 250 Portsmouth, N. H.   Box 522, 39 Congress St.   WHRQ 140 250 Portsmouth, N. H.   Box 522, 39 Congress St.   WHRQ 140 250 Operation of the Whrole, 140 Frankins St.   WHRQ 140 250 Operation of the Whrole, Inc., 1618 M.   WHRQ 140 100 Decatur, III.   WHRC, Inc., 40 Frankins St.   WHRQ 140 100 Decatur, III.   WHRC, Inc., 1618 M.   Cernak Road   WHRQ 140 100 Decatur, III.   WHRC, Inc., 1618 M.   Cernak Road   WHRQ 140 100 Decatur, III.   WHRC, Inc., 1618 M.   Cernak Road   WHRQ 140 100 Decatur, III.   WHRQ 140 I00				_
WHRU 1210 100 Anderson, Ind.   Anderson Broadcasting Corp., Div. 816   WHRY 1200 100 Green Bay, Wis.   WHRY 1:0.0 100 Green Bay, Wis.   WHRY 1:0.0 100 Green Bay, Wis.   WHRY 1:0.0 100 Bacton, Mass.   WHRY 1:0.0 100 Backson, Wis.   Evebange Natl. Bank Bilg.   WHRY 1:0.0 100 Backson, Wis.   WHRY 1:0.0 100 Bac				WJAC 1310 100 Johnstown, Pa.
Anderson Brondenstinx Corp., Box 816				WJAC, Inc., Locust St.
WHBY 1200				
WHDF 1370		WHBY 1200 100 Green Bay, Wis.		
Mox 643	1			
WIADH \$10 100 Boston, Mass, Matheson Radio Co., 62 Boyston   WHDL 1420 100 Olean, N. Y. Exchange Nath Baits Bidg   WHEB 740 250 Portsmouth, N. H. Box 552, 39 Compress St.   WHEC 1230 500 Rochester, N. Y.   WHEC 1240 500 Rochester, N. Y.   WHEC 1240 500 Rochester, N. Y.   WHEC 1250 500 Rochester, N. Y.   WHEC 1260 100 Bloomington, Ill.   Kaskaskia Broadcastling Co.   WHER 1500 100 Kosciusko, Miss.   417 W. Adams St.   WHEF 1500 100 Kosciusko, Miss.   WHEF 1500 100 Kosciusko, Miss.   WHEF 1500 100 Dayton, Ohio 39 S. Ludlow St.   WHIO 1260 1000 Dayton, Ohio 39 S. Ludlow St.   WHIS 1410 250 Bluefield, W. Va.   Bland St.   WHIB 520 250 Greensburg, Pa.   WHIB 520 250 Greensburg, Pa.   WHIB 520 100 Cleveland, Ohio 1311 Terminal Town   WHO 100 1000 New York, N. Y.   WHO 100 1000 Medison, Wiss.   WHER 1300 100 Jackson, Mich.   WJSt, Inc., 3st. James Hotel WJF, Inc., 216 Locust St.   WHER 1300 100 Jackson, Mich.   WJSt, Inc., 181 James Hotel WJF, Inc., 216 Locust St.   WHER 1300 100 Medison, Wiss.   WHER 1300 100 Jackson, Mich.   WJSt, Inc., 3st. James Hotel WJF, Inc., 306 W. Michigan Ave.   WHER 1200 100 St. Louis, Mo.   WHER 1200 100 Advano, Ohio Ironwood, Mich.   WJSt, Inc., 3st. James Hotel WJF, Inc., 306 No.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400 100 Topeka, Kans.   Hith & Topeka Kilo.   WHER 1400				
Matheson Radio Co., 62 Boyiston   WHDL 1420 100 Olear, N. Y. Exchange Natl. Bank Bidg.   WHER 740 250 Portsmouth, N. H. Box 522, 39 Congress St.   WHEC 1430 500 Rochester, N. Y.   WHEC, Inc., 40 Frankin St.   WHEF 1500 100 Kosciusko, Miss.   417 W. AdamSt.   WHEF 1500 100 Kosciusko, Miss.   417 W. AdamSt.   WHEF 1500 100 Clerro, Ill.   WHIPC, Inc., 6138 W. Cernak Road   WHIPC, Inc., 6138 W. Cerna				
Exchange Natl. Bank Bidg.	l	Matheson Radio Co., 62 Boyiston		
WHEB				
Box 522, 39 Congress St.   WHEC 1430 500 Rochester, N. Y.   WHEC 1430 500 Rochester, N. Y.   WHEC 1430 500 Rochester, N. Y.   WHEC 1430 100 Kosciusko, Miss.   WHEC 1430 100 Kosciusko, Miss.   WHEC 1420 100 Cicero, III.   WHEP 1500 100 Dayton, Ohio 39 S. Ludiow St.   WHIP 1500 100 Dayton, Ohio 39 S. Ludiow St.   WHIP 1500 100 Cleveland, Ohio 1311 Terminal Tower   WHM 1390 1000 Cleveland, Ohio 1311 Terminal Tower   WHM 1390 1000 Cleveland, Ohio 1311 Terminal Tower   WHM 1301 1000 New York, N. Y.   Use 150 Bluedard   WHIP 160 Soudon Des Moines, Iowa Central Brdestg. Co. 94 Walmit St.   WHOM 1500 50000 Des Moines, Iowa Central Brdestg. Co. 94 Walmit St.   WHOM 1500 50000 Des Moines, Iowa Central Brdestg. Co. 94 Walmit St.   WHOM 1500 50000 Des Moines, Iowa Central Brdestg. Co. 94 Walmit St.   WHIP 160 Soudon Des Moines, Iowa Central Brdestg. Co. 94 Walmit St.   WHIP 160 Soudon Des Moines, Iowa Central Brdestg. Co. 94 Walmit St.   WHIP 160 Soudon Des Moines, Iowa Central Brdestg. Co. 94 Walmit St.   WHIP 160 Soudon Des Moines, Iowa Central Brdestg. Co. 94 Walmit St.   WHIP 160 Glenside, Pa.   WHIP 160 Glenside, Pa.   WHIP 160 Glenside, Pa.   Seaboard Radio Brdestg. Corp.   WHIP 170 Journal Ave WHIP 170 Journal	<u> </u>			
WHEC, Inc., 40 Franklin St.	ĺ	Box 522, 39 Congress St.	_	Kaskaskia Broadcasting Co.
WHEF 1500 100 Kosciusko, Miss. 417 W. Adams St.		WHEC 1430 500 Rochester, N. Y.		
Mark		WHEC, Inc., 40 Franklin St.		
WHFC 1420 100 Cicero, III.   WHFC 1020 138 W. Cermak Road   Baton Rouge, La.   Baton Rouge Broadcasting Co. Inc.   WHW 1200 100 New Orleans, La C. C. Carlson, Godehaux Bidg.   C. C. Carlson, Godehaux Bidg.   C. C. Carlson, Godehaux Bidg.   WHS 1300 250 Greensburg, Pa.   Penn-Albert Hotel. 128 Pa. Ave.   WHM 1301 1000 Cleveland, Ohio   I311 Terminal Tower   WHM 1301 1000 New York, N. Y.   I540 Broadway   WHM 1000 50000 Des Moines, Iowa   Central Brdestg. Co., 914 Walnut St.   WHMM 1450 250 Jersey City, N. J.   2870 Boulevard   WHP 1430 500 Harrisburg, Pa.   WHP, Inc., 216 Locust St.   WHMM 1450 250 Jersey City, N. J.   WJD 1132 2000 Chicago, III.   WJJD Inc., 201 N. Wells St.   WJMS 1420 100 Ironwood, Mich.   WJMS 120 100 Ironwood, Mich.   WJW 175 50000 Detroit, Mich.   WJW 175 50000 Detroit, Mich.   WJW 175 50000 Washington, D. C.   Earle Building   WHM 170 100 Jackson, Mich.   WJW 175 100 Gast Lansing, Mich.   WJW 175 100 Alson, Mich.   WJW 175 100				
WHIO 1260 1000 Dayton, Ohio 3 9 S. Ludlow St.		WHFC 1420 100 Cicero, III.		
39 S. Laddow St.   WHS   1410   250 Bluefield, W. Va.   Bland St.   WHS   1410   250 Bluefield, W. Va.   Bland St.   WHS   1210   100 Gadsden, Ala.   Gadsden Broadcasting Co., 112 N. 8th St   WHJ   1210   100 Gadsden, Miss.   Lamar Life Bidg.   WJX   1270   1000 Jackson, Miss.   Lamar Life Bidg.   WJX   1270   100 Lansing, Mich.   Coapital City Bridesk; Co.   WJJD   1130   20000 Chicago, Ill.   WJJD   1130   20000 Chic				Baton Rouge Broadcasting Co., Inc.
WHIS 1410 250 Bluefield, W. Va. Bland St.				
Bland St.   Gadsden Brondesting Co., 112 N. 8th St.	-			WJBY 1210 100 Gadsden, Ala.
Penn-Albert Hotel, 128 Pa. Ave.   WHK 130 1000 Cleveland, Ohio   1311 Terminal Tower   WJE 1210 100 Hagerstown, Md.   1311 Terminal Tower   WJE 1210 100 Lansing, Mich.   Lovely Dame Bidg.   WJE 1210 100 Lansing, Mich.   Lovely Dame Bidg.   WJE 1210 100 Central Brdesty. Co., 914 Walnut St.   WHO 1000 50000 Des Moines, lowa   Central Brdesty. Co., 914 Walnut St.   WHOM 1450 250 Jersey City, N. J.   2870 Boulevard   WHP 1430 500 Marrisburg, Pa.   WJJD, Inc., 2018 A.   WJJD, Inc.,		Bland St.		
WHK				
1311 Terminal Tower   WHM   1010   1000 New York, N. Y.   1540 Broadway   WHM   1010   1000 New York, N. Y.   1540 Broadway   WHM   1000   50000 Des Moines, Iowa   Central Brdestg. Co. 914 Walnut St.   WHM   1210   1000 Lansing, Mich.   Capiteal City Brdestg. Co.   His Walnut St.   WHM   1430   500 Harrisburg, Pa.   WJJD   1130   20000 Chieago, Ill.   WJJMS   1120   100 Madison, Wis.   WJMS   1420   100 Utroit, Mich.   WJMS   1120   100 Madison, Wis.   WJMS   1120   100 Madison, Wis.   WJMS   1200   100 Glenside, Pa.   Seaboard Radio Brdestg. Corp.   WJBM   1210   100 Akron, Ohio   WJW, Inc.   418 High St.   WJJV   1210   100 Akron, Ohio   WJW, Inc.   418 High St.   WJJV   760   50000 New York, N. Y.   30 Rockefeller Plaza   WKAQ   1240   1000 Wishington, Del.   WJWS   1200   100 Utica, N. Y.   WJMS   1200   100 Utica, N. Y.   WJMS   1200   100 St. Louis, Mo.   WILL   1200   100 St. Louis, Mo.   WKBB   1500   100 East Dubuque, Ill.   Sanders Bros. Radio Station   WKBB   1500   100 East Dubuque, Ill.   Sanders Bros. Radio Station   WKBB   1200   100 Harrisburg, Pa.   WKBB   1200   100 Richmond, Ind.   Knox Radio Corp., Box 308   WKBW   1500   100 Griffin, Ga.   Raddo Station   WKEU   1500   100 Criffin, Ga.   Raddo Station   WKEU   1500   100 Crif				
1540 Broadway   WHO 1000 50000 Des Moines, lowa   Central Brdestg. Co., 914 Walmit St.   WJD 1130 20000 Chicago, III.   WJJD 118 210 100 Ironwood, Mich.   WJJD 118 120 100 Ironwood, Mich.   WJMS, Inc., 201 N. Wells St.   WJMS, Inc., 15 5000 Detroit, Mich.   WJR, Inc., 15 100 Atlanta, Ga.   WJK, Inc., 15 100 Atlanta, Ga.   WJL 1370 100 Action, Mich.   WJBM, Inc., 300 W. Michigan Ave.   WJL 1370 100 Atlanta, Ga.   WJL 1370 100 Akron, Ohio   WJW, Inc., 41 S. High St.   WJZ 760 50000 New York, N. Y.   WJZ 760 50000 New York, N. Y.   WJZ 760 50000 San Juan, P. R.   Radio Corp. of Porto Rico, P. O. Box 358   WJBX 1200 100 Utica, N. Y.   WJBX, Inc., 15 Natl. Bank Bidg.   WKAR 1240 1000 San Juan, P. R.   Radio Corp. of Porto Rico, P. O. Box 358   WKAR 1240 100 Utica, N. Y.   WKAR 1240 100 East Lansing, Mich.   WKAR 1240 100 East Lansing, Mich.   WKAR 1240 100 East Lansing, Mich.   WKBH 1380 1000 LaCrosse, Wis.   WKBH 1420 100 Gicero, III.   WKBH 1420 100 G	1			Lovely Dame Bldg.
WHO 1000 50000 Des Moines, lowa   Central Brdestg. Co., 914 Walmut St.   WJDD, Inc., 201 N. Wells St.   WJMS, 1420 100 Ironwood, Mich.   WJMS, 1420 1000 Detroit, Mich.   WJMS, 1420 100 Detroit, Mich.   WJMS, 1420 100 Akton, Ohio   WJMS, 1420 100 Detroit, Mich.   WJMS, 1420 100 Akton, Ohio   WJMS, 1420 100 Detroit, Mich.   WJMS, 1420 100 Akton, Ohio   WJMS, 1420 1000 Akton, Ohio   W				WJIM 1210 100 Lansing, Mich.
WHOM 1450   250   Jersey City, N. J.   2870 Boulevard   WJMS, Inc., St. James Hote	-		_	WIID 1130 20000 Chicago III.
WHOM 1450				WJJD, Inc., 201 N. Wells St.
WHP				WJMS 1420 100 Ironwood, Mich.
WHP, Inc., 216 Locust St.				WIR 750 50000 Detroit. Mich.
MIBG 970 100 Glenside, Pa.   Seaboard Radio Brdestg. Corp.				WJR, Inc., Fisher Bldg.
WIBG 970 100 Glenside, Pa.   Seaboard Radio Brdestg. Corp.				
Seaboard Radio Brdestg. Corp.  WiBM 1370 100 Jackson, Mich. WiBM, Inc., 306 W. Michigan Ave. WiBU 1210 100 Poynette, Wis. WiBW 580 1000 Topeka, Kans. Ilth & Topeka Bivd. WiBX, Inc., 1st Natl. Bank Bidg. WiCC 600 500 Bridgeport, Conn. Southern Conn. Broadcasting Corp. WILL 1200 100 St. Louis, Mo. Melbourne Hotel WILL 390 1000 Urbana, Ill. University of Illinois WILM 1420 100 Wilmington, Del. 920 King St. WiND 560 1000 Gary, Ind. 504 Broadway WINS 1180 1000 New York, N. Y. WIND 1300 1000 Miami, Fia. Herald Bidg. Metropolis Pub. Co. WiF 1400 500 Indianapolis, Ind. 540 N. Meridian St. WiSC 1310 100 Milwaukee, Wis. Milwaukee Brdestg. Co. WISS 1310 100 Milwaukee, Wis. Milwaukee Brdestg. Co. WISS 11120 250 Milwaukee, Wis. Milwaukee Brdestg. Co. WISS 1120 250 Milwaukee, Wis. MIlwaukee Brdestg. Co. WISS 1120 250 Milwaukee, Wis. Milwaukee Brdestg. Co. WISS 1120 250 Milwaukee, Wis. WISS 11120 250 Milwaukee, Wis. WISS 11120 250 Milwaukee, Wis.		-	-	
WiBM, Inc., 306 W. Michigan Ave.				Volunteer Life Bldg.
WiBU 1210 100 Poynette, Wis.		WIBM 1370 100 Jackson, Mich.		
Win. C. Forrest, R. F. D. No. 3   30 Rockefeller Plaza   WKBW 580 1000 Topeka, Kans.   11th & Topeka Bivd.   WKAR 1040 1200 East Lansing, Mich.   Wisk 1200 100 Utica, N. Y.   Wisk 1200 100 St. Louis, Mo.   Will 1300 1000 LaCrosse, Wis.   WKBH 1380 1000 LaC				WJZ 760 50000 New York, N. Y.
Radio Corp. of Porto Rico, P. O. Box 358		Wm. C. Forrest, R. F. D. No. 3		30 Rockefeiler Plaza
WiBX 1200 100 Utica, N. Y.   WiBX, Inc., 1st Natl. Bank Bldg.   WiCC 600 500 Bridgeport, Conn.   Southern Conn. Broadcasting Corp.   WiL 1200 100 St. Louis, Mo.   Michigan State College   WKBB 1500 100 East Dubuque, Ill.   Sanders Bros. Radio Station   WKBH 1380 1000 LaCrosse, Wis.   WKBH, Inc., 409 Main St.   WKBH				
WIBX, Inc., 1st Natl. Bank Bidg. WICC 600 500 Bridgeport, Conn. Southern Conn. Broadcasting Corp. WIL 1200 100 St. Louis, Mo. Melbourne Hotel WILL 890 1000 Urbana, III. University of Illinois WILM 1420 100 Wilmington, Del. 920 King St. WIND 560 1000 Gary, Ind. 920 King St. WIND 560 1000 Gary, Ind. 920 King St. WIND 561 1000 Mew York, N. Y. 110 E. 58th St., Hearst Radio, Inc. WIOD 1300 1000 Miami, Fla. Herald Bidg., Metropolis Pub. Co. WIP 610 500 Philadelphia, Pa. Gimbel Bidg. WIRE 1400 500 Indianapolls, Ind. 540 N. Meridian St. WIS 1010 500 Columbia, S. C. Station WIS, Inc., 1811 Main St. WISC 1310 100 Milwaukee, Wis. Milwaukee Brdestg. Co. WISN 1120 250 Milwaukee, Wis. WISS 1120 250 Milwaukee, Wis. WISS 100 Cincinnatl, Ohio		WIRY 1200 100 Utica N. Y.	-	
Southern Conn Broadcasting Corp.   Sanders Bros. Radio Station   Will 1200 100 St. Louis, Mo.   Melbourne Hotel   Will 890 1000 Urbana, III.   WKBH, Inc., 409 Main St   WKB	1	WIBX, Inc., 1st Natl. Bank Bldg.		Michigan State College
Will 1200 100 St. Louis, Mo.   Melbourne Hotel		WICC 600 500 Bridgeport, Conn.		
WILL 890 1000 Urbana, III.   WKBI 1420 100 Cicero, III.   WKBI, Inc., 6138 W. Cermak Road   WKBN 570 500 Youngstown, Ohio   17 N. Champlon St.   WKBU 1500 100 Harrisburg, Pa.   Penn Harris Hotel   WKBV 1500 100 Harrisburg, Pa.   Penn Harris Hotel   WKBV 1500 100 Richmond, Ind.   Knox Radio Corp., Box 308   WKBV 1480 5000 Buffalo, N. Y.   Rand Bidg.   WKBV 1480 5000 Buffalo, N. Y.   Rand Bidg.   WKBV 1500 100 Muskegon, Mich.   Karl L. Ashbacker & Sons   WKEU 1500 100 Griffin, Ga.   Station WKEU, 906 Hill St.   WKSU 1500 100 Griffin, Ga.   Station WKEU, 906 Hill St.   WKSU 1500 100 Griffin, Ga.   Station WKEU, 906 Hill St.   WKSU 1500 100 Sunbury, Pa.   Hill Waukee Brdests. Co.   WKSU 1500 100 Sunbury, Pa.   Hill Waukee Brdests. Co.   WKSU 1500 100 Cincinnati, Ohio   WKSU 1500 100 Cincinnati, Ohio			-	
WILM 1420 100 Wilmington, Del. 990 King St.   WKBN 570 500 Youngstown, Ohio 17 N. Champlon St.   WKBD 1200 100 Harrisburg, Pa.   Penn Harris Hotel   WKBV 1500 100 Richmond, Ind.   WKBV 1500 100 Richmond, Ind.   WKBV 1500 100 Richmond, Ind.   Knox Radio Corp., Box 308   WKBV 1500 100 Richmond, Ind.   Knox Radio Corp., Box 308   WKBV 1500 100 Buffalo, N. Y.   Rand Bidg.   WKBV 1480 5000 Buffalo, N. Y.   Rand Bidg.   WKBV 1480 5000 Buffalo, N. Y.   Rand Bidg.   WKBV 1480 5000 Buffalo, N. Y.   Rand Bidg.   WKBV 1500 100 Griffin, Ga.   Karl L. Ashbacker & Sons   WKBV 1500 100 Griffin, Ga.   Radio Station WKEU, 906 Hill St.   Wis 1010 500 Columbia, S. C.   Station WKEU, 1500 100 Griffin, Ga.   Radio Station WKEU, 906 Hill St.   WKSC 1310 100 Milwaukee, Wis.   WKOK 1210 100 Sunbury, Pa.   His Nis 1120 250 Milwaukee, Wis.   WKRC 550 1000 Cincinnati, Ohio		Melbourne Hotel		WKBH, Inc., 409 Main St.
WILM 1420 100 Wilmington, Del. 990 King St.   WKBN 570 500 Youngstown, Ohio 17 N. Champlon St.   WKBD 1200 100 Harrisburg, Pa.   Penn Harris Hotel   WKBV 1500 100 Richmond, Ind.   WKBV 1500 100 Richmond, Ind.   WKBV 1500 100 Richmond, Ind.   Knox Radio Corp., Box 308   WKBV 1500 100 Richmond, Ind.   Knox Radio Corp., Box 308   WKBV 1500 100 Buffalo, N. Y.   Rand Bidg.   WKBV 1480 5000 Buffalo, N. Y.   Rand Bidg.   WKBV 1480 5000 Buffalo, N. Y.   Rand Bidg.   WKBV 1480 5000 Buffalo, N. Y.   Rand Bidg.   WKBV 1500 100 Griffin, Ga.   Karl L. Ashbacker & Sons   WKBV 1500 100 Griffin, Ga.   Radio Station WKEU, 906 Hill St.   Wis 1010 500 Columbia, S. C.   Station WKEU, 1500 100 Griffin, Ga.   Radio Station WKEU, 906 Hill St.   WKSC 1310 100 Milwaukee, Wis.   WKOK 1210 100 Sunbury, Pa.   His Nis 1120 250 Milwaukee, Wis.   WKRC 550 1000 Cincinnati, Ohio				WKBI 1420 100 Cicero, III.
920 King St				WKBN 570 500 Youngstown. Ohio
Denn Harris Hotel   WKBV 1300 100 New York, N. Y.   WKBV 1500 100 Richmond, Ind.   Knox Radio Corp., Box 308   WKBW 1480 5000 Buffalo, N. Y.   Rand Bldg.   WKBV 1500 100 Muskegon, Mich.   Knox Radio Corp., Box 308   WKBW 1480 5000 Buffalo, N. Y.   Rand Bldg.   WKBV 1500 100 Muskegon, Mich.   Karl L. Ashbacker & Sons   WKBV 1500 100 Griffin, Ga.   Radio Station WKEU, 906 Hill St.   Wis 1010 500 Columbia, S. C.   Station Wis, Inc., 1811 Main St.   WisC 1310 100 Milwaukee, Wis.   WKWC 1210 100 Sunbury, Pa.   WKSV 1210 100 Sunbury, Pa.   WKSV 1210 100 Cincinnati, Ohio   WKSV 550 1000 Cincinnati, Ohio		920 King St.		17 N. Champion St.
Wins 1180 1000 New York, N. Y.   WKBV 1500 100 Richmond, Ind.   Knox Radio Corp., Box 308   Wildle 1300 1000 Miami, Fla.   Herald Bidg., Metropolis Pub. Co.   Wips 610 500 Philadelphia, Pa.   Gimbel Bidg.   Wiss 1010 500 Columbia, S. C.   Station Wis, Inc., 1811 Main St.   Wisc 1310 100 Milwaukee, Wis.   Milwaukee Brdestg. Co.   Wish 1210 100 Sunbury, Pa.   History New Columbia, S. C.   Wisc 1310 100 Milwaukee, Wis.   Milwaukee Brdestg. Co.   Wish 1210 100 Sunbury, Pa.   History New Columbia, S. C.   Wisc 1310 100 Milwaukee, Wis.   Wisc 1310 100 Milwaukee, Wis.   Wisc 1310 100 Cincinnati, Ohio				
110 E. 58th St., Hearst Radio, Inc.   Knox Radio Corp., Box 308				4
Herald Bidg., Metropolis Pub. Co.   Rand Bidg.		110 E. 58th St., Hearst Radio, Inc.		Knox Radio Corp., Box 308
WiP 610 500 Philadelphia, Pa. Glmbel Bildg.   WKBZ 1500 100 Muskegon, Mich. Karl L. Ashbacker & Sons   WiRE 1400 500 Indianapolis, Ind.   S40 N. Meridian St.   WiS 1010 500 Columbia, S. C. Station Wis, Inc., 1811 Main St.   WKJC 1200 100 Lancaster, Pa. Station Wis, Inc., 1811 Main St.   WKJC 1310 100 Milwaukee, Wis.   WKJC 1210 100 Sunbury, Pa.   History Milwaukee Bridsts. Co.   WKJC 1500 N. Front St.   WKSC 550 1000 Cincinnati, Ohio				
Gimbel Bidg.   Karl L. Ashbacker & Sons				
S40 N. Meridian St.				Karl L. Ashbacker & Sons
Wis 1010 500 Columbia, S. C.   Station WIS, Inc., 1811 Main St.   WKJC 1200 100 Lancaster, Pa. 16 W. King St.   WisC 1310 100 Milwaukee, Wis.   WKOK 1210 100 Sunbury, Pa.   1150 N. Front St.   WKRC 550 1000 Cincinnati, Ohio				
Station WIS, Inc., ISII Main St.   16 W. King St.	-		-	
WISC 1310 100 Milwaukee, WIs.   WKOK 1210 100 Sunbury, Pa.				16 W. King St.
WISN 1120 250 Milwaukee, Wis. WKRC 550 1000 Cincinnati, Ohio				
				WKRC 550 1000 Cincinnati, Ohio
		123 W. Michigan St., Hearst Radio, Inc.		

WKY 900 1000 Oklahoma City, Okla. Plaza Court Bldg.	WMFt 900 500 New Haven, Conn. Patrick J. Goode
WKZO 590 1000 Kalamazoo, Mich. John E. Fetzer, Burdick Hotel	WMFJ 1420 100 Daytona Beach, Fla. W. Wright Esch
WLAC 1470 5000 Nashville, Tenn.	WMFN 1210 100 Clarksdale, Miss.
WLAC, Inc., 159—4th Ave., No. WLAP 1420 100 Lexington, Ky.	Attala Brdestg. Corp.  WMFO 1370 100 Decatur, Ala.
Main & Esplanade WLB 1250 1000 Minneapolis, Minn.	James R. Doss, Jr. WMFR 1200 100 High Point, N. C.
University of Minnesota	Hart & Nelson
WLBC 1310 50 Muncle, Ind. D. A. Burton, Anthony Bldg.	WMMN 890 500 Fairmount, W. Va. West Va. Brdestg. Corp., 325 Main St.
WLBF 1420 100 Kansas City, Kans. WLBF Broadcasting Co., Huron Bldg.	WMPC 1200 100 Lapeer, Mich. 81 Liberty St.
WLBL 900 2580 Stevens Point, Wis.	WMT 600 1000 Cedar Rapids, Iowa
Wisconsin Dept. of Agriculture and Markets WLBZ 620 500 Bangor, Me.	Hotel Montrose WNAC 1230 1000 Boston, Mass.
Maine Broadcasting Co., Inc., 100 Main WLEU 1420 100 Erie, Pa.	21 Brookline Ave. WNAD 1010 1000 Norman, Okla.
Leo J. Omelian WLLH 1370 100 Lowell, Mass.	University of Oklahoma WNAX 570 1000 Yankton, S. D.
Merrimac Brdestg Co., Box D	House of Gurney, Inc., 2nd and Capital St.
WLNH 1310 100 Laconia, N. H. 523 Main St.	WNBC 1380 250 New Britain, Conn. Wm. J. Sanders, 147 Main St.
WLS 870 50000 Chicago, III. 1230 W. Washington Blvd.	WNBF 1500 100 Binghamton, N. Y. Ariington Hotel
WLTH 1400 500 Brooklyn, N. Y. 305 Washington St.	WNBH 1310 100 New Bedford, Mass. 251 Union St.
WLVA 1200 100 Lynchburg, Va. 915 Main St.	WNBR 1430 500 Memphis, Tenn.
WLW 700 50000 Cincinnati. Ohio	Memphis Broadcasting Co., Hotel DeVoy WNBX 1260 1000 Springfield, Vt.
1329 Arlington St.  WLWL 1100 5000 New York, N. Y.	WNBX Broadcasting Corp., 39 Main St. WNBZ 1290 100 Saranac Lake, N. Y.
415 W. 59th St. WMAL 630 250 Washington, D. C.	Smith & Mace, 70 Broadway WNEL 1290 500 San Juan, P. R.
712—11th St., N. W. WMAQ 670 50000 Chicago, III.	Box 1252
Merchandise Mart	WNEW 1250 1000 Newark, N. J. Wodaam Corp., 1060 Broad
WMAS 1420 100 Springfield, Mass. WMAS, Inc., 70 Chestnut St.	WNOX 560 1000 Knoxville, Tenn. WNOX, Inc., Hotel Andrew Johnson
WMAZ 1180 1000 Macon, Ga. 211 Cotton Ave.	WNRA 1420 100 Muscle Shoals, Ala.
WMBC 1420 100 Detroit, Mich. 7310 Woodward Ave.	Kathryn Jones, P. O. Box 486, Sheffield, Ala. WNRI 1200 100 Newport, R. I.
WMBD 1440 500 Peoria, III.	S. George Webb WNYC 810 1000 New York, N. Y.
114 N. Madison St. WMBG 1210 100 Richmond, Va.	Centre & Duane Sts. WOAI 1190 50000 San Antonio, Texas
914 W. Broad St. WMBH 1420 100 Joplin, Mo.	Southland Industries, Inc., 1038 Navarro
1334 Roosevelt St.	WOC 1370 100 Davenport, towa Palmer School of Chiropractic
WMBI 1080 5000 Chicago, III. 153 Institute Place	WOCL 1210 50 Jamestown, N. Y. A. E. Newton, 840 N. Main St.
WMBO 1310 100 Auburn, N. Y. WMBO, Inc., Metcalf Bldg.	WOI 640 5000 Ames, Iowa Lowa State College
WMBQ 1500 100 Brooklyn, N. Y. Metropolitan Brdestg. Corp., 95 Leonard St.	WOKO 1430 500 Albany, N. Y. WOKO, Inc., Hotel Jen Eyek
WMBR 1370 100 Jacksonville, Fla.	WOL 1310 100 Washington, D. C.
F. J. Reynolds, Carling Hotel WMC 780 1000 Memphis, Tenn.	American Broadcasting Co., Annapolis Hotel WOMT 1210 100 Manitowoc, Wis.
WMC. Inc., Hotel Gayoso WMCA 570 500 New York, N. Y.	Francis M. Kadow, Box 326 WOOD 1270 500 Grand Rapids, Mich.
WMEX 1500 180 Boston, Mass.	Grand Rapids Natl. Bank Bldg.
The Northern Corp., Hotel Manger	WOPI 1500 100 Bristol, Tenn. 22nd & State Sts.
WMFD 1370 100 Wilmington, N. C. Richard Austin Dunlea	WOR 710 50000 Newark, N. J.
WMFF 1310 100 Plattsburg, N. Y. Plattsburg Broadcasting Corp.	WORC 1280 500 Worcester, Mass.
WMFG 1210 100 Hibbing, Minn.	Alfred F. Kleindienst, 60 Franklin St. WORK 1320 1000 York, Pa.
Head of the Lakes Brdcstg. Co. WMFH 1120 500 Boston, Mass.	York Broadcasting Co., 15 S. Beaver St.  WOS 630 500 Jefferson City, Mo.
Joseph M. Kirby	State Highway Control, Capitol Bidg.

WOSU 570 750 Columbus, Ohio	WSAI 1330 1000 Cincinnati, Ohio
Ohio State University WOV 1130 1000 New York, N. Y.	Crosiey Radio Corp., 1329 Arlington
132 West 43rd St.	WSAJ 1310 100 Grove City, Pa.
	Grove City College, 418 Popular St.
WOW 590 1000 Omaha, Neb.	WSAN 1440 500 Allentown, Pa. WSAN, Inc., 39 10th St.
Woodmen of the World, 4th and Farnam	
WOWO 1160 10000 Fort Wayne, Ind. Main Auto Supply Co., 213 W. Main	WSAR 1450 250 Fall River, Mass. Academy of Music Bldg.
WPAD 1420 100 Paducah, Ky.	
2201 Broadway	WSAZ 1190 1000 Huntington, W. Va. WSAZ, Inc., P. O. Box 729
WPAR 1420 100 Parkersburg, W. Va.	WSR 740 50000 Atlanta Ca
Ohio Valley Brdestg. Corp.	WSB 740 50000 Atlanta, Ga. Atlanta Journal, 7 N. Forsyth St.
WPAX 1210 250 Thomasville, Ga.	WSBC 1210 100 Chicago, III.
H. Wimpy, 135 E. Jackson St.	Gene T. Dyer, 1258 S. Michigan Ave.
WPAY 1370 100 Portsmouth, Ohio	WSBT 1360 500 South Bend, Ind.
F. P. Moler	South Bend Tribune, 225 W. Colfax Ave.
WPEN 920 250 Philadelphia, Pa.	WSFA 1410 500 Montgomery, Ala,
22nd & Walnut Sts.	Jefferson Davis Hotel
WPFB 1370 100 Hattesburg, Miss.	WSGN 1310 100 Birmingham, Ala.
Forest Brdcstg. Co.	Ormond O. & Mary C. Black
WPG 1100 5000 Atlantic City, N. J.	WSIX 1210 100 Springfield, Tenn.
City of Atlantic City, Convention Hall	638 Tire & Vulcanizing Co.
WPHR 880 500 Petersburg, Va.	WSJS 1310 100 Winston-Salem, N.C.
WLBG, Inc., Medical Arts Bldg.	Winston-Salem Journal Co., 416 N. Marshall
WPRO 630 250 Providence, R. I. Cherry & Webb Brdcstg. Co., 15 Chestnut	WSM 650 50000 Nashville, Tenn.
	301—7th Ave. No.
WPRP 1420 100 Ponce, P. R. Julio M. Conesa	WSMB 1320 1000 New Orleans, La. WSMB, Inc., Maison Blanche Bldg.
WPTF 680 1000 Raleigh, N. C.	WSMK 1380 200 Dayton, Ohio
324 Fayetteville St.	WSMK, Inc., Loew Theatre Bldg.
WQAM 560 1000 Miami, Fla.	WSOC 1210 100 Charlotte, N. C.
Miami Brdestg. Co., Inc., 327 N.E. 1st Ave.	WSOC. Inc., Box 730
WQAN 880 250 Scranton, Pa.	WSPA 920 1000 Spartanburg, S. C.
Scranton Times, 149 Penn Ave.	Virgil V. Evans, Ravenel and Avant St.
WQBC 1360 1000 Vicksburg, Miss.	WSPD 1340 1000 Toledo, Ohio
Delta Broadcasting Co., Hotel Vicksburg	Toledo Broadcasting Co., 505 Jefferson
WQDM 1370 100 St. Albans, Vt.	WSUI 880 500 lowa City, lowa
42 N. Main St.	State University of Iowa
WRAK 1370 100 Williamsport, Pa.	WSUN 620 1000 St. Petersburg, Fla.
WRAK, Inc., 244 W. 4th St.	Chamber of Commerce
WRAW 1310 100 Reading, Pa.	WSVA 550 500 Harrisonburg, Va.
Reading Broadcasting Co., 533 Penn St.	Shenandoah Valley Brdcstg, Corp. WSVS 1370 50 Buffalo, N. Y.
WRAX 920 250 Philadelphia, Pa. WRAX Broadcasting Co., 217 S. Broad St.	WSVS 1370 50 Buffalo, N. Y. 666 E. Delavan Ave.
WRBL 1200 100 Columbus, Ga.	WSYB 1500 100 Rutland, Vt.
Royal Theatre Bldg.	Philip Weiss Music Co., 80 West St.
WRBX 1410 250 Roanoke, Va.	WSYR 570 250 Syracuse, N. Y.
P. O. Box 2389	E. Onondaga & S. Warren Sts.
WRC 950 500 Washington, D. C.	WTAD 900 500 Quincy, III.
National Press Bidg.	Illinois Brdestg. Corp., State and 6th
WRDO 1370 100 Augusta, Me.	WTAG 580 500 Worcester, Mass.
WRDO, Inc., Augusta House	18 Franklin St.
WRDW 1500 100 Augusta, Ga.	WTAL 1310 100 Tallahassee, Fla.
Augusta Brdcstg. Co., 309 8th St.	Florida Capitol Broadcasters, Inc.
WREC 600 1000 Memphis, Tenn.	WTAM 1070 50000 Cleveland, Ohio
WREC, Inc., Hotel Peabody	1367 E. 6th St.
WREN 1220 1000 Lawrence, Kans. WREN Brdcstg. Co., 8th and Vermont St.	WTAQ 1330 1000 Eau Claire, Wis,
WRGA 1500 100 Rome, Ga.	Gillette Rubber Co., Hotel Eau Claire
10 Third Ave.	WTAR 780 500 Norfolk, Va. WTAR Radio Corp., Wainwright Bldg.
WRJN 1370 100 Racine, Wis.	WTAK Radio Corp., Wainwright Bing. WTAW 1120 500 College Station, Tex.
Racine Broadcasting Corp., Hotel Racine	Agricultural and Mechanical College
WROK 1410 500 Rockford, III.	WTAX 1210 100 Springfield, III.
109 So. Water St.	WTAN, Inc., 416 E. Capitol Ave.
WROL 1310 100 Knoxville, Tenn.	WTBO 800 250 Cumberland, Md.
Stuart Broadcasting Corp., 524 S. Gay	Associated Brdestg. Corp., Box 794
WRR 1280 500 Dallas, Texas	WTCN 1250 1000 Minneapolis, Minn.
City of Dalias, Southland Life Bldg.	Wesley Temple Bldg. WTEL 1310 100 Philadelphia, Pa.
WRUF 830 5000 Gainesville, Fla.	
State University	Broad & Erie Ave.
WRVA 1110 5000 Rechmond, Va. Larus & Bros Co., Inc., 22nd and Gary St.	WTFI 1450 500 Athens, Ga. Liberty Brdostg. Co., 133 E. Washington St.
T LEACHS & BYOS CO. THE ZZDH ADD GATV St.	I LIDELLY DIUGNIZ, CO., 100 Pr., WASHINGTON St.
David of Dion Con, Inc., III and Can, Dr.	

	1	XEFA 1180 500 Mexico City, D. F.
	WTIC 1040 50000 Hartford, Conn. 26 Grove St.	Eduardo Limon Segui, Meditarraneo 236
	WTJS 1310 100 Jackson, Tenn.	XEFB 1420 100 Monterrey, N. L.
	Sun Publishing Co., Sun Bldg.	Jesus Quintanilla, P. O. Box 317
	WTMJ 620 1000 Milwaukee, Wis.	XEFC 1310 100 Merida, Yuc.
	The Journal Co., 333 W. State St.	J. Molina Font. Calle 59, 517
	WTMV 1500 100 East St. Louis, III.	XEFE 920 250 Laredo, Tams.
	Mississippi Valley Brdcstg. Co.	R. T. Carranza, Km. 4 Carretera Laredo Mt
	WTNJ 1280 500 Trenton, N. J.	XEFG 1100 250 Mexico City, D. F.
	Trenton Brdcstg. Co., Stacy Trent Hotel	Ricardo Gonzales Montero, Tepic 48
	WTOC 1260 1000 Savannah, Ga.	XEFI 1440 250 Chihuahua, Chih.
-	Savannah Brdcstg. Co., De Soto Hotel WTRC 1310 50 Elkhart. Ind.	Feliciano Lopez Isles, Ap. 157  XEFJ 1230 100 Monterrey, N. L.
	Truth Pub. Co., Inc., Hotel Elkhart	R. Junco de la Vega, P. O. Box 186
	WVFW 1400 500 Brooklyn, N. Y.	XEFL 1150 500 Tiluana, B. C.
	Paramount Brdcstg. Co., 1 Nevins St.	(P. O. Box 6, San Diego, Calif.)
	WWAE 1200 100 Hammond, Ind.	XEFO 940 5000 Mexico City, D. F.
	402 Hammond Bldg.	Reforma No. 137
	WWC 1420 1000 Spartanburg, S. C.	XEFV 1210 100 Jaurez, Chih.
	Virgil V. Evans, Ravenal & Avant St.	Cordova & Prieto, Ave. Ferrocaril 104  XEFW 1310 250 Tampico, Tams.
	WWJ 920 1000 Detroit, Mich. Evening News Assn., 616 Lafayette Blvd.	J. E. Martinez, Salvador Diaz Miron 6
	WWL 850 10000 New Orleans, La.	XEFZ 1370 100 Mexico City, D. F.
	Loyola University, Roosevelt Hotel	Manuel Zetina, Calzada Nonoalco 481
	WWNC 570 1000 Asheville, N. C.	XEG 1270 500 Ensenada, B. C.
	Citizen Brdestg. Co., Inc., Flatiron Bldg.	Juan C. Chavez
	WWRL 1500 100 Woodside, N. Y.	XEH 1150 250 Monterrey, N. L.
	4130-58th St.	Tarnava y Cia, P. O. Box 147
1	WWSW 1500 100 Pittsburgh, Pa.	XEI 1370 125 Morelia, Mich. Carlos Gutierrez M., F. I. Madero 545
-	Hotel Schenley WWVA 1160 5000 Wheeling, W. Va.	XEJ 1020 1250 Juarez, Chih.
1	Hawley Bldg.	Juan G. Buttner, P. O. Box 111
	WXYZ 1240 1000 Detroit, Mich.	XEK 990 100 Mexico City, D. F.
	Macabees Bldg.	Arturo Martinez, Jalapa No. 51
	W1XBS 1530 1000 Waterbury, Conn.	XEKL 1240 500 Leon, Guan.
	61 Leavenworth St., Amer. Republican, Inc.	5 de Mayo 26
	W2XR 1550 1000 Long Island City, N.Y. Scientic Brdcstg. Serv., 41 Park Row, N.Y.	XELA 1240 50 Saltillo, Coah.
	W6XA 1550 1000 Bakersfield, Calif.	Enrique Gomez, Chauhtemos 28 Sur XELC 740 100 Mexico City, D. F.
	Pioneer Mercantile Co.	XELC 740 100 Mexico City, D. F. Manuel Valdes Bravo, C. Central 112
	W9XBY 1530 1000 Kansas City, Mo.	XELM 1310 15 Mineral del Monte,
	First National Television Inc.	Jose Sanchez, Abesolo 1-A Dgo.
1 1	XEA 1060 125 Guadalajara, Jal.	XELO 1110 10000 Piedras Negras, Coah.
	Alberto Palos Souza, Apdo. 197	Piedras Negras Brdcstg. Co.
	XEAA 920 200 Mexicali, B. C. Carlos Blando, Apto, 42	Manuel M. Pier, Aretsanos 10
	XEAF 980 250 Nogales, Son.	XEMO 865 2500 Tiluana, B. C.
1	Francisco G. Elias, Hotel Central	P. O. Box 202, San Diego, Calif.
	XEAI 1240 100 Mexico City, D. F.	XEMX 1280 12 Mexico City, D. F.
	Carlos Gonzales Cabailero, Insurgentes 366	Alfonzo T. Avales
	XEAJ 1310 15 Oaxaca, Oax.	XEN 710 1000 Mexico City, D. F.
	Enrique M. Crihuela, 3a, Gurroro 18	Cerveceria Modelo Ave. Juarez 77
	XEAM 960 50 Nuevo Laredo, Tams. Edificio Banco Longoria	XENT 910 60000 Nuevo Laredo, Tams-
	XEAO 560 250 Mexicali, B. C.	Box 410, Laredo, Texas XEOK 765 2500 TiJuana, L. C.
	Luis L. Castro, C. Altamirano 156	Carlos de la Sierra, Calle 5a 312
	XEAW 960 10000 Reynosa, Tams.	XEOX 640 250 Saltillo, Coah.
	Internacional Broadcasting Co., S. A.	Victoria No. 4, Altos.
	XEAZ 1420 7 GuanJuato, Gto.	XEP 840 500 Mexico City, D. F.
	Antonio Zavala, Pasco de la Presa 85	Cia Difusora de Mexico S. A., Rembrandt 11
	XEB 1030 10000 Mexico City, D. F. El Buen Tono, S. A., Apdo. 79-44	XEPN 590 50000 Piedras Negras, Coah.
-	XEBC 730 5000 Agua Callente, B. C.	Piedras Negras Brdestg. Co., Madero 53
	Alberto V. Aldrete	Fernando Sada, Box 309
	XEC 1310 50 Tijuana, B. C.	XET 690 500 Monterrey, N. L.
	Luis F. Enciso, Teatro Zaragoza	P. O. Box 203, Hidalgo
	XECW 1310 10 Mexico City, D. F.	XETB 1310 125 Torreon, Coah. Jose A. Berumen, R. Corona 317
	Maria Elena Bravo de Cordero Ave. Juarez 104	
	XED 1160 500 Guadalajara, Jal.	Jose M. Lopez, Independencia 20
	Cia. Radiofonografica, Apdo. 197  XEE 1219 50 Durango, Dgo.	XETH 1210 100 Puebla, Pue.
	20 de Nov. 112 (Apdo. 148)	Ramon Huerta G., Calle 17, Oriente 11
The state of the s		

XETW 820 500 Mexico City, D. F. Rafael M. Pena, Ave. 16 de Sep. 83
 XEU 1010 250 Veracruz, Ver. Fernando Pazos Sosa, Independencia 98
 XEW 890 50000 Mexico City, D. F. P. O. Box 2516
XEWZ 1150 100 Mexico City, D. F. Medellin e Insurgentes
XEX 1310 125 Monterrey, N. L. L. F. Petit Jean, P. O. Box 10
XEXX 845 500 Mexico City, D. F. Av. Pino Suarez 9
XEYZ 780 10000 Mexico City, D. F. Angel M. Diez, Ave. Juarez 48

XEZ 630 500 Merida, Yuc. Jorge L. Falomeque, Estamores Ctd 214
Emilio Delgado R. Ave. Chicosein 32
XFB 1270 1000 Jalapa, Ver. Gobierno del Estado de Veracruz
XFC 810 350 Aguascalientes, Ags. Gobierno del Estado de Aguascalientes
XFD 1340 350 Orizaba, Ver. Gobierno Estado de Veracruz
XFO 940 5000 Mexico City, D. F. Nat. Rev. Party, Ave. Morelos 110
XFX 610 1000 Mexico City, D. F. Secretaria de Educacion Publica



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CONNEAUT, OHIO

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MIDNIGHT TO NOON (EST)

GMT	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
AST	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00
EST	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
cst	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00
MST	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00
PST	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
	DJA DJN HIZ HJIABE HJ4ABL		W8XAL	DJB DJN GSB RV15	DJB DJN JVM RV15 VK2ME VK3LR		DJB DJN GSF GSG JVM LKJ1 RNE RV15 VK2ME VK3ME VK3ME WSNAL	GSF GSG JVM LKJ1 PH1 RNE Pont. RV15 VE9GW VK2ME VK3LR W1XK W8XAL	DJB DJE GSF GSG PCJ PHI Pont. RNE VE9GW VK2ME W1NK W8NK	DJB DJE DJQ GSF GSG HAS3 PCJ PHI Pont. RNE VE9CA VE9GW W1XK	DJB DJE DJQ GSF GSG HVJ PCJ PHI Pont. RNE VE9GW WIXK WSXAL WSXAL	DJB DJE DJQ GSE GSF Pont. VE9GV W1XK W2XE W3XL W8XK W9XA

### NOON TO MIDNIGHT (EST)

			77.			_		• • •	'			
GMT	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	1:00	2:00	3:00	4:00
AST	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00
EST	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
CST	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00
MST	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00
PST	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
	DJC DJD GSB GSB GRK Pont. VE9GW WIXK W2XE W3XAU WSXAL WSXAL	DJD EAQ GSB GSD ORK Pont. VE9CA VE9GW W1XK	DJC DJD GSB GSD VE99CA VE9GW W1XK W2XAD W3XXAU W8XK W9XAA	GSB GSD Pont. VE9GW W1XK W2XE W3XAL	VE9GW W1XK W2XE W3XAU W8XAL W8XK	HJIABB Pont. PRF5 VE9GW WIXK W3XAL W3XAU W8XK W9XAA XEBT YV2RC YV3RC	COC CTILAA DJD DJA DJD DJN EAQ GSC GSD HAT4 HC2RL HJ1ABB IRA VE9GW W1XAL W1XK W2NE W3XAU W8NK W9NAA NEBT XECT YV2RC YV5RMO	DJA DJD DJN GSC GSD HC2RL HJ1ABB HJ1ABG H75B VF9GW WIXAL WIXK W2XAF W2XAF W2XAF W3XAU W8XK W9XAA XEBT YV2RC YV4RC YV5RMO	HJIABB HP5B TIEP VE9GW WIXAL WIXK W2XAF W2XE W3XAU W8XK W9XAA W9XAA XEBT YV2RC	CJRO CJRX COCD CJRX COCD COH DJC DJD DJN HCJB HC2B HC2ET HC2RL HIX HJ1ABB HP5B OAX4D PRADO TIGPH VE9GW WINK W2XAF W3XAF W3XAF W9XF W9XF YV2RC YV3RC YV5RMO	CJRO CJRX COCD DJC DJC DJD GSC GSL HC2EL HC2EL HC2EL HC2EL WINK WINK WINK WINK WINK WINK WINK WINK	CJRO CJRX COCD COC HJ4AB W1XK W3XA W8XK W9XA

### BEST SHORTWAVE BROADCASTING STATIONS BY CALL LETTERS

Frequencies are given in megacycles and the time is Eastern Standard.

CEC. Santiago, Chile, 10 670. EAQ, Madrid, Spain, 9 862. 1730-Afternoons irreg. 1900; Sat., 1200-1400. CJRO, Winnipeg. Man., 6.150. Daily 2000-2400 CJRX, Winnipeg, Man., 11.720. Daily 2000-2400. CMHR Sancti-Spiritus, Cuba. 10.200. COC, Havana, Cuba. 6.010. Daily, 0930-1300; Sat., 2330-0030. COCD, Hayana, Cuba, 6.130. Nights until midnight. COH, Havana, Cuba. 9.428. Daily 1000-1200; 1600-1800; 2100-2200. CT1AA, Lisbon, Portugal, 9.600. Tues., Thurs., Sat., 1630-1900. Berlin, Germany, 0030-0215; 1705-2115. Berlin, Germany. 15.200. 0345-0715; 0800-1130. DJC. Berlin. Germany. 6.020 1200-1630; 2130-2245. DJD. Berlin, Germany, 11.770. 1200-1630; 1705-2245. DJE, Berlin, Germany, 17.760. 0800-1130. DJN, Berlin, Germany, 9.540, 0030-0215; 0345-0715; 1705-2245 DJQ. Berlin, Germany, 15,280. 0800-1130

GSB, Daventry, England,

0115-0315; 1215-1500; 1515-1645 GSC, Daventry, England, 9.580. 1800-2000; 2200-2300.

GSD, Daventry, England, 11,750. 0115-0315; 1215-1600; 1800-2000; 2200-2300.

GSE, Daventry, England, 11.860. 1100-1200

GSF, Daventry, England, 15.140. 0900-1200; 1615-1745; 0600-0845. GSG. Daventry, England, 17.790. 0900-1045; 0600-0845.

GSL, Daventry, England, 6.110. 2200-2300.

HAS3, Budapest, Hungary, 15.370. Sun., 0900-1000.

HAT4, Budapest, Hungary, 9.125. Sun., 1800-1900.

HBL, Geneva, Switz., 9.595. Sat., 1730-1815. HBP, Geneva, Switz., 7.797. Sat.,

1730-1815. HCJB, Quito, Ecuador, 8.214 Daily exc. Mon., 1915-2315. 8 214

HC2AT, Guayaquil, Ecuador, 8.400. Daily exc. Sun., 2000-2200,

HC2ET, Guayaquil, Ecuador, 4.600. Wed., Sat., 2130-2300.

HC2JSB, Guayaquil, Ecuador, 4 283. Dally exc. Mon., 2015-2315. 7.700. irregular.

HC2RL, Guayaquil, Ecuador, 6.659. Tues., 2115-2315; Sun., 1745-1945

HIH. San Pedro de Macoris, D. R., 6.800. 1600-2030.

HIX, Santo Domingo, D. R., 5.980. Tues., Fri., 2000-2200.

HIZ, Santo Domingo, D. R., 6.315. Sat., 2300-0100; daily exc. Sun., 1700-1800

HI4D, Santo Domingo, D. R., 6.500. 1640-1940 daily exc. Sun.

HJIABB, Barranquilla, Colombia, 6.447. 1700-2200.

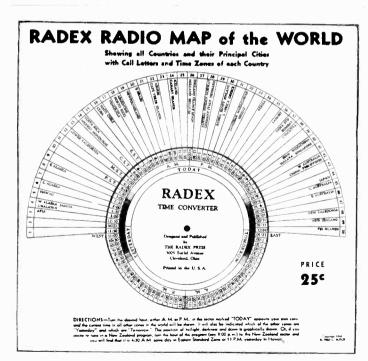
HJ1ABD, Cartagens 7.280. 1945-2115. Cartagena, Colombia.

HJ1ABE, Cartagena, Colombia 6.115. Sun. at 0400; Mon., 2200-2400; Wed., 2000-2200.

HJ1ABG, Barranquilla, Colombia. 6.042. 1900-2200.

HJ1ABH, Cienaga, Colombia, 6.300. Tues., Frl., 1945-2200. HJ2ABC, Cucuta, Colombia, 5.975

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<ul> <li>IJ3ABF, Bogota, Colombia, 6.200.</li> <li>1900-2300.</li> <li>IJ3ABH, Bogota, Colombia, 6.012,</li> </ul>	0730-0930; Sat., Sun., 0730-1030. RADO, Riobamba, Ecuador, 6.620. Thurs., 2100-2330.	W2XE, Wayne, N. J., 6.120. 1800- 2300. 11.830: 1500-1700. 15.270:
	RF5, Rio de Janeiro, Brazil, 9.505. 1730-1815. NNE, Moscow, USSR, 12 000. Daily, 1400-1800: Sun., 0700-1100; Wed., 0600-0700.	1100-1300.  3NAL, Bound Brook, N. J., 6.100: Mon. Wed., Sat., 1700- 0100. 17.780: Tues., Thurs., Fri., 1500-1600.  W3NAU, Philadelphia, Pa., 9.590: 1200-2000.
(J4ABE, Medellin, Colombia, 5.900. 1900-2300. Tl. J4ABL, Manizales, Colombia, 6.100. Sat., 2300-2430. Tl. J5ABD, Cali, Colombia, 6.490. Thurs., Sat., Sun., 1900-2100. VIP5B, Panama City, Panama, 6.030. 1900-2200.	V15. Khabarovsk, USSR., 4.273. Daily, 0300-0900. IEP, San Jose, Costa Rica, 6.710. 1900-2200. IEP, San Jose, Costa Rica, 5.820, 1900-2200. E9CA, Calgary, Alta., 6.030. Thurs., 0900-0200; Sun., 1200-2400; Other days, 0900-2400. E9GW, Bowmanville, Ont., 6.090.	W3XL, Bound Brook, N. J., 17.310: 1100-1700.  W3XK, Pittsburgh, Pa., 6.140: 2100-0100. 11.870: 1700-2100. 15.210: 0900-1900. 21.540: 0700-0900.  W9XF, Chicago, Ill., 6.100: Monday to Friday, 0100-0200; 2100-2200; Sat., 0100-0200; Sun
1930-2200.  (VJ, Vatican City, 5.970. Sun., VJ 0500-0530. 15.120. Daily exc. Sun., 0500-0515.  2RO, Rome, Italy, 9.630. Mon., VJ Wed., Fri., 1800-1930.  VH. Nazaki, Japan, 14.640. 0000-0100.	0600-2300.  K2ME, Sydney, Australia, 9.585.  Sun., 0000-0200; 0430-0830; 0900-1100.  K3LR. Melbourne, Australia, 9.580. Daily exc. Sun., 0400- 0800.  K3ME, Melbourne, Australia,	0100-0230; 2100-2200. XEBT, Mexico City, D. F., 6.000; 1290-0100. XECR, Mexico City, D. F., 7.380; Sun., 1800-1900. XECW, Mexico City, D. F., 5.980; daily 2300-2400. YV2RC, Caracas, Venezuela, 6.112.
2100. VI AN4D, Lima, Peru, 5.780. Wed., Sat., 2100-2330. W RK. Brussels, Belgium, 10.330. U 1200-1400. W	9.503. Wed., Thurs., Fri., Sat., 0500-0700. PD, Suva, Flji, 13 045. 0030-0130. UB, Bombay, India, 9.565. Suu., near 7 a.m. (1XAL, Boston, Mass., 11.790. Tues., Thurs., Sun., 1830-2030. (1XK, Millis, Mass., 9.570. 0700-	1700-2145. YV3RC, Caracas, Venezuela, 6.150. 1700-2200. YV4RC, Caracas, Venezuela, 6.375. 1630-2230. YV5RMO, Maracalbo, Venezuela, 5.850. Daily exc. Sun., 1700-
PCJ. Hilversum, Netherlands, 15.220. Irregular, mornings. W PHI. Hilversum, Netherlands, W 17.775. Mon., Thurs., Fri.,	0100. 22NAD, Schenectady, N. Y. 22NAF, Schenectady, N. Y., 9.530. 1840-2300.	2130. YV6RV, Valencia, Venezuela, 6.520; 17(0)-2200.

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Sometimes I think there ought to be a law to make everyone do a little studying every week. I didn't think that a year ago because it looked like all the cards were stacked against me. But I am surely making good money now. Maybe my story will show you the way to larger earnings also.

### I THOUGHT RADIO WAS A PLAYTHING

But Now My Eyes Are Opened, and I'm Making Over \$40.00 a Week!

\$40 a week! Man alive, a year ago I thought anyone making so much was just plain lucky.

Twelve months ago I was just barely getting by. It was the same old story—a little job; a salary as small as the job.

If you had told me that twelve months later I would be making \$40 a week in my own Radio business—I'd thought you were crazy.

But I am getting ahead of my story—let me tell you how it all started. I was hard up a year ago because I had been kidding myself—that's all—not because I had to be. I thought a fellow either had to be lucky or have a string of college degrees to make good money.

One day I picked up a magazine and an ad attracted me because it seemed to fit my case. It said, "I will show you how to start a spare time or full time Radio service business of your own WITHOUT CAPITAL."

"They're trying to kid somebody." I thought, "but I'll find out what it's all about."

I wrote in and within a few days received a 64-page book telling about the opportunities in Radio, how I could prepare right at home in my spare time, and how they would show me how to start making money in my neighborhood selling and repairing Radio sets. It would have sounded too good to be true if the promises had not been backed up by nearly 100 letters from fellows who had taken their course and were very enthusiastic about it.

What has happened since seems almost like a dream. I started to take their course and soon I was ready to start making money in my neighborhood—as much as \$5 and \$15 a week. It wasn't long until I had saved enough money to start a little business of my own.

That business has since grown to the point where I am clearing an average of \$40 a week. All this took place under the watchful guidance of my friends at the National Radio Institute. They also offered to train me for other lines. Broadcasting Stations, Radio Manufacturers, Operating on Board Ship, Servicing Sets, Aviation Radio, Television, Short Wave, Automobile and Police Radio. Loud Speaker Systems are other fields their training covers. And to think, until the day I wrote for that book, I'd been wailing, "I never had a chance and will never have one because It have no pull or a igood education!"

Friend-you may not be as bad off as I was-

but think it over—are you satisfied? Are you making as much money as you need? Would you sign a contract to stay where you are for the next ten years at the same salary? Those are the things you have to think about—because no one is going to make it his business to push you ahead—you must make it your own business.

Take my tip—write for their book, "Rich Rewards in Radio." It won't cost you anything except a postage stamp. It shows you a lot of things which I don't believe you know now about Radio—a lot of facts and figures on the opportunities in this new, fast-growing field. Where the jobs are, what they pay, how to get ready for them. Beginners as well as experienced men are making as much as \$500 to \$1,500 a year more as a result of N.R.I. training. And at the same time they send the book "Rich Rewards in Radio" they'll send you, without any cost or obligation, a Free Lesson to prove that their training is easy, practical, fascinating. The lesson they send "Radio Receiving Troubles—the Cause and Remedy" is valuable. And when you see how simple this lesson is to understand you'll know why many fellows with less than a grammar school education have mastered N.R.I. training and are now making good money as Radio Experts.

You are not placing yourself under any obligation by writing for this material as they will gladly send it to anyone who is ambitious and wants to get ahead. Mail the coupon in an envelope or paste it on a Ic postcard. Just address Mr. J. E. Smith, President, National Radio Institute. Dept. 5J0, Washington, D. C.

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New Pisch Button Silent Tuning is offered for first time! Simply pushing Silencer Button hickes set between stations, auppresses noises. Pressing Station Finder Button automatically indicates proper did position for Fringing in extremely weak stations.

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