THE FEBRUARY 1938



RADEX

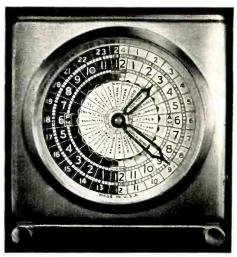
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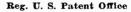
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FEBRUARY 1, 1938



RADEX



ELIZABETH S. BUTLER
Publisher



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

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B. FRANCIS DASHIELL, Technical CARLETON LORD, Broadcast

FOURTEENTH YEAR

Number 116

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North American REALLOCATION Coming

HE Havana Conference which was concluded on December 13 adopted a drastic reallocation plan which will call for a shifting of the frequencies of a large number of the United States Broadcasting Stations. None of the United States stations will have to be deleted, however, and the frequency changes, in most cases, will be from only 10 to 30 kilocycles from the present frequencies.

Most important to DXers are the facts that the broadcast band will be widened to 1600 kcs, and that the so-called "border" stations will have to leave the air or materially reduce their power.

There are seven nations in the agreement, United States, Canada, Newfoundland, Mexico, Cuba, Haiti and the Dominican Republic. The treaty will become effective one year after ratification by the four major countries.

The Channels

The 106 channels in the broadcast band are divided into three classes—clear, regional and local.

A clear channel is, briefly, one on which the dominant station is able to provide service over a wide area, clear of objectionable interference within its primary service area and most of its secondary area.

A regional channel is one on which several stations may work, with power not in excess of 5000 watts.

A local channel is one on which several stations may operate with power not exceeding 250 watts.

The 59 Clear channels are designated as follows: 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740,

750, 760, 770, 780, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 940, 990, 1000, 1010, 1020, 1030, 1040, 1050, 1060, 1070, 1080, 1090, 1100, 1110, 1120, 1130, 1140, 1160, 1170, 1180, 1190, 1200, 1210, 1220, 1500, 1510, 1520, 1530, 1540, 1550, 1560, 1570 and 1580.

The 41 Regional channels will be as follows: 550, 560, 570, 580, 590, 600, 610, 620, 630, 790, 910, 920, 930, 950, 960, 970, 980, 1150, 1250, 1260, 1270, 1280, 1290, 1300, 1310, 1320, 1330, 1350, 1360, 1370, 1380, 1390, 1410, 1420, 1430, 1440, 1460, 1470, 1480, 1590, and 1600.

The 6 Local channels will be: 1230, 1240, 1340, 1400, 1450, and 1490 kcs.

(The definitions given above, and throughout this article, are not exact, but are sufficiently accurate for DXers' purposes.)

The treaty provides for 59 clear channels, 41 regional channels and six local channels. These frequencies are apportioned among the seven nations as follows:

United States	63
Canada	14
Cuba	9
Dominican Republic	1
Haiti	1
Mexico	15
Newfoundland	2

Stations Classified

All the broadcasting stations are divided into several classes and subclasses. Stations of Class I-A, Class I-B and Class II will be permitted to work on clear channels.

Class I-A stations will operate with a power of 50 kilowatts or more; their primary service area will be within the limits of the countries in which they are located; and they will be free from objec-



Vyola Von, known to the dialers as "Mademoiselle Fifi," is lending her comedy and singing talents to Eddie Cantor's program on Wednesdays. Despite her very French name, Vyola is not French but a product of Southern California. She is 19 years of age, and the proud possessor of a two-year contract with Cantor Cantor.

tionable interference from stations on the same or adjacent channels.

Class I-B stations will employ power of not less than 10 kilowatts or more than 50 kilowatts, and their primary service areas will be free from objectionable interference from stations on the same or adjacent channels.

A Class II station is a "secondary" station which uses a clear channel. Stations in this class will use not less than 250 watts or more than 50 kilowatts, and whenever necessary a directional aerial or some other means must be provided to prevent interference with other stations.

Regional stations are grouped, roughly, in Class III and its subclasses, and local stations are considered as being in Class IV.

Assignments to Nations

Twenty-four United States stations of Classes I and II are shown in the tables which follow. remaining 39 Class I and II stations of this country will work on the clear channels of 640, 650, 660, 670, 680, 700, 710, 720, 750, 760, 770, 780, 820, 830, 840, 850, 870, 880, 890, 1020, 1030, 1040, 1100, 1120, 1160, 1180, 1200, 1210, 1500, 1510, 1520 and 1530 kilocycles.

TABLE A

Class I-A Stations in Canada, Cuba and 14----

MONICH													
690	Quebec, Canada	1010	Alberta, Canada										
730	D. F., Mexico	1050	Nuevo Leon,										
740	Ontario, Canada		Mexico										
800	Sonora, Mexico	1220	Yucatan, Mexico										
860	Ontario, Canada	1540	Santa Clara,										
900	D. F., Mexico		Cuba										
990	Manitoba.	1570	Nuevo Leon,										
	Canada		Mexico										
		1580	Quebec, Canada										

TABLE B

Class I-B	Statio	ns.
New York State	1090	Arkansas
California	1110	North Carolina
Quebec	1110	Nebraska
	1130	British Columbia
		(5 kw minimum)
	1130	New York-
(20 kw max.)		New Jersey
Washington	1140	Chihuahua
	1140	Virginia
	1170	Oregon
	1170	Oklahoma
	1170	West Virginia
	1190	Sinaloa
	1190	Indiana
California	1550	Ontario
	1550	Vera Cruz, Mex.
		(20 kw max.)
	1560	Havana
Maryland		
	New York State California Quebec (5 kw minimum) D. F., Mexico Jalisco (20 kw max.) Washington Illinois Havana Mexico City Pennsylvania Maritime Provinces California Conneccicut Texas Baja California	New York State 1090 California 1110 (110 (5 kw minimum) D. F., Mexico Jalisco (20 kw max.) Washington 1140 Hilmois 1140 Havana 1170 Mexico City 170 Pennsylvania 170 Maritime 1190 Provinces California 1550 Conneccicut 1550 Texas Baja California 1560

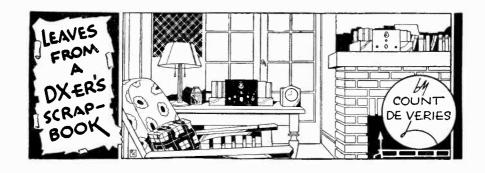
	TABI	LE C	
	Class II	Station	ns
640	Newfoundland	1060	Alberta
690	Kansas or		(10 kw max.)
000	Oklahoma	1070	Alabama
740	California	1080	Manitoba
800	Ontario		(15 kw max.)
200	(5 kw max.)	1080	Haiti
810	Tampico		(10 kw max.)
	(50 kw max.)	1110	Mexico City
900	Quebec		(20 kw max.)
	•	1130	Louisiana
	(5 kw max.)	1170	Dominican
990	Tennessee		Republic
1000	Oriente (Cuba)		(10 kw max.)
2000	(10 kw max.)	1190	Havana
1050	New York		(15 kw max.)

TABLE D

Class II Stations on Regional Channels

ออบ	Newloundiand	000	110,40110
	(10 kw max.)		(15 kw max.)
570	Sta. Clara, Cuba	1270	Havana
	(15 kw max.)		(10 kw max.)
590	Havana		
	(25 kw max.)		

1050 New York



PPEARING in the January issue of *Popular Photography* was a short item titled "I Am Photography." It was a particularly significant thought, this creed of the camera addict, and I couldn't help but feel that some of it might also apply to those who follow the radio waves to the far corners of the globe.

"I turn back the pages of the Book of Memory," it went. "I bring you thoughts of past years and oldtime friends. I keep forever green the happy hours of childhood. I dull the pangs of bereavement and blunt the edge of the grim reaper's scythe. I carry the news of the world, and bring you visions of far distant lands. Our modern civilization is largely dependent upon my efforts. Though men may pass and empires crumble to dust, my magic will preserve their likeness for future generations. Not purse proud, I am within the reach of all. I solve mysteries impenetrable to mortal eves: I ferret out the criminal when other means have failed. I illumine the pages of history, and make learning possible for the multitude. Born instantaneously in a ray of light, I become everlasting. As necessary in war as in peace, I am man's servant, and yet his master. I am an art-and yet a business. I am photography."

How many of these virtues might

also be applied to the magic of radio! How well does radio span the globe in an infinitesimal unit of time, to bring us news of the world, to provide entertainment and education, to apprehend the fugitive criminal, to bring aid and comfort to those in distress and in danger!

The pity of it all is that radio has become accepted as commonplace. The daily visits to our homes by the great artists are taken for granted. When the turn of a dial speeds us to a distant land, and we are privileged to participate in exciting events as they take place, do we think of the wondrous medium which makes all this possible?

The chances are that we fret and frown when a bit of static mars some portion of the broadcast or a slight fade makes it difficult to catch a few words.

If challenged, younger listeners agree that they don't know what they'd do without radio, and older folks wonder how they got along before it came, but what dialer ever takes time to give thanks for the miracle which has become an every-day affair?

A Fairy Story

Once upon a time a group of men decided to build a radio station. They obtained from the proper authorities the necessary permission, and set about their work. News of this impending event spread near

and far, and in due time the new station was listed in various call books and radio magazines.

But construction of the station required considerable time, as do all good works well done, and for months after the first news had gone forth, the engineers were still assembling parts for what one day would be a very fine transmitter.

One morning a listener was tuning up and down the broadcast band when he happened to hear a very weak signal. He waited faithfully for an announcement of identification, meanwhile jotting down notes on the program. But try as he would, he was unable to hear a thing to tell him the identity of the station to which he was listening.

Turning to his favorite radio magazine, he checked the frequency of the unknown station and tried hard to determine which of the listed broadcasters he was hearing. By a secret and mysterious process of deduction, he finally decided that he was tuned to the station which, even then, the engineers were building in far-off South Australeurope.

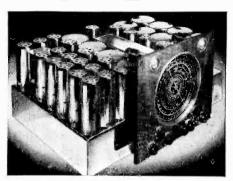
Fairly bursting with joy at this exceptional catch, he sat down at his typewriter and sped off a report of reception. Eager to impress his fellow-listeners with his amazing proficiency at the dials, he spread the news among his friends, to his radio clubs and even to the magazine which had listed the station. And in due time, the whole radio world heard that little Johnny Stationgetter had added yet another entry in his most amazing log.

But great was his shame and confusion, when, one day, he received a letter from far-off South Australeurope which said that this station had not yet come on the air. And red did his ears burn when his fellow-listeners heard the tale, for

(Please turn to Page 40)

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Only a custom, laboratory built radio can give the sensational performance of a SCOTT! Features currently new in many factory, mass produced receivers were offered in a SCOTT years ago! So far advanced in design, and so perfect are the materials and hand craftsmanship in a SCOTT, that it is guaranteed for 5 years! Distance? . . The SCOTT holds 6 OFFICIAL world's records. Tone? . . Finer than the costliest motion picture sound system. Sensitivity? . . World's most powerful radio. Fidelity? . . 50% higher than the average high priced radio. Quiet? . . Four static reducing systems (electrical and atmospheric). Handling Capacity? . . Up to 500% more than ordinary receivers. Selectivity? . Continuously variable from 2 to 16 kc. You will be AMAZED at the spectacular ability, and moderate cost, of this hand made precision instrument.

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When TROUBLE Comes

• • By B. FRANCIS DASHIELL

Job For An Expert

RECENTLY purchased an 18-tube receiver that performed excellently and it became my pride to demonstrate it. Then, suddenly it got out of alignment about 10 points on the standard broadcast band, and more so on the short waves. The volume now is weak. The tuning device, or "eye," which used to become a deep red when a station was tuned in, does not function at all. I live very far from the factory, and shipping the set back will be expensive. What would you do, and what is wrong with the set?

The fault probably lies in some relatively simple defect or failure, and shipping the entire chassis to the factory from your home would involve more than the cost of having a good repairman do the work. We feel that a tube failure might be the cause, and a careful examination of all tubes and replacement of the defective one should, therefore, be the first step to be considered. If this does not remedy the trouble. then the serviceman must look elsewhere for the fault. The concern making this set has a rather wide system of servicing, and if your local man does not have the data for all voltages and resistances as well as test oscillator settings, he can procure them upon application to the service department of the manufacturer. These receivers are well made and offer considerable satisfaction for the outlay involved, and RADEX is certain that satisfactory adjustments can be made so the set will perform many years in the original manner.

But, in any set, when a tube in some vital circuit weakens or fails, as they do suddenly in all cases with



Kathryn Cravens, once a moving picture actress, but now one of the most popular newsgatherers on the air. Her broadcast of "News Through a Woman's Eyes" is heard over the CBS on Mondays, Wednesdays and Fridays at 2 and at 5:30 pm, EST.

all sets, the whole receiver seems ready to toss into the discard. First, we suggest that the tuning "eye" or tube that does this work, be tested. This is the 6C5G tube, and is for the color-ray tuning eye circuit. All the other tubes, especially in the tuning circuits should be tested.

Next, if the tubes do not show failure, the working voltages must be checked, to see whether they have the proper plate potentials and grid bias. This check also will determine whether any of the condensers and resistors have shorted or opened. If these tests do not remedy the trouble in correct tuning then it will be necessary to re-

align the set, and this operation calls for a competent serviceman or the return of the receiver to the factory for this work.

We do not feel that this set is in anyway a cause for you to feel worried. The manufacturer will do all he can to help, and he will make the repairs, but you must bear the cost of transportation to and from the factory. Local servicing is at your expense if the guarantee period has expired. This is the standard radio manufacturers' practice everywhere. The job of aligning this or most any set is relatively simple and does not involve excessive expense if locally done.

Local Interference

I have an R. C. A. 18 7-tube receiver. A local station operates on 1370 kilocycles, and two stations about 50 miles distant operate on 1290 and 1440 kilocycles. When the local station is silent I can hear the two stations in the next city, but when the local is on the air the distant stations cannot be heard. I would like to be able to hear them, and hope you can tell me what should be done. The tubes are all new, but I have had the set examined two or three times and the trouble still exists.

The trouble is that of broad tuning. But if you live very close to the local station, although its power is only 100 watts, it may be impossible to hear the two distant stations even with their 1000 watts of power. However, any good receiver, if properly aligned, should be able to cut through local interference when the distant stations are as much as 80 kilocycles or more on either side of the dial setting for the local.

We suggest that this set, since it has 7 tubes, is definitely in need of proper alignment. In this set the variable tuning condensers sometimes become defective, and a careful adjustment may be help-

ful. Find a good serviceman and have him align the set and test it himself. If you are using too large an antenna you will get a broad signal. Try a short wire, about 30 feet.

Noise Eliminator

I have a 1937 Philco 630T receiver, and would like to know if there is a satisfactory noise eliminator that can be used with this receiver. I also have a doublet, 30 feet to each half, running NE by SW, 12 feet above the ground with 50 feet of leadin wire. What do you think of it as a good type of aerial?

You do not mention what kind of noise you wish to eliminate. If it is man-made static that comes over the power wires into the set from electrical appliances, it is quite simple to remedy the trouble. A good power-line filter, such as the Tobe or equal, plugged into the wall outlet between the A. C. supply and the radio set, should practically eliminate all the power-line noises. However, if a ground is used with the set, do not attach it to the same pipe or ground to which the noise eliminator is grounded.

If the noise comes through the antenna system, then you need a good noise-reducing aerial. This is not, of course, always a doublet system, as you will find by reading up on noiseless antennas. The new R. C. A. antenna, or one with shielded leadins such as a Lynch, tend to reduce much of the noise that is carried to the set by means of the leadin wires. However, a good doublet is always satisfactory. The doublet that you are using is not high enough above the ground. Its length is correct, but the leadin may be too short. We wonder whether you purchased it as a ready-made kit or arranged it yourself without regard to matching the leadin to the antenna. If it is a kit antenna, then it is likely that the leadin was matched to the antenna and receiver by means of transformers.

Crystal Set

In the October, 1935, issue of RADEX, is an article describing an all-wave crustal receiver. I have built it according to instructions but find it difficult to eliminate a 15 K. W. local station, and because of this I do not know whether it is possible to obtain outside reception. If there is any way of improving this little receiver, please tell me. I mean by this, to eliminate the local from all points on the dial. I was unable to obtain the November and December, 1935, issues of RADEX which continued the article about this set.

The article in the October, 1935, issue of RADEX described simply how an elementary radio set could be built. It covered the broadcast band as well as a longer wave band above 600 meters, and extended well down into the realm of the short waves-about 20 meters. However, its range was just that of a crystal set-several hundred miles for powerful transmitters. set of this type tuning is naturally broad, and a powerful local station will come in at most points on the The more setuning adjustment. lective the tuning circuit is, the sharper the tuning, and this was shown in Fig. 4 of the October article, where a two circuit tuner was shown.

The article in question was continued next in the January, 1936, issue of RADEX, in "Improving the All-Wave Crystal Set." This article showed how improvements could be placed in the set so as to make it more selective and sensitive. It explained experiments in building tuning devices that eventually were to be used in more complicated tube sets of greater range. The final, and concluding chapter in the series appeared in the March, 1936, issue of RADEX, under "Using Tubes in Our Crystal Set." This explained

how to convert the crystal set into a tube set which was very sensitive on all the wave bands. The issues of RADEX, mentioned above, all are available at the regular price of twenty-five cents each at the office of publication in Cleveland.

At its best, a crystal set is more or less of a demonstration of how radio works. Because of its very nature it is difficult to make it selective so that powerful locals can be cut out—in fact it is impossible to remove a nearby local entirely. However, if the locals are off the air, it is possible with a carefully constructed crystal set to listen to strong stations in nearby cities. You cannot expect too much with a set of this kind-and the one described will do all a crystal can do without the improvements described in the two chapters that followed.

Very Short Waves

I want to know whether I can build my radio so it will tune down to about 7 meters or less. I do not want to change it very much, as it is a Grunow, 1935, model 671, but I do not care to buy a new one just yet for these short waves. It now goes down to 16 meters, and if I can get it down to 10 or 5 meters, I think it will be a fine set.

We do not recommend any changes in this set to make it tune down to 5 meters. In fact, it will be almost impossible to so alter the set and obtain any degree of satisfaction. So many factors enter into the reception of the very short waves that the circuits and parts would have to be rebuilt so completely that the cost would be more than that of a newer set. An experienced serviceman would have to do the work, and not many would attempt the job.

While the very short waves are interesting, it is doubtful whether there is sufficient activity to make 10 and 5 meter reception a practical thing in your case. The 10-meter

amateur band, which is about all you will be able to hear, is confined to amateur work over great distances, but there are many times when this band is closed down because of severe natural interferences. The 5-meter band is almost a visual radio, and reception is limited to stations that are within range of the eye, or the limits of vision. Such stations, in your case, must be very few or absent entirely.

Pre-Selector

I have a Zenith 52 that has been used a long time. As I know now just what it will do there is little left for me to do in the way of DX tuning. It occurs to me that perhaps the use of a good pre-selector will pep this set up so that I will get new stations that I have not already logged. I have examined all the radio catalogues and visited my local radio stores but I do not see any pre-selectors advertised. you tell me whether a pre-selector will boost this set or will it create too much noise so that DXing will be impracticable? Also, where can I find the Miller pre-selector or some other kind?

A pre-selector or pre-amplifier should be of considerable benefit to this receiver, which is a tunedradio-frequency set. The addition of a pre-amplifier provides for an additional stage of radio-frequency amplification. However, most preamplifiers now made are for superheterodyne receivers of the all-wave model, and might not work so well with your receiver. You should correspond with some of the larger mail-order radio supply houses, all of which handle pre-selectors of the all-wave model, to discover whether they have the kind you need on hand and what the cost is.

The Miller pre-selector which you refer to, is also an all-wave selector, and while part of it will cover the broadcast band, the short-wave section of it will be useless. The address

of the Miller Company, according to our records, is 5917 So. Main Street, Los Angeles, Calif.

Then, if you care, you might try making a pre-selector for this receiver. All you need is a good radiofrequency amplifier transformer and shield which, together with a microfarad variable .00035denser, will tune to the broadcast band, and a type 27 tube. Connect the primary of the coil to the antenna and ground, and the secondary, which is shunted with the tuning condenser, is attached to the tube grid and to the negative A terminal of the tube filament. Attach the plate of the tube to a 90volt B battery, but with a small r-f choke between the battery and the Then run a short, shielded lead from the plate also, to a small .0001 bypass condenser, and thence to a terminal that can be connected to the antenna connection of your receiver. The set is grounded in the usual manner. While this is a rather crude type of pre-amplifier it is one that can be experimented with and should give at least considerable improvement. It is best operated separately from dry-cell A and B batteries.

Mine Interference

I have a new 13-tube Bosch receiver, and while it is a very good outfit, I believe it can be improved upon for the reason that I live in the heart of the iron-ore region of Minnesota. The magnetically inclined soil gives off some terrific QRM which is hard to overcome. Therefore, I have not been able to utilize the full sensitivity of the set, and as a result the broadcast band is no better than on an ordinary, smaller receiver. It works quite well on the short waves. I have been thinking of adding a peak-preselector, and do you advise my doing

While the ground beneath you for miles about is full of iron ore,

we do not see just how it can cause such severe interference. Iron ore does show magnetic qualities and affects compasses and telegraph and telephone lines to a slight extent, but it seldom affects radio transmission. Then, the trouble would likely be that of fading and interference with the ground wave. Noise, as a rule, should not be caused by such conditions unless you live near mines, railroads, power lines or smelters, particularly those of the electric furnace types.

If you are free of sources of manmade static, we believe that the excessive noise you hear is that caused by the ultra sensitivity of the receiver. Certainly a modern set of 13 tubes has a great amplifying power, and noises are therefore greater. You have purchased very good receiver and it ought to be free of excessive noises, but it is possible that a tube or some unit has become noisy. This frequently occurs in the wave-band switch on The switch should be many sets. examined for loose contact, and a little cleaning often helps. The volume control, too, can cause noise. And there are other things, but which we do not believe are probable in a new set, such as filters and voltage dividers in the power unit. Man-made static, however, if it comes in over the electric line. can be eliminated to some extent, if not entirely, by means of a good power-line noise filter, connected between the set and the 110-volt a. c. outlet in the house. Other noises that come from traffic and outside sources by way of the aerial can be reduced considerably by utilizing a noise-reducing or doublet antenna, as high above the ground as possible. The use of a doublet antenna precludes the necessity for a ground. and this, too, might prove of some benefit to you.

A pre-selector to this set will only add to your troubles, for this form of amplification adds the equal of one or two stages of radio-frequency amplification to the set. The great increase in sensitivity raises the noise level too high and the background in your case would prove intolerable. These pre-amplifiers have their place, and a good one, with smaller sets that do not have the requisite amount of r-f amplification to provide high sensitivity on distant, weak signals.

Zepp Antenna

Please tell me if the Lynch variocoupler is suitable for use between a 78-foot Zepp antenna and my radio receiver? Also, can the same coupler be attached to two doublet antennas arranged in the form of an X so as to have greater directive qualities from all points of the compass.

The coupler mentioned can be used with any type of antenna having a twisted or transposed leadin system of two wires. The coupler permits of the tuning of the impedance of the leadin wires to the, impedance of the antenna coils in the receiver, and therefore provides for the maximum transfer of energy from the antenna to the receiver at all wave lengths. Since both of your antenna systems utilize the twisted pair leadin wires the coupler will be of practicable use. However, if you will write the L. S. Brach Mfg. Co., Newark, N. J., they can advise you definitely since they are familiar with the impedance of their product.

The X type of system utilizing two doublet antennas each 26 feet long for the half-section seems very good as it should eliminate the slight directional effects noticed in most single doublet antennas, that is, if all four wires of the two doublets are horizontal. If the four wires are erected in a vertical plane the directional effect is maintained.

Reducing Voltage

I have a Grunow model 501, and

lately it has become defective. We have 250 volts here with 600 amperes in the power line. In order to operate this set I was told that if I hooked up two 115-volt 75-watt bulbs in series with the 110-volt wires leading to the set it would reduce the current to the safe amount. Now, was the radio getting sufficient current or too much? For 8 months the radio ran this way with excellent tone and power, but now after it runs a few minutes it loses power, the dial light flickers, and it plays no more. But, if I turn it off a while and then on, it begins to play nicely for a short time. What can be wrong and have I damaged the set on this high-voltage line?

Your receiver draws from 110 to 115 volts, and the light bulb placed in series draws a maximum of about 115 volts, and as high as 118 safely. Adding these two together you will find that the two require about 235 volts (maximum) to force the necessary amperage (current) through the light and radio so that both operate. A higher voltage overloads both the bulb and radio proportionately, by about 8 to 10 volts. This is a rather steep overload and can shorten the life of the set. We are a bit doubtful about your power lines bringing 250 volts, since the usual in this case is 220-230 volts. We advise you to check this with the concern providing power and, if the line is carrying 250 volts, arrange to place a small additional resistance in line with the light bulb and set. Your local dealer can provide this resistance, and it can be in the form of a small low-voltage (18) lamp having enough amperage. The 75 watt lights are too powerful, and we suggest two bulbs whose total wattage is equal to that required by the set-if the set uses 75 watts place a 50 and a 30 bulb in parallel (one in each wire) if you wish to use the two bulbs. However, one bulb of 110 volts and 75 watts is sufficient if placed in series with the set.

While it may be possible that the slight excess of potential that the set is getting due to the above condition provided the line does show 250 volts, it seems to us that damage would have become apparent long before this. The intermittent reception of which you complain is something that comes to any set should certain things go wrong. This is especially true when some resistor or bypass condenser partially shorts or opens when sufficiently heated after the set has been operating a few minutes. This change in resistance and capacity will throw the set out of balance and cause a change in tube potential or bias so that it ceases to function. Merely testing and replacing old or defective tubes often remedies trouble. But if it is in some small unit only a careful check by a good serviceman can locate and replace the shorted part.

Aligning T. R. F. Set

I have an old Silvertone Model H receiver, and I would like to know how to align this set. Also, it has a lot of hum that I would like to get rid of. The tubes are all new and test perfectly.

The usual types of t.r.f. sets, such as yours, are fairly easy to align. Turn the set on so it will warm up thoroughly. These sets contain trimmer condensers attached to the variable tuning condensers. Without an oscillator the best way to accomplish this is to tune in a distant station weakly on the midway point of the dial-number 50. Adjust the trimmers with a small wooden wrench or screw driver (which you can easily make) until the station is heard loudest when the volume is way down. Then move the dial to the low end, pick up a station and reset the trimmers; also, do this again for a station at the high end (Please turn to page 47)

This VERIFICATION Question

• • • By COUNT DE VERIES

ITH each succeeding issue, the debate on verifications grows more heated. Supporters of both sides of the question come forward to voice their opinions, and it looks as though this is going to develop into quite an argument.

But before continuing the discussion pro and con, it would be well to assemble a few definite facts for consideration. It now seems pretty certain that concrete evidence on a number of points has been missing from previous comment, so let's see just what is what.

In another section of this issue, there are statements from four persons who are vitally concerned with the current controversy. Arthur E. Foerster had the "doubtful honor," as he puts it, of being the first to issue monitored veries, so his reactions to the recent developments carry considerable weight. Both Carroll H. Weyrich and Stanley B. LaRue have received plenty of publicity for their Daventry and ZBW cards, while E. J. Shields, Editor of the Quixote Radio Club, has absorbed quite a bit of punishment as the result of the QRC dime veries.

Reading over these statements, it is evident that a number of critics have been popping off when they knew little or nothing of the actual facts. There is no question but what a great many misleading statements have been going the rounds.

Most maligned of those concerned are E. J. Shields and his QRC. They were first accused of monitoring the Central and South American stations and "selling" veries to any who cared to buy them. Later it was charged that for a dime and a three-cent stamp, they would supply

anything a listener wanted in the way of a Central or South American verie. It was further stated by one critic that a brief report might accompany the request for a verie, although "it was not stressed too much, but the dimes and 13 cents are imperative."

The statement by Mr. Shields, as well as letters from countless QRC friends, would indicate that these accusations were entirely without foundation. It is shown that the QRC does not operate a monitoring service. On the contrary, it collects reports from listeners and forwards them, together with ten cents for each verification request, direct to The addithe station concerned. tional three cents from the DXer is used to defray the cost of the international postal money order which remittances to the stations are made, and to pay for the air mail postage. The question of verifying is left entirely to the broadcaster, who sends his card direct to the DXer, although the QRC does



This candid camera shot of Stuart Erwin reveals the screen star as a latent dynamo of activity in the process of preparing for his part on the Jack Oakie College program.

guarantee that all *correct* reports for its group of twenty-odd stations will be verified.

Since the QRC veries come direct from the stations, let's pass on for the moment to the monitored veries for Daventry and ZBW. These cards came from persons having no connections with the broadcasters involved, and the statements of Messrs. Weyrich and LaRue indicate clearly the positions which they have taken.

Even the severest critic of the former has admitted that the Weyrich Daventry cards were distributed conscientiously and in accordance with the merits of the reports received, and there is no reason to believe that the LaRue ZBW veries also were not earned by those who received them.

As is pointed out by Mr. LaRue, anyone who witnesses an act is competent to certify thereto. In the same vein, anyone who hears and logs a program from a radio station, is in a position to determine whether a report from another listener agrees with what the monitor has heard. If a report checks the monitor's log, who shall say that he is not fully qualified to verify that report as correct to the best of his knowledge?

This naturally leads to the question of whether a monitored verie shall be accepted by a DXer as proof of his reception of a given station. On this point, listeners appear to be divided in their opinions. More than 400 DXers thought enough of the Weyrich Daventry cards to pay five cents each for them, while an undetermined number have paid 10 cents for the LaRue ZBW cards. Would that indicate that those who paid out good money for these cards thought them worthless? And if a listener thinks a monitored verie of sufficient value that he is willing to pay for it, who shall deny his right to patronize a monitoring service?

On the other hand, there is the group which wouldn't touch a monitored verie with a ten-foot pole. The IDA has gone on record as stating that veries not coming direct from a station will not be considered in IDA contests. In the CDXR foreign BCB contest, verifications must come direct from the stations. The short wave editor of the GCDXC advises of a like rule for contests sponsored by his department.

Between these two extremes is a group which feels that the problem is largely one for the individual listener to settle for himself. If he derives some pleasure from the receipt of a monitored verie, then he has every right to collect all that he may desire. If he decides that they are of no particular value, he simply ignores them and concentrates his efforts on the stations which will verify.

Typical expression of opinion is that of Ray E. Everly, 102 West Washington St., Newton, Ill., who writes: "My version of the verification problem may be typical of other listeners. If a DXer sends the station a comprehensive report and encloses return postage, surely the report is worth a line of verification. In many instances I have received nice veries from stations which normally do not verify, while I have also been ignored by broadcasters listed as willing to verify. parently it depends largely upon the temperament ofthe personnel, whether or not we get a verie. If Carroll Weyrich and Barney Ahman want to monitor stations and issue veries, that is their personal affair. But who would care for a verie which didn't come from the station itself? The DX fraternity knows that the B.B.C. doesn't verify, so why worry about it? I say just keep DXing for the other stations which appreciate good reports and will send you a nice card for your efforts."

Many readers are of the belief that, while a monitored verie may be perfectly legitimate, they would not care to have one in their collection. If a station definitely will not verify of its own accord, then all listeners are pretty much in the same boat. If a listener by virtue of a superior report is able to wheedle a verie from a normally-reluctant manager or engineer, then that is a feather in that DXer's cap. But the important point for these readers is to get their veries direct from the station.

And so it looks as though the whole question may well be one for the individual listener to solve. It is noted from the statement by Mr. Weyrich that his monitoring service definitely has been discontinued. In view of current opinion, the originator of the monitoring idea, Arthur E. Foerster, feels that the practice should be outlawed. Stanley LaRue has ceased monitoring ZBW as a result of an announcement from the station that they now verify reports.

What the future may bring in regard to monitored veries cannot be foretold now, but this may well be the end of the problem.

Lowell Thomas, NBC News Commentator, now has a singing stenographer—except she doesn't sing at her work—she sings in the chorus of the Metropolitan Opera. Pretty Rita Sheridan, found time between assorting and answering the news commentator's fan mail to take voice lessons. Now, in the chorus of the Metropolitan Opera, she's started on a road that some day may lead to personal fan mail.

CLOSING

OR the past two or three months the pages of most of the DX bulletins and magazines in this country have been full of discussions about verifications, but now, for the first time, are presented statements written by the persons who were the cause of the debates.

With these statements from the monitors, we close the artificial verification argument. Mr. La Rue's original article has been slightly altered by the editor, in view of a recent letter from him which states that he has ceased verifying ZBW.

WHY WE VERIFIED DAVENTRY

By Carroll H. Weyrich

THE idea of monitoring the short wave stations of the British Broadcasting Corp. was conceived in November 1936. It was my intention to listen in at stated periods and keep an accurate log of what I heard. Reports from interested DXers would be checked against this log, and those found to be correct would merit a card of verification.

The matter was discussed in detail with my colleague, Bernard Ahman, and he agreed that it would be a fine thing if listeners could fill the gaps in their logs, which had been created by the refusal of the B. B. C. to confirm reception of Daventry. We felt that this would stimulate interest in the great game of DXing, and encourage newcomers to send for the veries which could be obtained direct from a station.

Accordingly, the first attempt was made in January 1937. We printed QSL cards with the calls in large red letters. A charge of five cents per card was made to cover

a Discussion

the cost of printing and postage. Notice of the service was sent to the various radio clubs and magazines.

As the early response from DXers was most favorable, we then worked out a schedule of dates and times when the Daventry transmissions would be monitored for the balance of the year. That the service was well received is indicated by the fact that well over 400 cards were issued during the time the plan was in operation.

Unfortunately, one of the radio magazines made a slip-up by reprinting one of our cards with caption "Daventry Now Verified." This was completely confusing to many, as in other publications it was specifically stated that the cards were not being issued officially by the B. B. C., but that they were coming from me and were mailed in Baltimore with a U. S. stamp affixed.

As the outcome of this magazine's mistake, I received a lengthy letter from the New York offices of the B. B. C. They informed me that they had a copy of one of my cards for Daventry and they voiced the strongest possible objection to the practice. They insisted that I stop issuing the cards and that I send them the balance of the cards in my possession, so that they could be destroyed. As a consequence, I wrote them a letter of apology and explained the service which I was performing. I heard no more from them, and so continued to issue the cards for the correct reports received.

Not long after this, I received a resolution adopted by a chapter of a DX club, which charged me with violating the rules of DX. I was assured that continuance of the practice would result in stations discontinuing their policy of verifying

reception.

In spite of this and other criticisms aimed in our direction, I have felt that listeners approved the service. Of those who have voiced an opinion, a vast majority was in favor of the plan, while only a very small minority was against it. And I'm not forgetting that more than 400 DXers thought enough of my cards to pay five cents apiece for them.

However, it seems that the practice has stirred up quite a bit of comment and, rather than antagonize listeners against Barney Ahman and myself, we decided to discontinue the service. With this thought in mind and for the best interests at large, the monitoring of Daventry transmissions has been discontinued.

Those who have our cards in their possession, can always look back and remember the story attached to their distribution.

In my opinion, if there were ways of securing verifications from a station, all would be well and good. But when a broadcaster has no particular desire to co-operate with listeners in this respect, then it is time for the DXers to do something about it.

LET'S STOP MONITORING

By Arthur E. Foerster

FOR the past few months, I have read with interest the items concerning verifications which are being furnished by various DXers. Inasmuch as I have the doubtful honor of having started this idea with my veries of WJRD and WMFO in 1936, the comments have been of special interest to me.

After reading the stands taken by DXers and the DX Clubs concerning this monitoring business, I, too, believe that the practice should be stopped. It is very obvious that there will be too many abuses of this privilege, so the only way to end the abuses is to stop the idea entirely.

It is, however, unfortunate that we are forced to penalize the many, just because a few refuse to play the game.

When I began to monitor and verify reception of WJRD and WMFO, I first secured the permission of the station manager to issue verifications in the name of his stations. I can honestly say that anyone who received from me a confirmation of WJRD or WMFO, actually earned that verification. In fact, there are probably some listeners who will read this, who can attest the fact that I refused them a verification because their reports were too meager.

Likewise, there is no doubt in my mind that the veries issued by Weyrich and Ahman also were earned. This is probably true of others who have issued verifications, but the



It has been nearly two decades since an El Paso, Texas, schoolboy named Harold Wayne King, used to annoy neighbors by clarioning on a clarinet given him by his father. Today, he is one of the leading saxophone stylists, and the leader of the perchially popular orchestra heard over the Red Network Tuesdays and Wednesdays.

many obvious disadvantages of this system which now become apparent, lead me to believe that all DX clubs should now take a definite stand against veries of this type. I dislike to see such conditions arise which will make this stand necessary, and I know that this will penalize those who have received verifications from me, but there is little else to be done.

Fortunately, in the cases WMFO and WJRD, there has been a change in policy which now permits DXers to receive bonafide verifications from the stations themselves. In many other instances, the DXer has no chance to obtain a real verie. But after all, if the DXer feels that his card is a real verie, then there is little that individuals and clubs can do to change this attitude. And the DXer's word in such things is final!

WHY WE MONITOR ZBW

By Stanley B. LaRue

THE subject of monitored verifications seems to be putting up quite a perplexing problem. A lot of listeners seem to be in favor of the idea, while a few are against it. So far, the latter group has made the most noise.

In our case, Station ZBW had stated that they would not verify any more reports until they were ready to experiment again. In some circles this station is considered a rare catch, and many listeners would surely like to have some proof of reception.

Anyone who witnesses an act is competent to certify thereto. Thus there can be no question but that a listener, so located that his reception is reliable, is competent to certify that the report of another checks with his reception. Hence our veries for ZBW.

When the cry against monitored veries first arose, I wasn't even concerned about the issue. At least, I

wasn't until the CDXR came out and stated that there was a group that would verify every request, at a price, on ZBW.

That is definitely not true. This club is for the purpose of serving the listeners, but we will continually uphold the high standard of the radio world. We will not verify false reports, nor will be charge any great price.

The fact of the matter is that, at first, the monitoring was only a service for our club members, and we made no charge whatsoever for the verifications. This was received so well by our members that we decided to offer the service to all DXers. Some charge would naturally have to be made, since a large outflow of cards would result in considerable expense. The price was low, though, even less than the cost of a reply coupon sent direct to the station.

Some of those who object to monitored veries take the attitude that these veries do not cost anything and that there is a large profit for those who conduct the service. They seem to forget that a large supply of printed cards must be kept on hand, more than may ever be required. They overlook the cost of postage as well as some slight compensation for the monitor who spends so much time serving the enthusiastic DXer.

Even if, by any stretch of imagination, a profit should be possible, is it any more iniquitous than the profits made by the objecting clubs through the sale of stationery, stickers and supplies to their members?

The view of Count de Veries in the November RADEX is the logical one to make. Why does the monitoring of Daventry and Hongkong endanger future verification collecting? How can two non-verifying stations sway some 400 other broadcasters on the short wave bands?

Are any more stations refusing to verify merely because they know listeners will assume the responsibility? No, of course not!

There are only two reasons why stations are ceasing to verify: the first is because of the great expense entailed; the second, because they become discouraged by the uselessness of the many thousands of reports which they have received.

DXers who send false or inadequate reports endanger the possibility of complete, bonafide reports being verified. Monitored veries, on the other hand, tend to discourage listeners who send false reports.

Dime Veries

• • By E. J. Shields

WHILE others either invoked consular intervention or resorted to insult in their attempt to force the verification of reception reports, the Quixote Radio Club relied exclusively upon unfailing courtesy to win recognition.

In appreciation of this policy, Manager Ferrari of Radio Station HRN at Tegucigalpa, Honduras, courteously explained the reasons of force majeur which had hitherto precluded verification of reports and offered promptly to verify every correct report accompanied by a dime (reply coupons being invalid in Honduras) which the QRC might submit by air mail. But, owing to the danger of loss for which no claim would be entertained by the postal authorities, inasmuch as the mailing of coin is contrary to regulations, Sr. Ferrari insisted that all remittances be bv international postal money order.

Such an arrangement appeared eminently fair to listener and station alike. While affording the listener absolute assurance against loss or disappointment, it at the same time yielded the station a more equitable contribution toward the clerical, postal and printing expense of issuing verifications.

Estimating its pro-rata expense at three cents per request, the QRC consented to accept, for forwarding by air-mail to the station, all requests accompanied by a dime and three cents, all cards to be issued and mailed by the station direct to listeners, with the guarantee that if a card should chance to go astray, another could be requested by the QRC without charge. The QRC further requested that, for the benefit of listeners in the United States and Canada, this arrangement be announced by the station at the conclusion of its evening broadcast. With respect to all these conditions, Station HRN and the QRC are in perfect accord.

Upon learning of this arrangement, other stations similarly situated likewise availed themselves of its advantages, more than a score having given the QRC full and complete assurance of verification when requested through its good offices. These stations are listed monthly in the SHORT WAVE REPORTER published by the QRC at \$1.00 a year. Single copies are 10 cents.

Until this arrangement shall have been fully publicized, coupons received direct (but worthless to the stations) may be returned to listeners by some of the stations with advice in writing as to the correct procedure, but this courtesy on their part is an extra expense and may not be expected indefinitely.

The inference is clear: Having advised how verifications may surely be obtained, the stations are then morally under no obligation to grant requests made in a manner at variance with this advice. While they may honor direct requests, there is no assurance of this, nor would the applicant have ground for com-

plaint if he himself disregards directions.

Listeners in the United States and Canada who desire the verification cards of these stations, are assured of their issuance by the stations if they send their report with a dime and three cents postage to the Quixote Radio Club, Box 772, Santa Barbara, Calif, for forwarding to the stations. This service is open to all.

Universal DX

Club Corner

● ● *By* "Pooky"

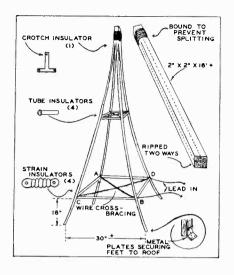


A S THIS month's prize-winning entry in the UDXC Mysterious Contest, "Pooky," with his suitcase all packed, presents a diagram. It was contributed by Mr. W. J. McGrandle of 886 Home St., Winnipeg, Manitoba. The diagram is of a vertical antenna, and Mr. McGrandle's letter explains it.

Mr. McGrandle is now working on another diagram of a vertical antenna, wherein the house will be located at a point to be called "EEEE", at the juncture of the upper crossbraces. In the meantime, "Pooky," peering from behind the curtains of 345 Maple Ave., Oradell, N. J., nervously adjusting his false beard, awaits your comments.

The Vertical Aerial

I read with considerable interest the articles about Mr. Hammond's vertical aerial, and I agree with his claim that the vertical aerial is superior to any other kind. It not only insures good reception, but for



ease of erection, inexpensiveness and adaptability to almost any location, it is hard to beat.

I have been using a vertical antenna since November of 1934, on both long and shortwaves, and have had such good results that I feel I must tell other DXers how to build an aerial like mine.

I used a piece of lumber 2 inches by 2 inches by 16 feet long—but four pieces of 1 x 1 can be used as well. If 2 x 2 stock is used, this should be split both ways, as shown in the sketch, up to within about a foot of one end. Then this end is securely bound to prevent splitting.

The sketch shows how the four legs are spread out at the base and held in position by four cross members. These braces are made of ¾ inch stock. The wire bracing adds rigidity.

This kind of a mast can be erected on a peak roof as well as on a flat one. The legs are secured to the roof by means of metal braces—right angle braces for a flat roof and angle braces for a peak roof.

The method of wiring this aerial is very simple. From the insulator

at "A" the wire runs up inside the leg, through the tube insulators, to the crotch insulator at the top, then crosses over to the opposite leg, and down to point "B". From "C" the wire runs in a similar manner to "D". The two wires do not touch at the top. The free ends at "B" and "D" form the lead-in.

Using two wires on the tower allows one to work out several different combinations of hook-up when one or more small switches are used between the lead-in and the set. The lead-in can be kept straight, transposed or twisted. My experience shows that twisted leadin is best for shortwaves, and grounding one of the wires direct eliminates much interference.

A determined effort to enlist Charlie McCarthy, noted radio entertainer, in the ranks of the American Federation of Radio Artists, has been launched, according to Carlton KaDell, president of AFRA's Los Angeles local.

"As one of the nation's most popular radio performers we feel that he should be a member of this organization," KaDell declared. "Mr. Edgar Bergen, who is associated with Mr. McCarthy on the air, is one of our charter members, but Mr. McCarthy has not yet joined."

Eddy Duchin's sophisticated "Hour of Romance," which induces listeners to roll up the carpets and dance, switched its broadcasts to the Mutual network, on Tuesdays from 10:00 to 10:30 p.m., EST.

This famous society band is heard over WGN, WLW, CKLW, WOL, WIP, WRR, twenty-four stations of the Don Lee Broadcasting System, and WOR, originating in the theater of the latter station.

What the SHORTWAVES

Are SAYING

Argentina

LSL2 Buenos Aires, has been heard on 10300 kcs talking with La Paz, Bolivia, near 8:30 pm, EST. (RX60 Ky.)

Brazil

PSH in Rio de Janeiro on 10220 kcs, has been heard nightly from 7 to 9 pm, EST. The signal strength is very good, and the programs, composed principally of Brazilian music, are worth listening to. PSH is owned by Cia. Radio Internacional do Brasil, Caixa Postal 709, Rio. An attractive QSL card is promised to reporters. Programs of PRF4 are relayed. (RX42 Calif, RX59 Texas RX60 Ky, RX64 D. C., RX68 P. Q.)

British Guiana

VP3MR is owned by the British Guiana Broadcasting Company, Georgetown. They give their frequency as 6010 kcs, and state that 150 watts power is used. The transmitting schedule is daily from 7:45 to 10:15 am, and 4:45 to 8:45 pm, EST

British Honduras

ZIK2, Belize, on 10600 kcs, transmits on Tuesdays, Thursdays and Saturdays from 7:30 to 7:45 pm. (RX27 N. Y.)

Ceylon

VPB in Colombo came through weakly one morning. The best time for reception is around 9 am, EST, which may be a little late for eastern listeners, but they might try near 7 am. (RX42 Calif.)

Channel Islands

Several reports have appeared in British newspapers about the existence of a mystery station in the Channel Islands. This station is owned by Alderney Radio, Ltd., on Alderny Island, Channel Islands,

and has not been licensed by the British General Post Office. It is understood that the Channel Islands are a part of the ancient Duchy of Normandy, are governed under Norman laws, and that French is the official language. The Mystery Station transmits on about 50 meters (6000 kcs.) and is expected to go to very high power soon. (RX47 England).

Chile

CED at Antafagasta on 10230 kcs, tests frequently from 7 to 9:30 pm. (RX27 N. Y.)

Colombia

HJ7ABP Bucaramanga is heard frequently on its frequency of 9630 kcs, but also once in a while on 10330 kcs. (RX70 Colo.)

Cuba

Sr. Casas, owner of COCO, tells us they have just installed a new broadcasting station, CMCK, to work on 1030 kes. COCO, on 6010 kes, employs a Collins transmitter of 2500 watts power. Reports should be addressed to Sr. Luis Casas R., Apartado 98. Hayana.

COCU is heard nightly on 6590 kcs. The schedule is Monday to Saturday, 7 am to midnight, EST. On Sundays the transmission lasts one hour longer. The address is Estrada Palma No. 25, Vibora, Hayana. (RX42 Calif.).

COBC has been heard on about 9960 kcs. . . . COCO is now being heard on about 12050, relaying CMCK . . . COCH is now relaying CMGF . . . COKG is still on 8930 kcs, putting in a fair but "tinny" signal. (RX52 and RX69, N. Y.).

COKG is heard on 8920 . . . COBC, listed on 9360, has been heard on 9420 and 9090 . . . COCH is heard on

9480 . . . COCQ, listed on 9750, has been logged on 9090, 9600, 10390, 9700, 9750 and 10000 kes. . . COCX heard on 9290 (RX70 Colo.).

COCA, the new Havana station, has been heard on 9200. The address is P. O. Box 3488 . . . COBX comes through on 10000 . . A commercial station, CMA5, Havana, transmits on 10890 working with WQV at Rocky point. (RX22 Ohio).

COCQ and COBC have been chasing each other all over the dial, from 9060 to 9100 (RX62 Calif.).

Denmark

OZF, Copenhagen, operating on 9520 kcs, with 6 kilowatts power, is heard daily from 2 to 6:40 pm, EST. (RX47 England).

Dominican Republic

HI7P in Trujillo now verifies through the QRC Dime Verie Plan.

Ecuador

Station HCJB transmits on two w. broadcasting wavelengths, operates in two of the amateur bands, and is also on the broadcast band. Each transmitter employs one kilowatt power, and the broadcasting schedule on all frequencies (except the amateur frequencies) is daily from 7 to 8:15 am, 11:30 am, to 2:30 pm, and 4:45 to 10:15 pm, EST. On the 4107 kcs frequency the slogan is "Broadcasting Provincial;" on 8830 the slogan "La Voz de Los Andes" is used, and on the broadcast band (974) the station is known as "La Voz de Quito." On the 20 and 40-meter amateur bands the call letters are HC1JB, and the slogan, "Radio Rodante." These amateur stations are employed frequently for rebroadcasting HCJB programs. (RX22 Ohio).

The list of Ecuadorian stations given here was taken from the Ecuadorian Trade Index:

HC1VT, "Radio Ambato," 6575 Ambato.

"Radio Esmeraldas," at Esmeraldas.

HC2JB, "La Voz del Litoral," Apartado 784, Guayaquil.

HC2JSB, "Ecuador Radio," Guayaquil.

HC2RL, "Quinta Piedad," 6674 Guayaquil.

HCT, "Radio Telefonica," 5003, Guayaquil.

"Radio Ortiz," Guayaquil.

HC2CW, "Ondas del Pacifico," 8408, Guayaquil.

"Radio Paris," 12675, Guayaquil.

"Radio Naval," Guayaquil.

"Sociedad Filantropica del Guayas," Guayaquil.

"La Voz del Imbabura," Ibarra.

"Radio Asemany," Loja.

"Radio Loja," Loja.

HC1ETC, "Teatro Bolivar," 6976, Quito.

HC1JB, "La Voz de los Andes" (See paragraph above).

HC1PM, "La Voz del Palomar," 5725, 6555 and 12000. Quito.

HC1TQ, "El Telegrafo," 6720, Quito.

HCK, "Radiodifusora del Estado," 3529 and 5885, Quito.

"El Prado," Apartado 98, Rio Bamba. (RX52 N. Y.).

Guatemala

TGWA, 10 kilowatts, has been heard on 9685, 11760 and 15170 kcs, at various times throughout the day and night. (RX61 Ariz.). Their signal on 15170 is especially good. On certain days, around 12:30 pm, they have a program for Americans, and many of the selections are played by a marimba band. (RX29 Ill, RX30 Ky, RX57 Ill, RX67 Ky, RX70 Colo.).

TGWA is heard best on 9690 kcs between 7 and 8 pm, and from 4 to 5 pm, is the best time to hear it on 11760 and 15170 kcs. (RX64 D. C.).

Honduras

HRN, Tegucigalpa, now verifies through the QRC Dime Verie Plan.

India

The best reception this month was the interception of signals of VUC Calcutta on 6110 kcs. The signals were exceptionally good, at R7, and were best from 8:30 to 9 am, EST. At 9 o'clock W9XF comes on the air and ruins it (RX42 Calif.).

Italy

Two new Italian shortwave broadcasting stations, both relaying the programs to 2RO, may be heard testing on the 19 and 16 meter bands. Sometime in February these stations, which are reported to be 2 kilowatt auxiliary transmitters, will probably relay all of 2RO's programs.

Macau

Station CQN has been heard again on a regular schedule on Mondays from 7 to 8:30 am, EST. They announce that they also transmit on Fridays at the same time. The best reception is at 7 am, when they sign on. Announcement of call letters is very frequent during broadcasts. A strong c. w. signal is usually on the low frequency side of CQN and bothers reception. (RX42 Calif.).

Martinique

A verification has been received from "Radio Martinique" at Fort de France. The letter states that QSL cards are now in preparation, and will be sent out as soon as possible. This 200 watt station was built by the operators, and transmits on 9700 kcs, between 6:45 and 7:45 pm, EST, daily. The address is P. O. Box 136. (RX22 Ohio).

Fort de France is still heard, but not as frequently as a few months back. Its actual frequency is about 9730. (RX70 Colo.).

Mexico

The new Mexican station on 7100 kcs, reported in the December RADEX, uses as its identifying slogan, "Radiodifusora del Pueblo." It is situated in Guadalajara. No call letters are announced, but reports are to be addressed to La Oficina del Partido Revolucionario Mexicano, Guadalajara, Jalisco, Mexico. (RX42 Calif.).

Netherland East Indies Station YDC at Batavia, Java, has



Originators of their own brand of heckling and "double talk," Shaw (right) and Lee, veteran comedians are featured on Columbia's novelty program, "Double Everything." Sam Lee and Al Shaw have teamed together for over a decade.

been verified on 15150 kcs. (RX41 La.).

New Guinea

Radio telephone service has been opened between Sydney, Australia, and Rabaul, New Guinea. The service is available throughout the entire Mandated Territory and all of Australia, between the hours of 11 am and noon (8 to 9 pm, EST.).

Nicaragua

Reports on YNPR are conflicting. This station has changed frequency from 8650 to 8580 kcs; the power is 500 watts, and the schedule is 1:30 to 2:30 pm, and 8 to 10 pm, according to RX42, California. YNPR, "Radio Pilot," was logged at 10:30 pm on about 8750 kcs, by RX29 Illinois.

Panama

HP5A in Panama City must be using their new 3000 watt station now, as they are coming through almost as well as COGF (RX52 and

RX69 N. Y.).

Peru

"Radio Nacional de Peru," (probably OAX4T), at Lima, has been heard on 15170 announcing test schedules with the British Broadcasting Corporation daily from 6 to 8:45 pm, GMT (1 to 3:45 pm, EST.) (RX22 Ohio).

Philippine Islands

A verification from KZRM at Manila states that the power is one kilowatt, and the frequencies are 9570 and 11840 kcs. At present only the latter frequency is used, but they may change to the other at any time. Their antenna is a 420 foot vertical radiator, and the schedule given on the card is as follows; Monday to Friday inclusive, 4:30 to 6 pm, and 5 to 9 am, EST. Saturdays 4:30 to 6 pm, and 5 to 10am, EST. Sundays 4 to 10 am. Programs are broadcast in English, Spanish and Philipino. (RX42 Calif.).

Portugal

CSW in Lisbon, assigned frequencies 11840, 11040 and 9940, is on the air daily from 1 to 8 pm, EST (RX27 N. Y.).

CSL, Lisbon, 6150 kcs, is heard from 7 to 8:30 am, and from 2 to 7 pm. (RX27 N. Y.).

Portuguese West Africa

"I have verified CR6AA, Lobito, Portuguese West Africa. The frequency of this station is given on the card as 9660 kcs, and the address as P. O. Box 103." (RX41 La.).

Siam

HS8PJ, in addition to their Thursday broadcasts on 9510 kcs, has been holding a special broadcast on Mondays from 8 to 10 am, on 19020 kcs. These broadcasts may become permanent if reports on their signals are favorable. (RX42 Calif.).

Spain

EAR in Madrid has been heard at 7:30 pm, transmitting news from the war front. In asking for reports, the announcer gave the address as

Radio Station EAR, The Voice of Madrid. (RX56 Ont.).

Spanish Morocco

A verification card from EA9AH states that it is owned by F. Diaz Gomez, Apartado 124, Tetuan. This station works on approximately 14050 kcs, which is in the 20-meter amateur band but can be considered as a broadcasting station as well because of its regular programs. The power is 500 watts. War bulletins are read in Spanish and English at 4:45 and 7 pm, EST. (RX47 England).

Sweden

SM5SX, Stockholm on 15155 kcs, is now heard operating from 11 am, to 5 pm, EST. (RX54 Minn.).

Union of South Africa

Mr. H. O. Collett of the South African Broadcasting Corporation provides us with complete information concerning the new Johannesburg shortwave station. Mr. Collett's letter reads:

"We wish to advise you that the following is a synopsis of our schedule:

"Mondays to Fridays inclusive, EST, 11:45 pm, to 12:45 am, physical jerks session with news services and market reports. Time signal at midnight with chimes from Union Buildings at Pretoria.

"3:15 to 7:30 am, the morning session consisting of recorded orchestral music, talks, reports and news, with time signals at 5, 6, and 7 am.

"9 to 11:45 am, afternoon session consisting of recorded music, children's broadcast, Youth Movement broadcast, and reports, with time signals at 10 and 11 am.

"11:45 am, to 4 pm, orchestral and variety programs with news and talks, together with general interest broadcast and time signals at noon, 1 pm, and 3 pm.

"The Saturday program is a repetition of the weekday program with the exception that afternoon sessions start at 10:30 am, and the evening session ceases at 4:45 pm.

"The Sunday program is made up as follows: Church broadcasts from 3:30 to 4:30 am, or from 4 to 5 am, followed by afternoon session which starts at 8 and finishes at noon. The evening program starts at 12:15 pm, with religious broadcasts, musical items and news. There is a time signal at 1 pm.

"Our correct mailing address is South African Broadcasting Corporation, P. O. Box 4559, Johannesburg. The exact frequencies employed by our stations are:

Klipheuvel: South African day-

light broadcast on 9606 kes, and night broadcasts on 6097 kcs.

Davlight broad-Johannesburg: casts on 6097 kcs. This station is shut down during the evening sessions.

RobertsHeights: This station will be in operation as from the 1st December (barring mishaps) and will broadcast on the frequency of 9523 kcs, until such time as it is decided to introduce a second frequency." (End of letter).

Johannesburg comes in quite well, and is heard every night tried for, from 8:45 to 9:45 pm, PST. opening and closing announcements are made in English and Afrikaans. (RX62 Calif.).

J/B is heard with only R1 and R2 signals, through bad static at times. The programs always start with a bugle call. (RX42 Calif, RX61 Ariz.).

United States

The new General Electric station near Belmont, Calif. has been assigned the call letters W6XBE.

WWTA at St. Albans, Vt., 1626 kcs, transmits daily at 11 pm. A new police station in Lafayette, Ind. is 1634. working on An unlisted weather station comes in on 1630, transmitting storm warnings near 11 pm. (RX65 N. H.).

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

New 1.698 WEVN, Belair, Md WHWN, Mo Md. 1.712 KPAT, Port Arthur, Tex. (.06)

1.626 WWTA, St. Albans, Vt. 1.698 WAKR, Pensacola, Fla. WAKS, Orlando, Fla. WAKT, Tampa, Fla. WAKU, Ft. Myers, Fla. WDSP, New Castle, Del.

Power 2.414 WPFI, Columbus, Ga. 250 w. from 100. 2.450 KACF, Chicasha, Okla. 100 from 50. KGPZ, Wichita, Kans: 400 from 250.

Vatican State

The Vatican City station HVJ has returned to the air and is very well heard. It tests in the mornings, coming on the air prior to 9:30 am. The announcer mentioned that they were also transmitting on a wavelength of 25.55 meters. (RX22 Ohio).

The Reporters

RX22, Jack Siringer, 1451 Lincoln Ave., Lakewood, Ohio.

RX27, Raphael Geller, 1652 Radcliff ave., Bronx, N. Y.

RX29, Wm. J. Wood, 817½ Lake St., Oak Park, Ill.

RX30, R. J. Nabor, 417 S. Western Pkwy., Louisville, Ky.

RX41, A. V. Deterly, 211 Convention St. Baton Rouge, La.

RX42, Stanley LaRue, 309 S. Bedford Drive, Beverly Hills, Calif.

RX47, D. H. Dussek, Morland Hall, Alton, Hants, England.

RX52, S. A. Meyer, Jr., 83 Canterbury Rd., Rochester, N. Y.

RX54, Darrel G. Johnson, Wolverton. Minn.

RX56, Cecil Dickenson, 61 Dover St., Chatham, Ont.

RX57, Jack Welsh, Kingston, Ill. RX59, T. D. Smith, Box 744, Burnet, Texas.

RX60, R. M. Carter, 1064 Everett Ave., Louisville, Ky.

RX61, Francis McDonald, 215 E. 34th St., Tucson, Ariz.

RX62, Richard S. Croker, 928 W. 11th St., San Pedro, Calif.

RX64, H. M. Phillips, 3907—20th St., N. E., Washington, D. C.

RX65, Harry Hawkins, 222 Massabesic St., Manchester, N. H.

RX67, Jesse L. Lausman, 409 S. Campbell St., Louisville, Ky.

RX68, Rene Chicoine, 4388 rue Fabre, Montreal, P. Q.

RX69, John D. Chamberlain, 190 Gregory Hill Rd., Rochester, N. Y.

RX70, W. F. Cornwell, 2939 So. Grant, Englewood, Colo.

The SWL Trading Post

Walter Th. Kammann, P. O. Box 1891, Caracas, Venezuela, wants to exchange SWL cards.

"I have heard various ship 'phones and Canadian weather stations on 1630 kcs, among them VBB of Sault Ste. Marie, VBE of Point Edward and VBG in Toronto," reports C. Roman, 1907. Kedzie Blvd., Chicago, Ill. "I would like to know if any other readers have heard these stations, or other stations of this type."

Howard Conrad, Route 1, Killingly, Conn., wants to exchange SWL cards with anyone in any part of the world, and promises to answer every card and letter he receives.

H. C. Hicks, Jr., 727½ W. Twelfth St., Dallas, Texas, will exchange correspondence.

Morris E. King, Bridgeport, Okla. (Exchange SWL cards).

Leo Herz, 730 Roscoe St., Chicago, Ill. (Exc. SWL cards).

Francis Gmeiner, 661 E. 109, Cleveland, Ohio, SWL cards.

KSTP has been granted special experimental authority to operate its regular transmitter on 1460 kcs for experimental facsimile transmissions from 1 to 6 am, CST.

Station News

Three new Australian stations have been licensed. One of these is a new National station for Adelaide, No. 2, with the call sign 2AN, on frequency 890 kcs with 500 aerial watts. The other two are commercial broadcasters. Parkes. NSW, has 2PK on 1400 kes with 100 watts, owned by the Parkes Broadcasting Co., Pty., Ltd., 283 Clarinda St., Parkes, NSW. The other commercial station is at Geraldton, 6GE on 1370 kcs. The power is 500 watts, and the owner, the Great Northern Broadcasters, Ltd., St. George's Terrace, Perth, W. A.

Many of the Chinese radio stations have suspended operation, according to *China Radio*. Our index of Asiatic stations, printed in full this month, shows the status of Chinese stations prior to military operations.

The correct mailing address of stations WOV and WBIL, New York, is 132 West 43rd St., New York, N. Y.

The Cuban Director of Radio ordered CMBG deleted on Nov. 12. This station was owned by John L. Stowers.

The mailing address of XELO, Tijuana, is P. O. Box 6, San Diego, Calif.

Joint operation of WLLH at Lowell and its "satelite" station at Lawrence was commenced on December 1st, and the operators report that their listening area has been increased by 250,000 persons. The call letters WLLH are used for both stations, which are synchronized on 1370 kcs. WLLH at Lowell works with 250 watts until local sunset and 100 watts thereafter, and the booster at Lawrence employs 100 watts full time. The stations are only ten miles apart.

Some Little BIOGRAPHIES

By BETTY

HE King of Jazz, the world-renowned Paul Whiteman, has returned to the Columbia Network for an extended series of popular musical programs which are heard every Friday night from 8:30 to 9:00 pm, EST, and rebroadcast to the west at 11:30 pm, EST.

In addition to the inimitable music provided by his orchestra of 26 stellar instrumentalists, America's foremost popular musical leader also will bring to the CBS airlanes each week, a different star from stage and screen, many of whom Whiteman himself started on the road to fame as members of his musical ensemble. The names of the guest stars will be announced from time to time.



The latest picture of Marian Jordan, the doubting half of the NBC comedy team, Fibber McGee and Molly. In addition to being a radio comedienne, Marian also is the mother of two children and the housewife of the Jordan household.

In the words of Whiteman, the series will be "popular programs, devoted to tune favorites old and new, but I hope to introduce many of the works of contemporary composers, with the emphasis, of course, on new American composing talent."

The first five programs of the series originated in Hollywood, but the remaining programs come from one of Columbia's New York playhouses where the noted critic and composer, Deems Taylor, who is also Columbia's musical consultant, brings to the series his informal and stimulating musical commentaries. Paul Douglas is the announcer.

The Brigadiers

Horace Heidt and his Brigadiers are presented to the radio audience over the largest network in the history of the popular program, on the coast-to-coast Blue Network, on Tuesdays from 9:00 to 9:30 pm, EST.

Although Heidt's orchestra and entertainers have been heard over NBC networks occasionally in the past, they are now broadcasting their first regular series over this network. In bringing his program to NBC, Heidt steps into the spot formerly occupied by another famous orchestra leader, Ben Bernie, the Old Maestro.

Assisting Heidt in his weekly program of gay and stirring rhythms are such well know specialty performers and singers as Lysbeth Hughes, singing harpist; Alvino Rey and his singing guitar; Larry Cotton, tenor; Charlie Goodman, baritone; Bob McCoy, basso; the Glee Club; Yvonne King, of the Four Kings, and the Three Trumpeters.



Olga Baclanova, of stage and screen fame, has ensconced herself in the radio limelight with her new role of singing star on her own "Continental Revue", which is heard over the Mutual System on Saturdays from 8:30 to 9 pm.

The maestro himself, a six-footer weighing 190 pounds, was a star athlete at Culver Military Academy and the University of California until a broken vertebra ended his athletic career. His Brigadiers were organized on the campus of the University of California. After graduation, the group met wide success in California, throughout America and abroad.

Jack Benny's Maxwell

"How do you make a Maxwell sound like a Maxwell when it isn't a Maxwell?" This, in effect, is the most frequent question asked in recent weeks in the thousands of letters that Jack Benny has received in regard to his sound-effects auto.

Pinto Colvig is the man responsible for the development of the apparatus which is the "Maxwell of the Air."

He uses the "south end" of a trombone for the sound of the car's starting motor, and a battered wash boiler with mounted electric motor gives a perfect imitation of a rickety jallopy rolling down a bumpy road. A siphon bottle simulates the sound of a gasoline pump putting in two gallons. A rattle, cowbell, steel plate, and coffee can, all mounted on a board which is beaten with a wooden hammer, creates the illusion of things dropping off the Maxwell.

The mechanical effects, together with whistles, screams, chugs, and wheezes supplied by Pinto himself, constitute the working parts of Jack's famous Maxwell. Jack calls the talented sound effects engineer his "air chauffeur," and no name could be more accurate. For Colvig is the only fellow wha has ever actually "driven" the Benny bus.

Arthur Godfrey

Arthur Godfrey is now heard every Friday from coast-to-coast



Horace Heidt's Alemite Brigadiers are now heard over the Blue Network on Tuesdays from 9 to 9:30 pm, EST. Heidt's programs are built to suit every musical taste, and vocal and instrumental soloists and groups are featured.

over the Mutual Network at 7:45 pm, EST. Born in New York thirty-four years ago, he recalls his earliest ambition as one "to see everything and do everything." And he meant it. Since his birth, Arthur has been an office boy, a coal miner, a navy radio operator, a life insurance salesman, a cemetery lot salesman, a vaudeville actor, a taxi driver, a member of the coast guard, a radio announcer, a breeder of thoroughbred dogs, horses and fine cattle, and the quizzing assistant to the quizzical "Professor Quiz."

His father, Arthur Godfrey, Sr., was a veteran sports writer who recognized the boy's ability at adlibbing, and gave him column recognition that resulted in the offer of nineteen different jobs. His broadcasts over WJSV, Washington, soon brought him a large following of listeners who liked to hear "somebody different."

Godfrey tips the scales at 185 pounds, possesses auburn hair, blue eyes, determined jaw, and a slow, drawling voice. He's a bachelor . . . never keeps an appointment on time, for no good reason, but admires punctuality in other people . . . his favorite radio performer is Al Pearce.

This new Mutual star likes to fish, ride and fly his own airplane, is a banjo player of note, and since his air debut has done considerable singing. On his new program he tries his diversified talents on a new Hammond electric organ.

Boake Carter will start a new program on February 28. His talks will be heard from 6:30 to 6:45 pm on Mondays through Fridays, over the Columbia Network.

Ed M. Vickers of Box 121, Coral Gables, Fla., wishes to obtain copies of RADEX published prior to 1929.

Aerials and Grounds

Back issues of RADEX are crammed with data about aerials and grounds. Good antenna installations are essential if one is to derive the greatest amount of DX possible from his set; most DXers realize this, and they continuously experiment with various combinations of sky wires until a winning combination is found.

DXers who wish to further their study of antenna systems are referred to the following articles:

"Experiments With Aerial and

Ground," in Feb., 1931.

"Experiments with Aerials and Grounds," in Apr., 1932.

"Expert's Ideas of Aerials and Grounds," June, 1932.

"Shortwave Antennas and Grounds," Feb., 1933.

"Static-Reducing Antenna Systems," Oct., 1933.

"A Word About Aerials," Dec., 1933.

"Debates on Aerials and Grounds," Jan., 1934.

"Is Your Antenna 100% Effective?" Oct. and Nov., 1934.

"Which is the Best Antenna?" March, 1935.

"Concerning Aerials," Sept., 1936. "Readers Ask About Aerials," Oct., 1937.

M. W. Oliver of Houston, Texas, writes, "A local station, KXYZ, 1440 kcs, inaugurated, on January 1st, a new policy of 24-hour continuous broadcasting.

This will be bad news to many DXers, but news is news."

"There are unidentified Mexicans on 810 and 960," reports Samuel Meyer, Jr., of Rochester, N. Y. "XEN is back on 780 and XEJP on 1120."

DOIN'S of the Radexers

• • • By CARLETON LORD

HEN the October 1935 issue of RADEX went to press, it was felt that a most important milestone in DX history had been passed. On page 37 of that issue, there appeared an announcement of the adoption of a new plan for inter-club co-operation.

That such a plan was necessary for the continued success of DXing as an organized hobby, was apparent to those who gave serious thought to the matter. For several years, rival radio societies literally had been battling for prestige, members and dedicatory programs, and it began to look as though no holds would be barred.

Instead of close harmony between groups allied in the pursuit of the ever-elusive distant station, there was a growing feeling of petty jealousies and resentment. Special broadcasts were scheduled without thought of whether conflicts would occur, and some organizations even tried to chisel in on specials arranged by other clubs. All in all, it was a rather deplorable situation.

Fortunately for DXing, Elwin H. Bullard of the CDXR conceived a solution for the problem and set about to make it an accomplished fact. One by one he obtained the support of other clubs and climaxed his activities in the summer of 1935, when he was able to report the approval by leading clubs of the Inter-Club Co-operation Plan.

Although intended primarily as an instrument to prevent clashing special programs, the plan as adopted was a virtual code of ethics for DXing. Agreements were made whereby the co-operating clubs

would refrain from attempts to chisel in on programs arranged by other clubs, would not use names and addresses from other bulletins as a means of soliciting members, and would not use tips from another club without first receiving permission to do so. Each club further agreed that it would not publish anything in its bulletins which would in any way be offensive to another club in the plan.

Provisions were made for the establishment of a Clearing House under the supervision of Miss Emily Griswold, and through this medium clashing specials would be reduced. In the event that conflicts did arise, means were provided for their elimination.

As such, the I. C. C. P. was commended in the October 1935 RADEX as "one of the most important forward steps in the history of DXing as an organized hobby."

The history of the plan since its inception, while not brilliant, has at least been satisfactory. Without any better solution to the problems which faced the DX fraternity, it provided a basis for continued cooperation between clubs and acted as a constitution for the settlement of future questions of policy.

At the end of its first year of operation, the plan was renewed by all of the participating clubs. When Miss Griswold announced last Spring that she would be unable to continue as Clearing House Operator, Alfred J. Stansfield, president of the Universal DX Club, took the initiative in getting the clubs to renew the agreement for another year. With the assistance of Robert H. Weaver, former NRC president

and new Clearing House Operator, approvals were received in short order from the URDXC, IDA, UDXC, NRC and GCDXC. The NNRC later approved a renewal of the agreement. Finally, in a roundabout manner, we were advised that the CDXR also intended to cooperate under the rules which its former officers helped to formulate in 1935.

However, while the leading allwave clubs once more have pledged their support to a renewal of the original agreement, it appears that some officials are not entirely familiar with the regulations which they have promised to uphold.

One of these regulations very definitely stated: "Each club agrees that it will not publish anything in its publications that will in any way be offensive to another club in the plan." As the result of a recent leading article in their bulletin, the attention of the CDXR is directed to this clause.

The matter in question started when the CDXR arranged a special program for December 1st from the new CFAR at Flin Flon, Man. According to CDXR President Charles Hesterman, a flash sheet advising of this broadcast was sent to CDXR members as well as to the other DX clubs. Notice was also published in the November 9th CDXR bulletin.

Just what happened to the flash sheets is not certain, but the NNRC claims that it never received a copy. It did, however, receive a letter from a CDXR-NNRC member in Toronto, George H. Goodwill, advising of the date of the special and promising further details about the time of the broadcast. This letter was quoted in a prominent place on the first page of the November 8th NNRC bulletin. A second reminder appeared in the tip section of the bulletin on November 15th.

Then in the November 29th bulletin, the program was given further publicity. In each of the three instances, the CDXR was given full credit for arranging the program.

For some unknown reason, the CDXR took exception to this handling and devoted a page and a half of its November 26th bulletin to a vitriolic condemnation of the NNRC. Lacking grounds for complaint on the basis that publicity recognition of sponsorship not given, the CDXR were wailed the fact that the NNRC did not advise its members "that the CDXR had officially notified the NNRC of the new station and DX programs arranged from it."

Quoting further from Hesterman's article: "The NNRC also implied that they were forced to depend entirely upon Goodwill for any future information regarding CFAR's DX program. I now publicly state that the NNRC lied by implication." When a protest to NNRC President Potts brought in reply only a clipping from the Newark Evening News, giving further publicity to the CFAR program, Hesterman continued: "There probably is a scarcity of writing paper at NNRC headquarters, just as there's a scarcity of straightforward decency."

Other than the knowledge of another incident in which CDXR mail failed to arrive at its destination, which lends credence to the NNRC statement that the flash sheet was never received, RADEX does not intend to comment on the events leading up to the CDXR denunciation.

However, it is felt that the unprovoked attack on the NNRC not only was in exceedingly bad taste, but it was in direct violation of a specific clause of the I. C. C. P. which the CDXR was pledged to uphold. This is indeed a far cry

from the friendly spirit of co-operation which was laid down by the former CDXR officers who helped organize the Inter-Club Co-operation Plan.

In closing this incident, may it be said that the matter would not have received publicity in RADEX but for a direct invitation by the CDXR president himself. On October 31st, he wrote: "In the future, please publish outright the name of an offending bulletin. Don't think that I will rant and rave if it transpires that it is the CDXR."



A view of the new building housing the transmitter of Argentine station LRA. This station, known as "Radio del Estado," transmits on 750 kcs with 10,-000 watts power.

Station News and Reports

As the current DX season swings down the mid-winter stretch, listeners in all parts of the country are hearing new stations for the first time. Old stations bob up on new frequencies and other changes occur almost daily.

On any cold, crisp evening, Spanish-speaking stations bombard the air lanes with potent signals. And, while it is really no small problem to keep abreast of the changing broadcast spectrum, Radexers do their share to clear up the maze by reporting what they hear.

"On 855 keys there is a Spanish-

speaking station which comes in well at times," reports Carroll H. Weyrich, 112 Alden Road, Parkville. Md. "Those who hear this station should stick by the frequency, as it is OAX4A in Lima, Peru, 'Radio Nacional.' YV5RQ, Caracas, Venezuela, is being heard on 882 kcys from 6 p.m., EST, on. YV5RA, also in Caracas, is received on a clear channel on 960 between 5 and 6 p.m. On 1005 keys, YV5RG is heard between 8 and 9 p.m. On 1105, HJ3ABB is heard around 8 p.m. relaying HJ3ABD, TIPG, 625 kcys, San Jose, Costa Rica, is a daily visitor from 9 to 11:30 p.m. Down in Havana. CMBC has moved from 630 to 955 keys. Another station is being heard under WMAL on 630 and may be a new Cuban. On 775 keys is an unidentified Mexican. Other unidentified stations are also being heard on 690, 985 and 1185. When reception from the South is the following Cubans favorable, may be heard: CMCY on 570, CMCG on 680, CMBS on 770, CMGF on 790, CMCF on 810, CMCM on 850, CMX on 920, CMBY on 970, CMBZ on 1000, CMBX on 1070, CMBD on 1170, CMCB on 1230, CMC on 1260, CMCQ on 1410, and CMOA on 1440."

"We have installed a new 5000 watt transmitter which is operating on 1030 keys under the call CMCK," writes Luis Casas R., owner, Apartado, No. 98, Havana, Cuba. "All programs are broadcast simultaneously over short wave station COCO on 6010 keys."

Cuban Invasion

"Just about the greatest source of radio interest in this section is the Cuban Invasion of 1937," relate John D. Chamberlain and Samuel A. Meyer, Rochester, N. Y. "There have been numerous power changes, new frequencies and new stations down there. CMQ switched from 880 to 600 and is now using an an-

nounced power of 25-KW, but competition on that channel is pretty keen, what with WICC, WMT and CFCF. A new carrier has appeared on 880, which might be CMW. CMW's old 2500-watt outfit is now on 750 with the call CMBL, making life miserable for WJR. CMK has moved from 730 to 720, creating an awful howl on WGN. CMCO occasionally manages to break through the mob on 1200. What happened to the CMCX which was on 1030 before CMCK. and where CMCW?"

Other Cuban changes reported show that CMW is definitely on 880, where it moved from 600, that CMCD changed from 950 to 630, and CMBC from 630 to 950. CMCX and CMBG are reported deleted.

Mexico . . .

"XERO is a new Mexican station on 670 at Chapultepec," advises Howard M. Phillips, 3907 20th St. N. E., Washington, D. C. "A government program in Spanish and English is broadcast nightly from 2 to 2:30 a.m., EST."

"A new lower Californian station has cropped up on 730 kcys," briefs Hadley Wilcox, 623 W. 40th Place, Los Angeles, Calif. "It is XERB, Rosa Rita Beach, B. Cfa., about 15 miles South of the border. I heard them making transmitter and antenna adjustments. They announced their power as 100 KW and said they would be on the air in about 10 days (from November 28th). They had fine modulation and put in an excellent signal."

Bahamas . . .

"I would like to report reception of a new station at Nassau, Bahama Islands," asserts Merlin Olmstead, Route 2, Anacostia Station, Washington, D. C. "The call is ZNS and I have heard them on 540 kcys from 8:30 to 9:30 p.m., EST, the past three evenings. Each time I

tuned them in, the announcer gave the call, location and frequency, so there is no question about these details. According to the announcement, the station is operated by the government down there."

Confirmation of this new station comes from the Secretary of the Broadcasting Committee, at the Office of the Superintendent of Telegraphs, Nassau, who writes:

"Will you publish the following information regarding the Nassau Bahamas Broadcasting Station? The call is ZNS (pronounced Zed En Ess), the frequency is 540 kcys, and the power 400 watts. The station transmits from 1:30 to 1:45 and 8:30 to 9:30 p.m., EST. Frequently there is a relay of the Daventry short wave station, which begins at 8 p.m. The identification signal is a recording of the Bells of St. Margarets, London, and at the close down there is a recording of 'God Save The King.' Requests for verifications should be addressed to the Superintendent of Telegraphs, Box 48, Nassau, Bahamas."

Canada . . .

"At deadline in the December issue," exclaims Bill Cunningham, 528 N. Marengo Ave., Pasadena, Calif., "you mentioned the new CJBR at Rimouski, Que. A recent letter from the Department of Transport, Ottawa, advises that this station will operate temporarily on 1030 keys with 1000 watts.

"Other Canadian additions include CHLN, Trois Rivieres, Que., 1420 kcys, 100 watts; CFAR, Flin Flon, Man., 1370 kcys, 100 watts; and 100-watters at Owen Sound, Ont., on 1370, and at Kenora, Ont., on 1420.

"Flin Flon, by the way, is not the transmitter site for a new Winnipeg voice of the night, but is up in the Northern Manitoba mining country. I expect that this station, along with Kenora and CFGP, are new Northern Broadcasting Co., transmitters, as this concern pioneered radio development in the awakening North with CKGB, CKCK and CJKL."

"Many Canadian changes were made by the CBC this month," offers Bill Clarke, Box 13, Quesnel, B. C. "Both of the new 50-KW stations in the East-CBL. Toronto, and CBF, Montreal-have at last come on the air. Two new stations in Quebec-CHLT. Sherbrooke, and CJBR, Rimouski-will use 1000 watts. On November 2nd was opened a 100watter at Grand Prairie, Alta., with the call CFGP. The low power stations in Vancouver are expecting word any day now for at least one or two of them to raise power to 1000 watts. CFCT, Victoria, has been granted a power increase from 50 to 500 watts. Their new transmitter, which was scheduled for completion by Christmas, will have a possible maximum output of 1000 watts."

"According to the November RA-DEX," reminds Kenneth E. Pierce, 85 Portland St., Worcester, Mass., "CFAC, Calgary, Alta., was a 100-watt station on 930 keys. But on October 22nd I heard a signal on 1120 and an announcer said: "This is CFAC in Calgary, operating with our new power of 1000 watts.' Your December issue announces the power increase, but leaves the station on 930. Did they move to 1120, or was I hearing things?"

The last official Canadian list showed CFAC still on 930. Perhaps Radexers have the answer to this discrepancy.

Trans-Atlantics . . .

"The new Dutch station Loperikapel (Hilversum) on 722 kcys uses a power of 17 KW," offers D. H. Dussek, Morland Hall, Alton, Hants, England. "They relay programs from Hilversum No. 1 (160 kcys) after 9:40 a. m., EST. Good progress is being made with the construction of the new Broadcasting House at Athens. It is officially announced that the service will begin on January 1st. The station will use 15 KW on 601 kcys,"

Trans-Pacifies . . .

"The Siberian station on 540 keys, RW54, has a very good signal," greets Warren E. Winkley, Hughson, Calif., "and can be heard easily from 4 to 8 a. m., EST. The Japanese are the best they've been in recent years. In fact, everything is fine, except the static, which is now really bad."

"Several Japanese stations are frequently linked in a chain to broadcast a talk in English on the proper way to speak the English language," reports Anthony C. Tarr, 909 W. Lee St., Seattle, Wash, "Apparently varying combinations of stations are used on different mornings. So far the program has been heard at various times from JOIK, JOAK-2, JOBK-2, JOXG. JOQK, JOHK, JOCK-2 and JBCK. The best time for the broadcast is 4:30 to 5 a. m., EST. Other Japanese heard lately are JOHG (1050), JOLK (910), and one on which is unlisted. Other Orientals heard were MTCY XGOA. In Russia, RW54, Khabarovsk, 540 kcys., is heard from 6 to 9:30 a.m., EST, and sometimes RW32, Vladivostock, 635 kcys., is heard about the same time.

"Recently I succeeded in picking up ZJV, 920 kcys., Suva, Fiji Islands, at their sign-off at 4 a. m., EST. Signal was QSA2, R3. I understand that they use 7500 watts, but I consider this to be my best catch in five years of DXing.

"Several fine signals from Australia are being heard, with 4AK being particularly consistent. Occasionally they maintain a steady R7

4BH comes in well at times on 1380. 3UZ on 930 and 3BA also have been heard. A report was secured on an Aussie on 1390, but I have not as yet learned whether it is 2GN or 2CA. 3AR is heard fairly well on their new frequency of 630 kcys."

Another reader to hear RW54 on 540 keys is J. W. Hansen, 3028 Fairmont Blvd., Riverside, Calif., who also reports a mystery station on 860 keys. "On November 7th," he writes, "I tuned in a station on 860 at 3 a. m., EST. All announcements were in Spanish. Many musical selections were played during the two hours I heard the station. Although there was a poor signal, I have plenty of dope for a verification, if I only knew where to send my report."

"Station 2KA, Katoomba, 1160 keys, expects to have a new 2000-watt transmitter working shortly," informs A. I. Breen, 68 Pine Hill Terrace, Dunedin, N. Z. "Their old power was 500 watts. A new plant of the same power will shortly be put in operation by 2CA, 1050 keys, at Canberra. There are two other new stations being heard just now—presumably Aussies—but reception conditions are so poor that they are not as yet identified, although one is believed to be at Broome, West Australia."

United States . . .

"The Visalia Station, KTKC on 1190, is now broadcasting on a regular daily schedule," states Richard S. Croker, 928 W. 11th St., San Pedro, Calif., "although they come in here very poorly. KTMS, Santa Barbara, Calif., 1220 kcys., is also on regular schedule and carries NBC programs. KIT, Yakima, Wash., has been heard on 1250 kcys with a frequency check."

"Although the change has not yet been listed in RADEX," submits Vincent C. Johnson, 1025 S. 36th St., Lincoln, Neb., "KOIL, Omaha, is now operating with a new 5-KW high fidelity transmitter and a vertical antenna. The transmitter house and antenna are located on low, flat land near the Missouri river. KOIL's night power remains the same, 1000 watts."

"Our local WLBZ has just installed and put into operation a new vertical antenna," reports Frank W. Hoxie, South Orrington, Me. "It is 404 feet high and, according to announcements over the station is the highest in the state. Fifteen miles of copper wire were used in the ground system. Work was finally started on the construction of WGAN at Portland. Under the terms of its construction permit, it must be completed by May 22nd."

"Although you list WSAN and WORK as carrying only NBC Blue network programs, they also take some of the Red network features," corrects Lloyd Rees, 619 Hamilton St., Easton, Pa. "Our local WEST is on from 7 to 8 a. m., EST, which should be a good time for DXers."

Special Programs

Although mid-winter usually finds special broadcasts at a peak, this year seems to be an exception. Exclusive of frequency check dedications, a total of 45 dedicatory programs were released by the I. C. C. P. Clearing House from October 28th to December 16th. Of these, the IDA claimed credit for 16, the NNRC had a like number, the UDXC had 8, the NRC3, and the URDXC 2. Quite a contrast to previous years.

Regular test transmissions broadcast at the discretion of the stations themselves have not been nearly as numerous as in past seasons. In fact, announcements of special programs of every nature have not as yet justified the tabulation of the monthly DX calendar.

A number of readers have inquired about frequency checks from the Canadian stations. It will be recalled that a few seasons back, a number of low power transmitters broadcast nine-minute test programs, so a query brings the following statement from G. C. W. Browne, Assistant Controller of Radio, Department of Transport, at Ottawa:

"I may say that no special transmissions are made by broadcasting stations in Canada for the specific purpose of frequency checks at the present time, although measurements are made by our monitoring stations during the regular transmissions of the various stations."

Tips on three West Coast 100-watters are supplied by Charles C. Norton, president of the URDXC, as follows: KDB, Santa Barbara, Calif., 1500 kcys, 3 to 3:45 a. m., EST, every Saturday; CKMO, Vancouver, B. C., 1410 kcys, 3 to 4 a. m., EST, every Sunday, Tuesday and Thursday; and KAWN, Gallup, N. M., 1500 kcys., 4 to 5 a. m., EST, every Thursday.

"As I believe KPPC is quite a catch for Eastern listeners," writes Mel Dilbeck, 1385-B Holliston Ave., Pasadena, Calif., here is a tip on their schedule. Each Sunday night they broadcast services from the Pasadena Presbyterian Church from 11 p. m. to 1:00 or 1:30 a. m., EST. At the same time on Wednesday evening, they transmit the prayer meeting from the church and usually follow with a program from the Pasadena Junior College."

No Veries Wanted

"Recently I have been sending postcards to stations heard testing," supplies Warren E. Winkley, Hughson, Calif., "giving them a report, and not even expecting a verie. In fact, the subject of a verification was not even mentioned. In several instances, I received confirmations. In one sense, I earned veries, because I gave them a good report; in another, I didn't, because no return

postage was enclosed. Maybe I should feel proud of getting something for nothing, but I don't. I had thought of stating on the report that no verie was desired, but that might sour the stations on the idea of verifying at all. What do you think?"

A number of readers have reported similar experiences in the past. so the logical solution might be deliberately to omit any mention of the program material. Merely report reception of the station, give details of how the signal was received, thank the station for the program, and let it go at that. If no program material is given and if no verie is requested, the average broadcaster would take the card or letter at its face value and consider it as a very welcome report. If a verie is still forthcoming, it should certainly be disregarded.

"Sometimes I am quite amused," chuckles E. M. Vickers, Box 121, Coral Gables, Fla., "by the veries I get from the various stations. I spent considerable money printing report forms and take a great deal of care in getting the data reported, but sometimes that doesn't mean much to the stations. The Chief Engineer of KTEM, for example, wrote: 'This is to verify your report on the frequency check made November 9th. Thanks very much. How is the weather in Coral Gables? There is four inches of snow in Temple.' WHBQ merely returned my report and wrote at the bottom: 'We are very glad to verify this report.

"However, occasionally I get a letter like the following from WMFD: '... we are investigating the discrepancy between musical and program level over voice level. Thank you again for the complete report. Reports like yours are a definite help to broadcasting stations, inasmuch as there is usually



Solicitous Eddie Cantor turns the page for Pinky Tomlin who is broadcasting under some difficulties, as a result of a fractured arm sustained in an auto accident. Songwriter Tomlin is featured as a singer on the Cantor program which is heard from Hollywood over the Columbia Network on Wednesdays.

a noticeable difference between local reception and DX. We invite you to be with us again on a DX check."

Veteran DXers undoubtedly could cite innumerable instances where similar replies were received. Some of the older stations, perhaps fed up with requests for veries, feel that they are doing enough by sending out the desired confirmation. Probably they feel that they know enough of their local coverage and aren't greatly concerned how their signal reaches a distant point.

The newer broadcasters, like WMFD, may still be making adjustments on transmitter and aerial, so a complete report is a very welcome source of additional data. Then, too, they may have an engineer who still remembers his early days in radio, and who has a fellow feeling for the listener out on the midnight air.

Of course, blunt replies and stereotyped veries should never discourage the DXer from making his reports as complete as possible. Even though some stations may not appreciate his efforts, he is under very definite obligations to the broadcasters from whom he requests the courtesy of a verification.

RADEX Dedications

Another schedule of frequency check dedications to RADEXers has been arranged by Raymond W. Sahlbach, 4708-A S. Compton St., St. Louis, Mo. All times are a. m., Eastern Standard.

Fohmany 1et

	16.0	ebruary	1st
6:00-6:15	WMBS	1420	Uniontown, Pa.
		ebruary	8th
5:40-6:00	WCAT	1200	Rapid City, S. D.
	F	ebruary	
3:40-4:00	KAND	1310	Corsicana, Texas
4:20-4:40	KSO	1430	Des Moines, Iowa
5:20-5:40	KELD	1370	El Dorado, Ark.
5:40-6:00	KRBC	1420	Abilene, Texas
	Fe	bruary	10th
3:20-3:40	WBLK	1370	Clarksburg, W. Va
3:40-4:00	WJBC	1200	Bloomington, Ill.
4:10-4:30	KAWM	1500	Gallup, N. M.
5:10-5:30	KTRB	740	Modesto, Calif.
	Fe	bruary	11th
5:00-5:20	KIUN	1420	Pecos, Texas
	Fe	bruary	12th
4:20-4:40	KSTM	1310	El Paso, Texas
	KRLC	1390	Lewiston, Idaho
4:40-5:00	KCMC	1420	Texarkana, Texas
5:00-5:20	KGFF	1420	Shawnee, Okla.
5:20-5:40	KFRO	1370	Longview, Texas
	Fel	ruary	14th
3:40-4:00	WSMB	1320	New Orleans, La.
4:00-4:20	WCAP	1280	Asbury Park, N. J.
5:00-5:20	WFOY	1210	St. Augustine, Fla.
	Fel	ruary	15th
6:00-6:20	KGTW	1310	Kearney, Neb.
			•

RADEX is indeed grateful to these stations for dedicating their frequency checks to our legion of readers, and it is hoped that DXers will express their appreciation by card or letter.

Rules for DXing

"Several times in the past," recalls Richard W. Fales, P. O. Box 209, Roslyn Heights, N. Y., "you have printed letters from DXers who attempted to set a standard for DXing. I don't think that it can be done. Personally, I DX entirely for my own pleasure, and if I want to count a change in call or frequency as a new station, I'm going to do it. And I know a good many other DXers feel this same way about it."

Right indeed is DXer Fales' contention that each listener tunes for his own pleasure and, accordingly, will pursue his hobby in the manner which gives him the greatest satisfaction. If a dialer wishes to count a new catch every time a station changes call, power, frequency, or location, that is his prerogative. If he decided to throw away a verification when a station is deleted or makes one of these changes, who shall question his right to do 'so.

The only catch is that it is impossible, under such a system, for one listener to make an accurate comparison of his log with that of another DXer. Both dialers might have heard the same number of stations over a period of years, but the listener who counts changes is going to have a lot more stations listed than the chap who counts only the active broadcasters.

Perhaps the only time definite rules can be laid down is during a contest, when it is imperative that every contestant participate on an equal footing. And as many of us have learned, even contests cannot be conducted without complaints that regulations favor listeners in a particular geographical location.

Reports and Resumes

"Although the DX season is yet young, my results so far indicate that I have a very good chance to surpass my record of last year," announces R. A. Butts, Box 138, Easton, Wash. "Last season I scored 386 stations for a total mileage of 646,219 miles. So far this season, I have logged 322 stations for a total of 599,575 miles.

The average mileage per station last year was 1674, while the average this year is 1862 miles per station."

"I have purchased a new 7-tube Lafayette receiver," contributes Peter A. Clarius, 11 Marianne St., Port Richmond, Staten Island, N. Y., "and with the help of the November frequency checks have boosted my log to 536 heard and 432 verified. Twenty-two new stations were heard this month."

"I have been DXing for about three months," asserts Kyle C. Bonifield, 519 Asbury Ave., Asbury Park, N. J., "with a four-tube Air King receiver. In that time I have logged some 60 stations in the United States and a half dozen in Mexico and Cuba. So far I have not sent for any verifications, but soon I hope to get a more powerful receiver and will do some real DXing."

"I only started DXing last April," admits Leon Grossman, 52 O. K. Terrace, Rochester, N. Y., "and I now have logged a total of 168 BCB stations. I began verifying in September, and have since reported to 52 stations, of which 37 have verified."

"Verifications to date total 603," reports J. Edw. Diehm, Jr., 632 Beech St., Pottstown, Pa., "and I expect to go after some more during the next frequency checks. However, even when the weather is clear and cold, reception isn't what it should be. Outside of Rennes, the TA's aren't coming in at all."

Station KZIB on 900 kcs has advised a member of the N.Z. DX Radio Association that they have a shortwave station under construction, but no other details were given. KZIB is located in Manila, Philippine Islands.

The MYSTERY Bands

• • • By CHRIS DAVIS JAFFÉ

→HE ultra short waves are a new field of radio, a vast, almost unexplored field, and until a few years ago just a hissing void that had never been disturbed by a signal. They are, to say the least, very mysterious in both their properties and their coverage. We shall first consider the longer of the ultra high frequencies. The 20 (13 meter) megacycle broadcast band is doubtless familiar to the majority of short wave listeners who have good equipment. band has two of the characteristics of the ultra short waves. Namely, it causes the reception of stations within its limits to be sporadic during some seasons of the year. Signals from a station on the 13 meter band are received only in the immediate vicinity of the station or at points a thousand or more miles from the station.

As we venture further downward into the ultra short wave spectrum we find the 10 meter amateur band. Excellent long distance reception can be had during the daylight hours of the fall and winter and during the early evening hours of the late spring and summer. Sunrise and sunset are excellent times for long distance DX. The characteristics of the 10 meter band vary from year to year. Just as an example, every continent on the earth was logged within the course of a day at the writer's listening post. At 7:13 A.M. we logged VU2CQ in India, thus getting Asia; by 10:00 A.M. GM6RG in Scotland and W6ITH in California were heard, adding the two continents-Europe and North America: at a few minutes past noon ZU6P in South Africa was heard; and at 6:10 P.M., LU9BV in South

America. We logged Australian VK2GU at 8:30 P.M., making every continent in one day. This is not unusual on the 10 meter band. It may be repeated again and again. Another factor that contributes toward the logging of DX on 10 meters is the lack of QRM. There are two reasons for this; first, on 10 meters there is no crowding, the band being very wide. Another reason is that signals are seldom received from more than two U.S. districts at one time. For example, at a certain time when only the W6 and W7 call areas were being heard well on 10 meters, the W1, W3, W4, W8, and W9 districts were all heard on 20 meters.

As we go on down to even shorter wave-lengths we find numerous and widely diversified types of stations. Broadcast relay stations will be heard with true high fidelity. Television and the sound accompaniment to it and two way police radio telephones are heard in the territory adjacent to 7½ meters, many cities having recently installed Among the numerous other services given allocations in this region by the Federal Communications Commission are fire departments, forest ranger stations, aircraft, experimental and ship to shore. Next we find the 5 meter amateur band where, theoretically, reception is limited to the horizon. To disprove this the author has a letter from the Chief Engineer of the British Broadcasting Corporation confirming his reception of the sound accompaniment to the Television transmissions from London on the ultra short wavelength of 6 meters. A short wave listener recently heard an Australian Amateur on 5 meters and

received a verification of his reception. This SWL was in England, which is a great distance from Australia

By keeping an accurate log of our reception on the ultra high frequencies we may do much to aid in the research that is being done to determine the possibilities of this spectrum.

An efficient antenna system and a sensitive receiver are prerequisites for good ultra high frequency reception. If we combine these with the essentials of patience and perseverence, who knows but that some morning an Englishman's "test DX" will come through on five meters.

The very uncertainty of the ultra short waves should be a challenge to us all. Another advantage of the ultra short waves is the fact that as listeners are sparse the stations actually need reports to determine their coverage. Perhaps they even study a listener's report and file it away for reference instead of relegating the report to the wastepaper basket.

The international allocation of wavelengths on the short wavebands, the synchronisation of two or more stations on the same frequency, and the compiling of a dictionary of technical and non-technical terms used in broadcasting are among the questions arranged for discussion at the half-yearly meeting of the International Broadcasting Union (L' Union Internationale de Radiodiffusion) which was held at Nice, France, last December.

This meeting of the U. I. R. is of particular importance in that the conclusions reached by the various programme and technical committees will be the basis of propositions to be brought forward at the Telecommunications Conference at Cairo next year.

The Northern Messenger

H AVE you listened to the CEC Northern Messenger on Saturday nights at 11:00 p.m., EST? If you have, you have heard only the final stage of a week of hectic activity which the program demands if it is to operate smoothly and efficiently.

Sydney S. Brown who, besides taking his trick at the microphone with letters and announcements, directs the service, states that the duties he performs on the Saturday evening broadcasts are mere recreation to what has gone on before.

His desk at the headquarters of CBC in Ottawa holds a pile of letters from all parts of Canada and many foreign countries. These are communications for transmission on the Corporation's weekly service to the north. They are first attacked with a blue-pencil, all superfluous remarks being deleted, until the message has been pared down to the allowed four lines, or as near to it as possible. As time is short, and "the show must go on," many are the split second decisions to be made, such as: which should be left in-a breathless announcement that "Baby John is sprouting a new tooth"? or the news that "Sister Mary has the Mumps"? However. the heavy volume of letters to be handled does demand that messages be ruthlessly edited.

Place names, too, must be checked and those messages directed to points served by telegraph or radiograph are weeded out.

After the letters have been sorted and edited they are whisked to the stenography department where the flying fingers of a battery of typists neatly transfer each message on a separate sheet of paper. The typing is double spaced and letters are capitalized so that the announcer may read with a minimum of difficulty.

The messages, thus prepared, are then filed alphabetically and on Saturday afternoon they are delivered to CBO, the Corporation's studios in Ottawa, where they are counted off in batches of thirty. They are studied by the announcers who familiarize themselves with the contents and with the sometimes difficult place names, of which "Kugaryuak" is a sample. Three announcers, besides Mr. Brown, participate in the broadcast, each one reading thirty messages before being relieved.

Scrapbook

(Continued from page 5)

they laughed and laughed and laughed.

And so J. Imaginary Stationgetter lived unhappily ever after, for he was never allowed to forget the time he heard a station that didn't exist.

A Solution

Cases such as this are familiar to many of our readers. Frequently in the past, "magazine DXers" have made a sad error in the selection of a station to report, and have come to regret their failure to establish definitely a transmitter's identity.

Commenting on the problem, Alan Hutchison, Editorial Secretary of the New Zealand DX Radio Association, writes: "I notice that you are in the habit of listing calls when the construction permits only have been issued. This leads to guess-work on the part of your local DXers, and I know that one Australian received over a dozen reports long before the work on the station was commenced. The result of this was that all DXers received a black mark.

I think you would be wiser not to list our stations until they are actually broadcasting."

Such a policy undoubtedly would eliminate reports to non-existent stations, but to this old alarmshutter-offer, it seems likely that this would hurt the listener who was able to hear the first few broadcasts and had no clue to the station's identity. The time taken while news of an opening travelled from Australia and finally got into print in this country, could easily add up to two or three months. And in the meantime. DXers who heard the station, and even identified the call and location, would have no basis for a report.

Granting that even this condition is better than having a flock of phantom reports crossing the Pacific, a compromise might cover both sides of the question.

Instead of ignoring announcements of new transmitters, suppose we list in italics all stations with construction permits. The DXer who turned to our indices for help in identifying a station, would be forewarned that the station so indicated probably was only in the process of construction. This would head off any possibility of a rash report, while at the same time, it would offer a clue to a transmitter which had just come on the air.

Of course, when confirmation is received that a station actually is in operation, the italics would be removed and regular type substituted. In the meantime, chances of mistakes would be minimized.

Construction of three new stations is completed. KWNO Winona, Minn., 1200 kcs, made its debut on Jan. 9. WTOL in Toledo and WBRK in Pittsfield are scheduled to start transmitting on February 1.

The MONTH'S CHANGES in STATION DATA

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

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	NORTH	AMERICAN BROADCAST	950	WRC	Washington, D. C., to 1000 (5).
***	# 3.TO	NEW	1000	CMBZ	Havana, Cuba, to 5000
54 0	ZNS	Nassau, Bahamas. Superintendent	1110	CMCJ	Havana, Cuba, to 5000
630		of Telegraphs, Box 48	1170	CMBD	Havana, Cuba, to 5000
000		Havana, Cuba. "La Voz del Aire," S. A.	$\frac{1190}{1240}$	WATR	Waterbury, Conn., to 250
670	XERO	Chapultepec, D. F.	1250	$\begin{array}{c} \mathbf{KLPM} \\ \mathbf{WCAL} \end{array}$	Minot, N. Dak., to 500 (1).
680	CMBQ	Havana, Cuba. Rufino Pazos	1230	WLB	Northfield, Minn., to 5000
730	CMCL	Havana, Cuba. "Radio City."	1310	KINY	Minneapolis, Minn., to 5000 Juneau, Alaska, to 250
	XERB	Rosarito Beach, B. Cfa.	1010	WOL	Washington, D. C., to 1900
770	CMBF	Havana, Cuba. Cia. Cubana de	1340	WCOA	Pensacola, Fla., to 1000
		Radio y Television, S. A., Edif. La	1350	CMCA	Havana, Cuba, to 5000
		Metropolitana 732	1410	CMCQ	Havana, Cuba, to 5000
1110	CMCH	Havana, Cuba. Leonardo Cano	1420	KABR	Aberdeen, S. Dak., to 500 (1).
1210	WHAI	Greenfield, Mass. John W. Haigis	1430	WBNS	Columbus, Ohio, to 1000 (5).
1310	KPBM	Poplar Bluff, Mo. Fields McCarthy	1490	KFBK	Sacramento, Calif., to 10000
		Co.			IT TO CHANGE LOCATION
1370	WLLH	Lawrence, Mass. Merrimac Brdcstg.	570	KGKO	Wichita Falls, Tex., to Ft. Worth
1400		Co., Inc.			OREIGN BROADCAST
1420		Kenora, Ont. FREQUENCY	(Excl	ading Asia,	which is listed complete in this issue) NEW
600	CMQ	Havana, Cuba, from 880	300		Moscow, U. S. S. R.
720	CMK	Havana, Cuba, from 730	722		Lopikerkapel (Hilversum) Nether-
750	CMBL	Havana, Cuba, from 710			lands
880	CMW	Havana, Cuba, from 600	890	5AN	Adelaide, S. A.
1110	CMCJ	Havana, Cuba, from 1100	1370	6GE	Geraldton, W. A.
1140	CMCW	Havana, Cuba, from 750	1400	2PK	Parkes, N. S. W.
1250	KIT	Yakima, Wash., from 1310			FREQUENCY
1380	CMCX	Havana, Cuba, from 1030	1070	2RG	Griffith, N. S. W., from 1470
880	anta	POWER	1050	001	POWER
980	CFJC XEAC	Kamloops, B. C., 1000 from 100	1050	2CA	Canberra, F. C. T., 2000 from 500
1140	CMCW	Tijuana, B. Cfa., 5000 from 1000 Havana, Cuba, 500 from 100	1070 1131	2RG SBH	Griffith, N. S. W., 100 from 50
1250	KIT	Yakima, Wash., 250 from 100	1131	SDIL	Horby, Sweden, 100,000 from 10000
1450	CFCT	Victoria, B. C., 500 from 50			*
		NETWORK	713		
580	CKUA	Edmonton, Alta., new CBC	```E	levis	sion on Wheels
910	CBF	Montreal, P. Q., new CBC	_ `	ole vic	non on whichs
930	WBRC	Birmingham, Ala., Red from CBS	т	ha fire	st mobile television sta-
1030	CFCN	Calgary, Alta., new CBC			
1140	WAPI	Birmingham, Ala., CBS from Red	tion	ı in Ar	nerica rolled into Rocke-
1370	WHLB	Virginia, Minn., new CBS OWNER	felle	er Plaz	a December 12 and, in
590	WOW	Omaha, Nebr. Woodmen of the			
000		World Life Insurance Society, 4th		oric ce	remonies in the shadow
720		and Farnum	of :	NBC's	
120	CMK	Havana, Cuba. Radiodifusion	of	NBC's	Radio City studios, was
120	CMK	Havana, Cuba. Radiodifusion O'Shea, Apartado 770	pre	sented	Radio City studios, was to engineers of the Na-
		Havana, Cuba. Radiodifusion O'Shea, Apartado 770 DELETE	pre	sented	Radio City studios, was to engineers of the Na-
840	CRCT	Havana, Cuba. Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont.	pre: tion	sented Ial Broa	Radio City studios, was to engineers of the Na- adcasting Company by the
	CRCT CMBG	Havana, Cuba. Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba	pres tion RC	sented Ial Broa A Mani	Radio City studios, was to engineers of the Na- adcasting Company by the ufacturing Company.
840 1140	CRCT CMBG PERMIT	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba TO CHANGE FREQUENCY	pres tion RC	sented Ial Broa A Mani	Radio City studios, was to engineers of the Na- adcasting Company by the
840 1140 1190	CRCT CMBG PERMIT WATR	Havana, Cuba. Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba T TO CHANGE FREQUENCY Waterbury, Conn., to 1290	pres tion RC. T	sented Ial Broa A Mani Ihe new	Radio City studios, was to engineers of the Nadcasting Company by the ufacturing Company. y unit, consisting of two
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840 1140 1190	CRCT CMBG PERMIT WATR	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760	pres tion RC. T mod visi	sented Ial Broa A Manu Ihe new dern ma Ion con	Radio City studios, was to engineers of the Nadcasting Company by the ufacturing Company. Tunit, consisting of two otor vans containing telentrol apparatus and a
840 1140 1190 1240	CRCT CMBG PERMIN WATR KLPM WCAL	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba T TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Minneapolis, Minn., to 760	pres tion RC. T mod visi	sented Ial Broa A Manu Ihe new dern ma Ion con	Radio City studios, was to engineers of the Nadcasting Company by the ufacturing Company. y unit, consisting of two otor vans containing tele-
840 1140 1190 1240 1250	CRCT CMBG PERMIT WATR KLPM WCAL WLB KINY WOL	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba TO CHANCE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230	pres tion RC. T mod visi mic	sented lal Broa A Mani he new dern man on con	Radio City studios, was to engineers of the Nadcasting Company by the ufacturing Company. Tunit, consisting of two otor vans containing teleptrol apparatus and a containing teleptrol apparatus an
840 1140 1190 1240 1250	CRCT CMBG PERMIT WATR KLPM WCAL WLB KINY WOL KABR	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390	prestion RC. T mod visi mic be	sented lal Broa A Mani he new dern mi on coi ro-wave used ir	Radio City studios, was to engineers of the Nadcasting Company by the ufacturing Company. Tunit, consisting of two otor vans containing teleptrol apparatus and a containing teleptrol apparatus an
840 1140 1190 1240 1250 1310 1420	CRCT CMBG PERMIT WATR KLPM WCAL WLB KINY WOL KABR PERM	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba I TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390 IT TO CHANGE POWER	prestion RC. T mod visi mic be	sented lal Broa A Mani he new dern mi on coi ro-wave used ir	Radio City studios, was to engineers of the Nadcasting Company by the ufacturing Company. Tunit, consisting of two otor vans containing teleptrol apparatus and a containing teleptrol apparatus an
840 1140 1190 1240 1250 1310 1420 570	CRCT CMBG PERMIT WATR KLPM WCAL WLB KINY WOL KABR PERM CMCY	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba T TO CHANCE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390 IT TO CHANGE POWER Havana, Cuba, to 10000	prestion RC. T mod visi mic be pick	sented lal Broa A Mani he new dern m on coi ro-wave used in	Radio City studios, was to engineers of the Nadacasting Company by the afacturing Company. Tunit, consisting of two otor vans containing teleptrol apparatus and a containing teleptrol apparatus a
840 1140 1190 1240 1250 1310 1420 570 590	CRCT CMBG PERMIT WATR KLPM WCAL WLB KINY WOL KABR PERM CMCY WKZO	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Abordeen, S. Dak., to 1390 IT TO CHANGE POWER Havana, Cuba, to 10000 Kalamazoo, Mich., to 250 (1).	prestion RC. T mod visi mic be pick NB0	sented lal Broad Maniche new dern mon con ro-wave used in turns of conging to the congin of the cong	Radio City studios, was to engineers of the Nadacasting Company by the ufacturing Company. Tunit, consisting of two otor vans containing telentrol apparatus and a certain television of outdoor news events.
840 1140 1190 1240 1250 1310 1420 570 590 770	CRCT CMBG PERMIT WATR KLPM WCAL WLB KINY WOL KABR PERM CMCY CMCY CMCY CMBS	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390 IT TO CHANGE POWER Havana, Cuba, to 10000 Kalamazoo, Mich., to 250 (I). Havana, Cuba, to 5000	prestion RC. Tmoo visi mic be pick NB0 in o	sented al Broad Maniche new dern mon con concurred in coursed in coursed in coursed in course connection nection nection in course connection in course connection in course cour	Radio City studios, was to engineers of the Nadacasting Company by the ufacturing Company. Tunit, consisting of two otor vans containing telentrol apparatus and a certain television of outdoor news events. Heers will operate the unit ion with the present NBC
840 1140 1190 1240 1250 1310 1420 570 590 770 810	CRCT CMBG PERMIT WATR KLPM WCAL WLB KINY WOL KABR PERM CMCY WKZO CMBS CMCF	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba 1 TO CHANCE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390 1T TO CHANGE POWER Havana, Cuba, to 10000 Kalamazoo, Mich., to 250 (1). Havana, Cuba, to 5000	prestion RC. Tmoo visi mic be pick NB0 in o	sented al Broad Maniche new dern mon con concurred in coursed in coursed in coursed in course connection nection nection in course connection in course connection in course cour	Radio City studios, was to engineers of the Nadacasting Company by the ufacturing Company. Tunit, consisting of two otor vans containing telentrol apparatus and a certain television of outdoor news events.
840 1140 1190 1240 1250 1310 1420 570 590 770	CRCT CMBG PERMIT WATR KLPM WCAL WLB KINY WOL KABR PERM CMCY WKZO CMBS CMCF CMW	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba T TO CHANGE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Morthfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390 IT TO CHANGE POWER Havana, Cuba, to 10000 Kalamazoo, Mich., to 250 (1). Havana, Cuba, to 5000 Havana, Cuba, to 5000 Havana, Cuba, to 5000	prestion RC. Tresion T	sented lal Broad Maniche new dern mon concording to the concording to the concording to the connection of the connection	Radio City studios, was to engineers of the Nadacasting Company by the ufacturing Company. Tunit, consisting of two otor vans containing telentrol apparatus and a certain television of outdoor news events. Heers will operate the unit ion with the present NBC transmitter atop the Em-
840 1140 1190 1240 1250 1310 1420 570 590 770 810	CRCT CMBG PERMIT WATR KLPM WCAL WLB KINY WOL KABR PERM CMCY WKZO CMBS CMCF	Havana, Cuba, Radiodifusion O'Shea, Apartado 770 DELETE Toronto, Ont. Havana, Cuba 1 TO CHANCE FREQUENCY Waterbury, Conn., to 1290 Minot, N. Dak., to 1360 Northfield, Minn., to 760 Minneapolis, Minn., to 760 Juneau, Alaska, to 1430 Washington, D. C., to 1230 Aberdeen, S. Dak., to 1390 1T TO CHANGE POWER Havana, Cuba, to 10000 Kalamazoo, Mich., to 250 (1). Havana, Cuba, to 5000	prestion RC. Tresion T	sented hal Broad A Mann he new dern m on con ro-wave used in cups of connect vision State	Radio City studios, was to engineers of the Nadacasting Company by the ufacturing Company. Tunit, consisting of two otor vans containing telestrol apparatus and a certansmitter, will soon a experimental television of outdoor news events. Heers will operate the unit ion with the present NBC transmitter atop the EmTower.
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The Stamp Corner

● By David Brockton Browne

A S WE enter the month of February, we know that many of our readers are beginners in the art of stamp collecting. To them we dedicate this column—we welcome them—for it is the newcomers—the life-blood of any hobby—who will perpetuate it.

Every beginner wonders just how to proceed once he has started-we wish we could tell him-but philately is a personal hobby—in which each may express his individual desires and ambitions to suit his own All we can suggest is to tastes. gather as many stamps as possible —in as good condition as you can study them-learn something about why the stamp was issued and about the country that issued it. Should you choose to have a general collection-before you know it -you will have the basis of a worthwhile collection. If, on the other hand, you decide to specialize on a certain country or type of stamps, those extra stamps that you have gathered will prove to be fine duplicate material to exchange with other collectors.

philatelist The successful who really obtains the greatest benefits from his hobby is the one who considers the forming of a collection a diversion—a happy pasttime—and not merely a dollars and cents proposition from which to reap financial rewards later on—perhaps. He does not spend more money or time than he can reasonably afford. other words, he masters the hobby —the hobby does not master him to the exclusion of all his other in-His dividends are untold terests. pleasures and the unfolding of new horizons — broader visions — and greater knowledge.

A Stamp Program

A message from America's No. 1 stamp collector, President Robsevelt, was read by Postmaster General Farley to inaugurate a series of weekly broadcasts by the National Federation of Stamp Clubs, over the NBC Red Network.

The new series, titled "Calling All Stamp Collectors," is presented on Saturdays from 5:30 to 5:45 pm, EST.

Important personages who make a hobby of stamp collecting will be guests on these programs. Among those to be heard are Lauritz Melchior of the Metropolitan Opera, and Adolph Menjou, screen star.

New Issues

It is expected that the ½d and 1d New Zealand regular issue will be replaced by new stamps portraying King George VI. The stamps are scheduled to appear not later than May, 1938.

The Franz Hals painting, the famous "Laughing Boy" is the subject of the 1937 Netherlands Charity stamps. These beautiful stamps are issued in the following values and colors; 1½c plus 1½c slate; 3 plus 2s green; 4c plus 2c reddish brown; 5c plus 3c blue green; and 12½c plus 3½c deep blue.

France has really reached the zenith in the miniature sheet fad. The French postal administration has issued a series of twenty-four miniature souvenir sheets—one for each of the French colonies which recently issued a special set for the French Exposition at Paris. All sheets have the same face value—3 francs—and are arranged horizontally. Each sheet has a design appropriate to the colony—there being six different designs in all.

In accordance with the decision of the Netherlands government, all postal issues of Curacao have been demonetized with the change in name of the colony to Dutch Antilles recently.

As we write this, the 1938 stamp program of the United States has not yet been announced. But we assure our readers that, in general, it will follow the schedule announced in this column in last month's issue. Nothing new has transpired to change that picture—as yet. Our next column should contain definite information.

Donald C. Truax, 539 Woodlawn Ave., Aurora, Ill., wants to correspond and exchange unused stamps with DXers outside the U.S.A.

We sincerely thank all our many kind readers for their expressions of approval. The support and cooperation of each of you is appreciated. Just keep your questions—your opinions—and your suggestions—rolling into the RADEX office—so that your Stamp Editor will know your desires—and what subjects you want discussed here most.

As Jim Seeley of Saranac Lake, N. Y., says; "My reaction to RADEX' new stamp column has been to dust off the Old Album—also the desire to catch up with the many beautiful new U. S. commemorative stamps."

We hope that many of you will follow Mr. Seeley's good exampledust off your album-or if you haven't one as yet-visit your nearest stamp shop-and make an investment that will be rich in pleasures-contentment-and new information. Next month we really will try to tell you all about the different types of stamp collectingand it's allied hobbies. Until thenbest of good wishes-and may each day bring a delightful addition to album and a new your stamp "catch" over the airwaves. Sunny Days.

Scanning the AMATEUR BANDS

• • By B. L. Ahman, Jr.

(The letters LF, MF and HF in parentheses following the call letters of stations mentioned in this column indicate the Low Frequency, Middle Frequency and High Frequency portions of the 20 meter amateur band. Low Frequency stations are those on frequencies between 14,000 and 14,100. Middle Frequencies are from 14,100 through 14,300. High Frequencies are from 14,300 through 14,400. No attempt is made to show exact frequencies as they vary so greatly).

SOME of the boys throughout the country seem to be enjoying very good success with the 20 meter hams, but here in the east reception has never been worse. On only one night during the month, the band "opened up" and long skip seemed to be in effect. On this night, only Argentinians, Ecuadorians and other South Americans were heard, along with a flock of W7's. Among the catches at 9:00 pm. were LU1DA, HK1JN, HI3N, LU2A, XE1LF, and PY2CK.

HC1JB on 14420 kcs, just out of the band, uses the slogan "Radio Rodante" when relaying programs of HCJB. The address is Casilla 691, Quito, Ecuador, and they request listeners to send a dime for verification in lieu of the usual Reply Coupon. QSL's from this station usually require from two to three months.

of Chisholm, Kurak William Minn. says that the NBC has already verified his report on VP3THE, the Terry-Holden Expedition in the wilds of British Guiana. Verification requests for this station can be sent to the NBC, Rockefeller Plaza, New York City, or to Orrin Hungerford, Radio Operator of the care of station Expedition, in VP3MR, Georgetown, VP3BG orBritish Guiana.

Jack Siringer reports that VP3BG



It's all in a broadcast's work with Robert Armbruster, maestro of the Chase and Sanborn Hour on the Red Network, to accompany Charlie McCarthy when Edgar Bergen's famous dummy decides to join Nelson Eddy or Dorothy Lamour in song. This popular orchestra is heard Sundays from 8 to 9 pm, EST.

uses the call VP3XYZ when operating as an amateur station. Thanks for information on VP3THE are also due to Richard M. Carter, Jack Welsh, M. C. Smith, Jack Sanderson and others.

Concerning expeditions, we learn that W1OXRA will have 500 watts, and will be located at Hollandria, Surinam (Dutch Guiana). The IDA assumes that a PK6 call will be assigned later.

OX2QY at Reindeer Point, near Etah, Greenland, is still holding its own. Are you still hearing it? This expedition, it is understood, is sponsored by the Carnegie Institute at Washington, D. C., and there is a chance that verifications may be available through them.

M. C. Smith of Cleveland sends in a nice catch this month. It is VS7GS on 14100 kcs., heard at 7:30 am., EST, on a regular schedule every Wednesday and Sunday morning with HI5X. He also reports VP6D. Has anyone heard this station? We have cards from VP6FO, VP6YB, VP6TR, but we have never heard VP6D. Two other new ones reported by Mr. Smith are HC8FQ, 14300 kcs., and HA4AD, 14150 kcs. Do you have them in your log?

The North Pole station, UPOL on 14400, uses both phone and cw.

A new QRA, not yet in the Call Book, is supplied by Leo Herz, GCDXC. It is OA4AL, Albert and Henry Gildred, P. O. Box 1915, Lima, Peru. Leo also lists the following new stations: PY1FR, PY2FF, LU1CA, VP6NW and K6MTE.

Venezuela has made a sudden spurt in our QSL collection. Recent arrivals are YV4AK, YV4AV, YV4AB (LF), YV5AE, and from Argentina, LU4KA in Cachi Yaco.

Mr. A. P. Morrison of Wellington, New Zealand, heard VK2NO, Bronte, NSW, Australia, on 5 meters. This is the first time 5 meter signals have been heard across the Tasman Sea. Mr. Morrison has been tuning the shortwaves for twenty-one years.

A. I. Breen, New Zealand, tells us that ZL amateurs are now permitted to work on 20 meter phone. The New Zealand Post and Telegraph Department has OK-ed the use of the band 14150 to 14250 kcs., between midnight and 7 am., local time.

The Australian amateurs have been granted permission to increase power to a maximum of 50 watts. Only 25 watts was formerly allowed.

Many thanks to Edward Hughes, Francis McDonald, Hadley Wilcox, Earl Roberts and others for help this month.

Addresses

We list below the call letters, the frequency and the address when known of every amateur station mentioned in these columns. Addresses will not be repeated, however, so readers are urged to keep

these columns for future reference. HC1JB, Clarence W. Jones, Casilla 691, Quito, Ecuador (14420).

VP3THE, c/o The National Broadcasting Co., Rockefeller Plaza, New York, N. Y. ((13740).

YV4AB, Jose Antonio Burgos, Constitucion 398, Valencia, Venezuela (LF).

YV4AK, Juan B. Moreno L., Diaz Moreno 147, Valencia, Venez,

Amateur

CALLS HEARD

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

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

CE1-: AH (j); AL (j); AO (jk); AR (k); CE2EW (j); CE3AA (f); CE3DW (j); CN8-: AJ (bm); MB (d); CP1AA (ak).

EASAE (jk); EASAK (d); EI2L (j); EI3J (j); EI9J (m). (d); EA9AH (k);

FB8AB (k); FE8XB (j); F3-: CP (j); GS (j); HZ (j); JD (ej); OO (m); F8-: BU (d): II (j); KW (e); LZ (e); TW (j); XT (gm).

GI2CC (m); GM5ST (e); GM6-: GO (j); OR (j); RB (j); RG (j); G2-: AK (j); AV (m); BB (j); CU (j); HK (ej); IN (j); KL (k); MA (k); MS (j); NM (j); PU (jm); RC (j); RS (e); UV (j); XY (j); XY (e); G5-: BJ (j); BM (j); CV (e); DF (j); FA (j); FG (j); FT (j); GO (j); GT (j); GW (j); JA (j); JL (j); JO (j); KG (j); LU (ej); MA (k); ML (jk); NA (j); NI (jk); TZ (ej); ZJ (e); G6-: AG (ej); IA (m); RH (e); VX (k); WT (ej); WX (ej); XI (j); XRX (j); ZI (e); G8-: IX (ej); LR (j); MA (e); MI (j); MY (e). H

HA4AD (j); HA8N (m); HB9BL (m); HC1FG (ik); HC1JB (fk); HC8FQ (j); HH-: 1A (j); 2A (j); 2B (ajk); 2LD (e); 2X (dl); 5PA (ijk); HI-: 1C (j); 2X (j); 3N (jm); 4F (j); 4JL (j); 4M (j); 5X (afj); 60 (j); 7G (fjk); HK-: 1Z (e); 3JA (f); 4AG (k); 5JS (k); HP1A (k); HP5A (l); HR5C (m).

KA1HS (m); K4-: BSE (j); DDH (j);

EJE (j); EJF (k); ENY (j); SA (k); UG (j); UY (j); XG (j); K6: BAZ (i); BHL (i); BNO (j); BNR (ji); CMC (f); HZK (i); JLV (j); KMB (a); KPF (i); MTE (i); NZF (g); NZQ (k); TNT (j).

LU: 1DA (f); 1EX (k); 4BH (k); 4DH (f); 5CZ (i); 7AG (k); 8AB (i); 9PA (e). N-0

 $\begin{array}{l} \text{NY2AE} \ (ek); \ \textbf{OA4-:} \ \text{AI} \ (j); \ \text{AK} \ (j); \ \text{AL} \ (cf); \ \text{AT} \ (j); \ \text{C} \ (ajkm); \ \text{L} \ (j); \ \text{N} \ (k); \ \text{R} \ (j); \ \text{RE} \ (j); \ \textbf{ON4-:} \ \text{AZ} \ (j): \ \text{MD} \ (m); \ \text{RY} \ (j); \ \text{XX} \ (j); \ \text{OX2QY} \ (aefkm). \end{array}$

PAOAD (m); PK1GL (m); PK2VD (m); PY: 1FR (e); 2EA (h); 2FX (f); 2HA (k); 2KX (k); 7AI (e).

SM5SV (m); SM7YA (m); SU-: 1CH (em); 1SG (cm); 8MA (k); SV1KE (e). 1CH

TI: 2AV (eim); 2DC (k); 2FG (m); 2LR (f); 2RC (gk); 3AV (k).

 $\begin{array}{c} \textbf{V-W} \\ \textbf{VK2-:} & \text{ADE} \ (j); \ AZ \ (jkm); \ \text{DK} \ (j); \ \text{HF} \\ (j); \ \text{IQ} \ (j); \ \text{JV} \ (j); \ \text{LZ} \ (f); \ \text{OG} \ (k); \ \text{TC} \\ (j); \ \text{VC} \ (j); \ \textbf{VK3-:} \ \text{AG} \ (k); \ \text{AL} \ (e); \ \text{BI} \\ (j); \ \text{GG} \ (j); \ \text{HJ} \ (j); \ \text{KI} \ (j); \ \text{KR} \ (k); \ \text{KX} \\ (j); \ \text{MR} \ (b); \ \text{MX} \ (j); \ \text{NR} \ (j); \ \text{WD} \ (e); \ \text{XU} \ (j); \ \text{ZB} \ (k); \ \text{VK6MW} \ (bjkm); \ \text{VK7C}, \ (m); \ \text{VO-:} \ \text{II} \ (k); \ \text{IY} \ (j); \ \text{SN} \ (m); \ \text{SD} \ (m); \ \text{6J} \ (jm); \ \text{6J} \ (jm); \ \text{6JQ} \\ (e); \ \textbf{VP-:} \ \text{2BG} \ (k); \ 2\text{DA} \ (hkm); \ 3\text{BG} \\ (e); \ \textbf{VP-:} \ \text{2BG} \ (k); \ 2\text{DA} \ (hkm); \ 3\text{SYZ} \\ (m); \ 4\text{TH} \ (k); \ 5\text{AA} \ (j); \ 5\text{AC} \ (j); \ 5\text{AF} \\ (ej); \ 5\text{AG} \ (k); \ 5\text{AS} \ (j); \ 5\text{AC} \ (j); \ 5\text{AF} \\ (ej); \ 5\text{AG} \ (k); \ 5\text{AS} \ (j); \ 5\text{AW} \ (j); \ 5\text{CW} \\ (j); \ 5\text{FI} \ (j); \ 5\text{GN} \ (j); \ 5\text{PZ} \ (jk); \ 6\text{YB} \\ (k); \ 7\text{NA} \ (k); \ 9\text{G} \ (jm); \ 9\text{R} \ (jk); \ \text{VS7GJ} \\ (djm); \ \text{WIOXAB} \ (g). \\ \hline \textbf{X-Y} \\ \end{array}$

XE: 1BC (ik); 1BT (k); 1F (i); 2AH (i); 2FC (k); 2HA (i); 2IY (m); 3AR (k); 4BJI (k); YN1HS (m); YV-: 3LV (j); 4AA (j); 4AB (dk); 4AN (j); 5AA (fjkm); 5ABF (fk); 5ABT (k); 5ABY (j); 5ACC (k); 5AE (h); 5AM (k); 5BC (j).

ZS2N (f); ZS5M (dk); ZT5S (d); ZT6AL (d); ZU1AX (d); ZU6AF (dk); ZU6P (dfm).

The Reporters

(a) Richard Carter, 1064 Everett Ave., Louisville, Ky.
(b) A. V. Deterly, 211 Convention St., Baton Rouge, La.

(c) Ben Follrath, 1419 Pearl St., Alameda, Calif.

(d) Raphael Geller, 1652 Radcliff Ave., Bronx, N. Y. (e) F. W. Hoxie, South Orrington, Me. (f) Wm. Kurak, Box 243, Chisholm, Minn. (g) Francis McDonald, 215 E. 34th St., Tusson Aria (Philos 230T). Tucson, Ariz (Phileo 630T).
(h) Martin Olthoff, 212 N. 16th St., In-

dependence, Kans. (RME69). Dale Smith, Eugene, Ore. (i) Dale Buddy).

(j) M. C. Smith, 2974 E. 67th St., Cleveland, Ohio
(k) Jack Welsh, Kingston, Ill.
(l) Wm. J. Wood, Jr., 817½ Lake St.,
Oak Park, Ill. (m) Jack Siringer, 1451 Lincoln Ave., Lakewood, Ohio.

THE BROADCASTING STATIONS OF ASIA

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

540	RW54		Khabarovsk, U.S.S.R.	882	VUD	20000	New Delhi, India
556	RW52		Tchita, U.S.S.R.	890	JOLG	500	Tottori, Japan
560	MTCY	10000	Hsinking, Manchukuo		MTBY	1000	Mukden, Manchukuo
000	XGOG	10000	Chengtu, China		XGKA	15	Kashing, China
	XLHB	45	Shanghai, China	900	XGOI	500	Shanghai, China
E~0		100	Hankow, China	910	JOLK	500	Kukuoka, Japan
570	XHJA		Taichu, Formosa	310	XLIM	50	Amoy, China
580	JFCK	1000		920	JOQK	500	Niigata, Japan
	XQHA	250	Shanghai, China	920		1000	Shanghai, China
590	JOAK1	150000	Tokyo, Japan	020	XHHX		
	$\mathbf{x}\mathbf{GLD}$			930	JOAG	500	Nagasaki, Japan
	XHKB	100	Tsingtao, China	940	$_{ m JOBK2}$	10000	Osaka, Japan
600	JONG	500	Miyazaki, Japan		XHHE	1000	Shanghai, China
	XMHA	600	Shanghai, China	95 0	JONK	500	Nagano, Japan
610	JOJK	3000	Kanazawa, Japan		XGOP	300	Peiping, China
0.0	XGSS	15	Tsunshi, China	960	XHHF	1000	Shanghai, China
620	XHHK	100	Shanghai, China	970	JODK1	10000	Seoul, Korea
			Okayama, Japan	0.0	XHIB	75	Wusih, China
630	JOKK	500		980	JOXK	500	Tokushima, Japan
635	RW28	800	Vladivostok, U.S.S.R.	900		500	Shanghai, China
640	JODG	50 0	Hamamatsu, Japan	990	XMHB	10000	Nagoya, Japan
	XLHG	100	Shanghai, China	990	JOCK2		
	ZEK	500	Hong Kong		XGCK	75	Chuching, China
650	JOUK	300	Akita, Japan		XGOD	2000	Hangchow, China
660	XGOA	75000	Nanking, China	1000	JOBG	500	Maebashi, Japan
668		20000	Jerusalem, Palestine		XGKE	5	Nanchang, China
670	JOTK	500	Matsuye, Japan		XGMK	15	Poatung, China
674	MTFY	3000	Harbin, Manchukuo		XGOT	50	Taiyuan, China
680	JOVK	500	Hakodate, Japan		XKRI	100	Canton, China
	JOBK1	10000	Osaka, Japan	1010	XGOW	5000	Hangkow, China
690				1020	JOFG	300	Fukui, Japan
	XGOY	250	Kunming, China	1020	XHHG	100	Shanghai, China
700	JOCG	700	Ashigawa, Japan	1020			
	VPG	5000	Colombo, Ceylon	1030	JBAK	150	Fuzan, Korea
	XMHC	500	Shanghai, China		XGOL	1000	Foochow, China
710	JODK2	10000	Keljo, Korea	1040	101G	500	Yamagata, Japan
	XGML	7500	Kashing, China		хини	100	Shanghai, China
	XGOS	1000	Chunking, China	1050	JOHG	500	Kagoshima, Japan
720	JFBK	1000	Talwan, Formosa		XHIE	100	Wusih, China
	JORK	500	Kochi, Japan		XHKA	200	Tientsin, China
	XLHC	50	Shanghai, China	1060	JOIG	500	Toyama, Japan
730	JOCK1	10000	Nagoya, Japan		XHIII	100	Shanghai, China
7.50	XHGS	50	Wuchow, China	1070	JOOK	300	Kyoto, Japan
= 40				1010	XGOQ	200	Kaifeng, China
740	JOSK	1000	Kokura, Japan	1080	JOOG	500	Obihiro, Japan
	хнив	50	Shanghai, China	1000			
750	HS7PJ	15000	Bangkok, Siam	1000	XHHJ	200	Shanghai, China
	JFAK	10000	Taihoku, Formosa	1090	JBBK1	500	Keljo, Korea
	LUHO	20	T'ung Hsien, China		XLIO	25	Shaohing, China
	XGOK	1000	Canton, China	1100	XHHS	100	Shanghal, China
	XQKB	150	Tientsin, China	1110	XLIG	15	Kaoyu, China
760	JQAK	1000	Dairen, Manchukuo	1120	XLHM	50	Shanghai, China
	XLHI	71/2	Shanghai, China		XLHN	200	Shanghai, China
	XLHJ	25	Shanghai, China	1130	$\mathbf{x}\mathbf{Goc}$	300	Nanchang, China
770	JOHK	10000	Sendal, Japan	1140	XHHL	100	Shanghai, China
170		200	Madras, India	1150	XGOZ	1000	Shinkiang, China
	VUM		Ningpo, China	1160	XHHU	100	Shanghai, China
-00	XHID	75		1180	XHHZ	150	Shanghai, China
780	JOPK	500	Shizueka, Japan	1200	VUL	100	Lahore, India
	XLHA	50	Shanghai, China	1200		100	
790	JOGK	10000	Kumamoto, Japan	1010	XHHN		Shanghai, China
	XGOV	100 00	Changsha, China	1210	XHKC	100	Tsingtao, China
	\mathbf{X} LIJ	50	Wusih, China		XLPH	15	Pinghu, China
800	JOKG	500	Kofu, Japan		XLTC	15	Wusih, China
	XLHL	100	Shanghai, China	1220	XQHG	250	Shanghal, China
805	XGOF	500	Tsinan, China	1230	XLIR	50	liangchow, China
810	JOIK	10000	Sapporo, Japan	1240	XHHY	100	Shanghal, China
0.0	VUC	3000	Calcutta, India	1250	MABS	35	Tingshien, China
	XQKC	200	Tientsin, China		XLIE	50	Wusih, China
200	JBBK2	50 0	Keijo, Korea	1260	XHHP	100	Shanghai, China
820				1270	XLIH	15	Wuhu, China
	XQHB	30	Shanghai, China			80	Shanghai, China
830	JOFK	10000	Hiroshima, Japan	1280	XHHQ		
	XGF	71/2	Tsinan, China	1290	XGOB	500	Tsinan, China
	XLII	30	Wuhu, China	1300	XQHC	2000	Shanghai, China
840	XMHD	1000	Shanghai, China	1310	XLIP	50	Suchow, China
845	zbw	2000	Hong Kong	1330	XLIK	75	Changchow, China
850	XLIQ	50	Hangchow, China	1332	ZHL		Singapore, Straits Settle-
855	HSP1	2500	Bangkok, Siam				ments
500	VUB	3000	Bombay, India	1340	XHHR	50	Shanghai, China
860	XHHD	50	Shanghai, China	1350	XGOE	1000	Nanning, China
870	JOAK2	150000	Tokyo, Japan	2.00	XQKA	150	Tientsin, China
910		75	Suchow, China	1360	XQHD	200	Shanghai, China
0.00	XHIC	100	Shanghai, China	1370	XLID	50	Hangchow, China
880	XHHV	100	Shanghai, Ohina	1010		0.0	

1380	XLHE	50	Shanghai, China
	XLHF	50	Shanghai, China
1390	XLIN	50	Wusih, China
1400	FFZ	250	Shanghai, China
	XLHO	100	Shanghai, China
1440	XLHQ	30	Shanghai, China
1450	XGOM	15	Peiping, China
	XLIB	15	Suchow, China
1460	XQHE	250	Shanghai, China
1470	XGDZ	10	Changchow, China
1480	XQHF	200	Shanghai, China
1490	XLKS	20	Kashing, China
1500	VUP	2000	Peshawar, India
	XHHT	100	Shanghai, China
	XOCL	71/2	Tsinan, China

When Trouble Comes

(Continued from page 11)

of the dial. Readjustments are next in order. Sometimes, in an old receiver like this, it is best to realign it to some one portion of the dial where the best liked stations are heard, and then make no further adjustments. Of course, an experienced serviceman with a test oscillator available can do a much better job, particularly if the receiver gang unit has split or fan shaped end plates on the condenser. Sometimes these are cut into five segments for tuning five different frequencies-approximately 1100, 900, 700, 600 and 500 kilocycles. After aligning an old receiver it, in nearly every case, must be neutralized, and then the alignment must again he checked.

Neutralizing is accomplished by using a type 26 dummy tube which has one heater filament prong cut off so the tube cannot light when in the socket. A faint signal will come through if the neutralizing effect does not work. Balancing the plate circuit, by means of the neutralizing condensers cuts off the signal, and then the tube circuit is neutralized. Neutralizing commences with the last r-f tube. Replace a god tube and retune the dial to loudest signal. Remove the next to last r-f tube and insert the dummy. Neutralize that circuit until no sound is heard. Finish the job at the first r-f tube and insert the good tube.

(Continued from page 41)

Televise News Events

Delivery of the NBC mobile television unit presages the most intensive activity in the history of American television. The National Broadcasting Company contemplates the experimental televising of outdoor sports, parades, scheduled news events and other subjects. After being relayed by micro-wave to the Empire State transmitter, the teleevents will broadcast vised be throughout the Metropolitan area to receivers in the hands of NBC engineers and those built by radio amateurs.

The new mobile unit consists of two motor vans, each the size of a large bus, to be operated by a crew of ten engineers. One van contains complete pick-up apparatus, including cameras, for both picture and accompanying sound. A picture, or "video," transmitter to operate on a frequency of 177,000 kilocycles is mounted in the other. A special directional antenna, to be raised on the scene of operations, is used in connection with the mobile unit. In the Metropolitan area, where the steel framework of many skyscrapers impedes ultra-high frequency transmission, the normal working range of the new unit is expected to be about twenty-five miles.

The second van, connected to the first by 500 feet of coaxial cable, when in operation, contains a complete micro-wave relay transmitter. The principal apparatus here is the radio frequency unit, generating the carrier wave for picture signals, and modulating apparatus for imposing picture signals on this carrier. Because of the great amount of heat generated by some of the large vacuum tubes used in television, this vehicle contains an air-conditioning unit and a water cooler to maintain tubes at operating temperatures.

When to Get the DAY'S NEWS

Network News Flashes

WWL.

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

Don Lee System, Daily KDB KDON KFRC KFXM KGB KGDM KHJ KPMC KQW KVOE KXO

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

Don Lee System, Sunday only Same stations as at Midnight.

E-1:15 a.m., C-12:15, M-11:15 p.m., P-10:15

CBC-Daily To CBC Pacific Network.

E-7:30 a.m., C-6:30, M-5:30, P-4:30 Michigan Radio Network, Daily.

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

CKAC KLRA KMOX WABC WADC WAIM WALA WBIG WCHS WCOC WDAE WDBO WDRC WEEI WESG WFBL WHIO WHP WIBX WJAS WJNO WKBW WLBZ WMAS WMBR WMMN WNBF WOKO WORC WPAR WPG WPRO WQAM WREC WRVA WSBT WSJS

E-9:40 a.m., C-8:40, M-7:40, P-6:40 NBC Red and Blue, Press Radio, Weekdays

To stations available

E-9:55 a.m., C-8:55, M-7:55, P-6:55 CBS-Press Radio, Sat. and Sunday CKAC KLRA KMOX WABC WADC WAIM WALA WCHS WCOC WDAE WDBJ WDBO WEEL WESG WFBL WFBM WHEC WHIO WIBX WJNO WJR WJSV WLBZ WMAS WMBR WMMN WNBF WOKO WORC WPAR WOAM WREC WSVA WSFA WSJS WTOC

E-10:45 a.m., C-9:45, M-8:45, P-7:45 Don Lee System, Daily except Sunday Same stations as at Midnight

E-11:00 a.m., C-10:00, M-9:00, P-8:00 NBC-Blue-Press Radio, Sunday To stations available

NBC-Red-Press Radio, Sunday To stations available.

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

Michigan Radio Network, Daily WASH WBCM WELL WFDM WIBM WJIM WKZO WOOD WXYZ

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

P-9:15 CBS-Edwin Monday

through Friday KFAB KFH KGKO KLRA KMBC KMOX KNOW KOMA KRLD KRNT AMIDA KNOW KOMA KRED KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCHS WCOA WCOC WDAE WDBJ WDBO WDNC WDOD WDRC WEEL WFBL WGR WGST WHAS WHEC WHIO WHP WIBX WISN WJR WJSV WKBB WKBN WKRC WLAC WLBZ WMAS WMAZ

WMRD WMRR WMMN WNAX WNBF WNOX WOC WOKO WORC WPG WPRO WQAM WREC WRVA WSFA WSJS WTOC WWL WWVA

E-2:00 p.m., C-1:00, M-12:00, P-11:00 CBS-Monday, Wednesday, Friday KFAB KFH KLRA KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDRC WEEI WFBL WFBM WGST WHAS WHEC WHIO WJAS WJR WJSV WKBB WISN WKBW WKRC WLAC WLBZ WMBR WNBF WOKO WORC WPRO WQAM WREC WRVA WWL

E-3:00 p.m., C-2:00, M-1:00, P-Noon Don Lee System, Saturday Same stations as at Midnight

E-3:15 p.m., C-2:15, M-1:15, P-12:15 Don Lee Sys., Mon. through Fri. Same stations as at Midnight

E-5:00 p.m., C-4:00, M-3:00, P-2:00 Michigan Network, Daily WASH WBCM WELL WFDM WIBM WJIM WKZO WOOD WXYZ

E-5:10 p.m., C-4:10, M-3:10, P-2:10 Blue, Monday through Friday To stations available

E-5:30 p.m., C-4:30, M-3:30, P-2:30 CBS-Monday, Wednesday, Friday KFBB KFPY KLZ KMBC KNX KOIN KOL KOY KSFO KSL KVI

E-6:25 p.m., C-5:25, M-4:25, P-3:25 CBS-Press Radio, Thurs. and Sat. Available to entire Network

E-6:30 p.m., C-5:30, M-4:30, P-3:30 CBC-Sunday only To National Network

CBS Press Radio, Mon., Tues., Frl. KFH KLRA KNOW KOMA KSCJ KSL KTRH KWKH WABC WACO WADC WAIM WALA WBIG WBRC WCCO WCOC WDAE WDBJ WDBO WDOD WHEC WISN WJAS WJNO WJR WKBB WKBW WLBZ WMAS WMBR WOC WORC WPAR WQAM WREC WSFA WSJS WTAQ WTOC WWVA

NBC-Red. Press Radio. Weekdays To all stations available

Blue-Saturday only

To all stations available

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

To all stations available

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

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

Don Lee Sys., Mon. through Fri. Same stations as at Midnight

E-7:30 p.m., C-6:30, M-5:30, P-4:30 CBC-Monday through Friday To CBC French Network

E-7:45 p.m., C-6:45, M-5:45, P-4:45 CBS—Boake Carter, Mon., Wed., Fri. KFAB KFH KLRA KMBC KMOX KNOW KOMA KRLD KRNT KTRH KTSA KTUL WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC WEEI WFAM WFBL WGR WGST WHAS WHEC WHIO WISN WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMBD WMBR WNOX WOKO WORC WPRO WQAM WREC WRVA

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

Blue—Monday, Thursday KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WMT WREN WSYR WTCN WXYZ

E-8:30 p.m., C-7:30, M-6:30, P-5:30 Blue March of Time, Thursday KDKA KECA KERN KFBK KFEL KFSD KGA KGO KJR KLO KMJ KOIL KSO KWG KWK KXYZ WABY WBAL WBZ WBZA WCKY WCOL WEBR WFIL WHAM WJZ WMAL WMPS WMT WOWO WREN WSPD WSYR WTCN WXYZ

CBS—Tuesday only KNX KSFO

E-9:45 p.m., C-8:45, M-7:45, P-6:45 Don Lee System, Daily Same stations as at Midnight Michigan Network, daily

WASH WBCM WELL WFDM WIBM WJIM WKZO WOOD

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

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

E-10:15 p.m., C-9:15, M-8:15, P-7:15 Michigan Radio Network, Daily WXYZ

E-10:45 p.m., C-9:45, M-8:45, P-7:45 CBC-Daily except Saturday To National and French Networks

Red—Friday only KDYL KFI KGW KHQ KOA KOMO KPO KSD KSTP KYW WBEN WCAE WCSH WDAF WDEL WEAF WFBR WGY WIRE WJAR WLW WMAQ WNAC WOW WRC WTAG WTAM WTIC WWJ

E-11:00 p.m., C-10:00, M-9:00, P-8:00 Blue, Sunday. Press Radio Available to Entire Network

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

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

To all stations available CBC—Saturday

To National and French Networks

The National Broadcasting Company

The stations which carry NBC programs are shown arranged by cities.

Red and Blue Netwo	orks		Hartford, Conn.	WTIC	1040
Albuquerque, N. Mex.	ков	1180	Houston, Texas	KPRC	920
Allentown, Pa.	WSAN	1440	Indianapolis, Ind. Jackson, Miss.	WIRE WJDX	1400 1270
Asheville, N. C.	WWNC	570	Kansas City, Mo.	WDAF	610
Amarille, Texas	KGNC	1410	Los Angeles, Calif.	KFI	640
Bakersfield, Calif.	KERN	1370	Memphis, Tenn.	WMC	780
Beaumont, Texas	KFDM	560	Montreal, P. Q.	CBM	1050
Billings, Mont. Bismarck, N. Dak.	KGHL KFYR	780 550	New Orleans, La.	WSMB	1320
Boise, Idaho	KIDO	1350	New York, N. Y.	WEAF	660
Butte, Mont.	KGIR	1340	Omaha, Nebr. Philadelphia, Pa.	WOW KYW	590
Charleston, S. C.	WCSC	1360	Pittsburgh, Pa.	WCAE	1020 1220
Charlotte, N. C.	wsoc	1210	Portland, Maine	WCSH	940
Chicago, Ill.	WCFL	970	Portland, Ore.	KGW	620
Cincinnati, Ohio	WLW WSAI	700 1330	Providence, R. I.	WJAR	890
Clearwater, Fla.	WFLA	620	Richmond, Va.	WMBG	1350
Columbia, S. C.	WIS	560	St. Louis, Mo. St. Paul, Minn.	KSD KSTP	$\frac{550}{1460}$
Columbus, Ohio	WCOL	1210	Salt Lake City, Utah	KDYL	1290
Corpus Christi, Tex.	KRIS	1330	San Francisco, Calif.	KPO	680
Covington, Ky.	WCKY	1490	Schenectady, N. Y.	WGY	790
Dallas, Texas Duluth, Minn.	WFAA WEBC	800	Seattle, Wash.	KOMO	920
Evansville, Ind.	WEBC	1290 630	Spokane, Wash.	KHQ	590
Fargo, N. Dak.	WDAY	940	Washington, D. C. Wilmington, Del.	$\begin{array}{c} \text{WRC} \\ \text{WDEL} \end{array}$	950 1120
Ft. Wayne, Ind. Ft. Worth, Texas	WGL	1370	Worcester, Mass.	WTAG	580
Ft. Worth, Texas	WBAP	800		,, 1110	000
Fresno, Cant.	KMJ	580	Disa Makasa Is		
Grand Rapids, Mich.	WOOD	1270	Blue Network		
Greenville, S. C. Honolulu, Hawaii	WFBC KGU	1300 750	Albany, N. Y.	WABY	1370
Hot Springs, Ark.	KTHS	1060	Atlanta, Ga.	WAGA	1450
Jacksonville, Fla.	WJAX	900	Baltimore, Md.	WBAL	1060
Knoxville, Tenn,	WROL	1310	Baton Rouge, La.	WJBO	1120
Little Rock, Ark.	KARK	890	Birmingham, Ala.	WSGN	1310
Louisville, Ky. Madison, Wis.	WAVE WIBA	940 1280	Boston, Mass. Bridgeport, Conn.	WBZ	990 600
Manchester, N. H.	WFEA	1340	Buffalo, N. Y.	WEBR	1310
Medferd, Ore,	KMED	1410	Cedar Rapids, Iowa	WMT	600
Miami, Fla.	WIOD	610	Chicago, Ill.	WENR	870
Milwaukee, Wis.	WTMJ	620	Claveland Ohio	WLS	870
Montreal, P. Q.	CBF	910	Cleveland, Ohio	WHK	1390
Montreal, P. Q. Nashville, Tenn.	CBF WSM	910 650	Denver, Colo,	WHK KVOD	1390 92 0
Montreal, P. Q. Nashville, Tenn. Norfolk, Va.	CBF WSM WTAR	910 650 780		WHK	1390
Montreal, P. Q. Nashville, Tenn.	CBF WSM	910 650	Denver, Colo, Des Moines, Iowa Detroit, Mich. Erie, Pa.	WHK KVOD KSO WXYZ WLEU	1390 920 1430 1240 1420
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans.	CBF WSM WTAR WKY KTAR KOAM	910 650 780 900 620 790	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind.	WHK KVOD KSO WXYZ WLEU WOWO	1390 920 1430 1240 1420 1160
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C.	CBF WSM WTAR WKY KTAR KOAM WPTF	910 650 780 900 620 790 680	Denver, Colo, Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas	WHK KVOD KSO WXYZ WLEU WOWO KXYZ	1390 920 1430 1240 1420 1160 1440
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK	910 650 780 900 620 790 680 1490	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y.	WHK KVOD KSO WXYZ WLEU WOWO KXYZ	1390 920 1430 1240 1420 1160 1440 1210
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN	910 650 780 900 620 790 680 1490 620	Denver, Colo, Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas	WHK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN	1390 920 1430 1240 1420 1160 1440 1210 1220
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK	910 650 780 900 620 790 680 1490 620 1190	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Augeies, Callt. Memphis, Tenn.	WHK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS	1390 920 1430 1240 1420 1160 1440 1210
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI	910 650 780 900 620 790 680 1490 620	Denver, Colo, Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Callf. Memphis, Tenn. Minneapolis, Minn.	WHK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN	1390 920 1430 1240 1420 1160 1440 1210 1220 1430 1430 1250
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO	910 650 780 900 620 790 680 1490 620 1190 1450 1200	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Callf. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF	1390 920 1430 1240 1420 1160 1440 1210 1220 1430 1430 1250 600
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak. Springfield, Mo.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX	910 650 780 900 620 790 680 1490 620 1190 1450 1200 1110	Denver, Colo, Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Augeies, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU	1390 920 1430 1240 1160 1440 1210 1220 1430 1430 1250 600 1250
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Calif.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG	910 650 780 900 620 790 680 1490 620 1190 1450 1200 1110 1230	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeies, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFGF WDSU WJZ	1390 920 1430 1240 1160 1440 1210 1220 1430 1430 1250 600 1250 760
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Callf. Terre Haute, Ind.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX- KWG WBOW	910 650 780 900 620 790 680 1490 620 1190 1200 1110 1230 1200 1310	Denver, Colo, Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeies, Callf. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL	1390 920 1430 1240 1160 1440 1210 1220 1430 1430 1250 600 1250
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Calif.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG	910 650 780 900 620 790 680 1490 620 1190 1450 1200 1230 1200 1310 840	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Augeies, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL	1390 920 1430 1240 1420 1160 1210 1220 1430 1250 600 1250 760 1400 1260 1260
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla, Weslaco, Texas	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV	910 650 780 900 620 790 680 1490 1190 1230 1210 1230 1210 840 1140 1260	Denver, Colo, Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Augeies, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFGF WDSU WJZ KJC KOIL WFIL KDKA	1390 920 1430 1240 1440 1160 1440 1210 1430 1430 1430 100 1250 600 1250 1400 1260 560 580
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla. Weslaco, Texas Wichita, Kans.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS	910 650 780 900 620 790 680 1490 1200 1110 1230 1200 1310 840 1140 1260	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeres, Callf. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa. Portland, Ore.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL KDKA KEX	1390 920 1430 1240 1160 1140 1210 1220 1430 1430 1250 760 1260 560 560 980 1180
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla, Weslaco, Texas	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV	910 650 780 900 620 790 680 1490 1190 1230 1210 1230 1210 840 1140 1140	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeies, Callt. Memphis, Tenn. Minneapolis, Minn. Monteal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa. Portland, Ore. Providence, R. I.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN	1390 920 1430 1240 1440 1160 1440 1210 1430 1430 1250 600 1250 760 1400 1260 980 1180 780
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Callf. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla, Weslaco, Texas Wichita, Kans. York, Pa.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS	910 650 780 900 620 790 680 1490 1200 1110 1230 1200 1310 840 1140 1260	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Augeies, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL KDKA KEX	1390 920 1430 1240 1160 1140 1210 1220 1430 1430 1250 760 1260 560 560 980 1180
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Callf. Terre Haute, Ind. Toronto, Ont. Tulsa. Okla. Weslaco, Texas Wichita, Kans. York, Pa.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KROV KANS WORK	910 650 780 900 620 790 680 1490 1200 1110 1230 1200 1310 840 1440 1210 1320	Denver, Colo, Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeies, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va. Rochester, N. Y.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGHF WRTD WHAM	1390 920 920 1430 1240 1420 1160 1210 1220 1430 1250 760 1400 1260 560 580 1180 1320 1500 1500
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla, Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KGBX WBOW CRCT KVOO KRGV KANS WORK	910 650 780 900 620 790 680 1490 620 1190 1110 1230 1200 1310 840 1260 1210 1320	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Callf. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va. Rochester, N. Y. St. Louis, Mo.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL KDKA KEX WEGHF WRTD WHAM KGHF	1390 920 1430 1240 11420 1160 1440 1210 1220 1430 1430 1250 600 1250 1400 1260 1800 1800 1800 1800 1800 1800 1800 18
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Callf. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla, Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK	910 650 780 900 620 790 680 1490 620 1190 1200 1110 1230 1200 1310 1450 1210 1320 740 1220	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Augeies, Callt. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadeiphia, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va. Rochester, N. Y. St. Louis, Mo. San Diego, Calif.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFGF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGHF WRTD WHAM KWK	1390 920 1430 1440 11420 1140 1210 1220 1430 1250 600 1250 760 1260 560 1400 1260 580 1180 1320 1500 1500 1500 1500 1500 1500 1500 15
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KGBX WBOW CRCT KVOO KRGV KANS WORK	910 650 780 900 620 790 680 1490 620 1190 1110 1230 1200 1310 840 1260 1210 1320	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angrees, Callf. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va. Rochester, N. Y. St. Louis, Mo. San Diego, Callf. San Francisco, Callf.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGHF WRTD WHAM KWK KFSD	1390 920 1430 1420 11420 1160 1210 1210 1220 1430 1430 1250 600 1250 1260 1260 1260 1380 780 1320 1350 600 1150 1350 600
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Callf. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla, Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR	910 650 780 900 620 790 680 1490 620 1190 1150 1200 1310 1210 1310 1220 740 1270 930	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Augeies, Callt. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadeiphia, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va. Rochester, N. Y. St. Louis, Mo. San Diego, Calif.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFGF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGHF WRTD WHAM KWK	1390 920 1430 1440 11420 1140 1210 1220 1430 1250 600 1250 760 1260 560 1400 1260 580 1180 1320 1500 1500 1500 1500 1500 1500 1500 15
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Callf. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass. Buffalo, N. Y. Chicago, Il.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WFBR WBRC WBAC WBAC WMAQ	910 650 780 900 620 790 680 1490 620 1190 1110 1200 1110 840 1120 1210 1320 740 1270 1270 1270 1270 1270 1270 1270 127	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Callf. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va. Rochester, N. Y. St. Louis, Mo. San Diego, Callf. Santra Barbara, Callf. Seatte, Wash. Spokane, Wash.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL KDKA KEX WEGHF WRTD WHAM KGHF WRTD WHAM KGHF KGO KTMS KJR KGA	1390 920 1430 1440 11420 1160 1440 1210 1220 1430 1430 1250 600 1250 1460 1260 1500 1180 780 1350 600 1150 980 1350 600 1250 1430 1430 1430 1430 1430 1430 1430 143
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Callf. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla, Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass. Buffalo, N. Y. Chicago, II. Cleveland, Ohlo	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC WBRC WBAC WBEN WMAQ	910 650 780 900 620 790 680 1490 620 1190 1110 1200 1110 1200 1210 1310 1210 1320 740 1270 930 1230 900 670	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeies, Callf. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va., Rochester, N. Y. St. Louis, Mo. San Diego, Calif. Sant Barbara, Calif. Seattle, Wash. Spokane, Wash. Springfield, Mass.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFGF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGHF WRTD WHAM KWK KFSD KGO KTMS KJR KGA WBZA	1390 920 1430 1420 11420 1160 1210 1220 1430 1250 600 1250 1260 1260 1260 1260 1260 1320 1150 1350 1150 1350 790 1260 790 1260 790 1260 790 1260 790
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass. Buffalo, N. Y. Chicago, Il. Cleveland, Ohlo Denver, Colo.	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC WNBC WBEN WMAQ WTAM KOA	910 650 780 900 620 790 680 1490 1450 1200 1310 1200 1310 1210 1320 740 1270 930 1230 900 670 1070 1070 1070 1070 1070 1070 107	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeies, Callf. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadeiphia, Pa. Pittsburgh, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va. Rochester, N. Y. St. Louis, Mo. San Diego, Calif. San Francisco, Calif. Santa Barbara, Calif. Seattle, Wash. Spokane, Wash. Spracuse, N. Y.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGHF WRTD WHAM KWK KFSD KGO KTMS KJR KGA WBZA WBZA	1390 920 1430 1420 11420 1160 1210 1210 1220 1430 1430 1250 600 1250 1260 1260 1260 1320 1350 600 1150 600 1150 600 1150 600 1150 600 127 600 128 600 129 120 120 120 120 120 120 120 120 120 120
Montreal, P. Q. Nashville, Tenn. Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Callf. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sloux Falls, S. Dak. Springfield, Mo. Stockton, Callf. Terre Haute, Ind. Toronto, Ont. Tulsa, Okla, Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass. Buffalo, N. Y. Chicago, II. Cleveland, Ohlo	CBF WSM WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC WBRC WBAC WBEN WMAQ	910 650 780 900 620 790 680 1490 620 1190 1110 1200 1110 1200 1210 1310 1210 1320 740 1270 930 1230 900 670	Denver, Colo. Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeies, Callf. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo. Richmond, Va. Rochester, N. Y. St. Louis, Mo. San Diego, Calif. Sant Barbara, Calif. Seattle, Wash. Spokane, Wash. Springfield, Mass.	WIIK KVOD KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFGF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGHF WRTD WHAM KWK KFSD KGO KTMS KJR KGA WBZA	1390 920 1430 1420 11420 1160 1210 1220 1430 1250 600 1250 1260 1260 1260 1260 1260 1320 1150 1350 1150 1350 790 1260 790 1260 790 1260 790 1260 790

WHAT'S ON THE AIR TONIGHT

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

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

Time: E Eastern; C Central; M Mountain; P Pacific While these programs are correct at the time of going to press, changes are made frequently.

MONDAY

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

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

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

C — Poetic Melodies; Jack Fulton WABC WADC WBT WCAO WCAU WDRC WEAN WEEI WFBL WGR WHEC WHK WJAS WJR WJSV WKRC WOKO WSPD WTOC WWVA

- Amos 'n' Andy KSD KSTP KYW WBEN WCAE WCSH WEAF WFBR WGY WHO WJAR WLW WNAC WRC WTAG

WTAM WTIC WWJ

E-7:15 p.m., C-6:15, M-5:15, P-4:15 R — Uncle Ezra's Radio Station KARK KFYR KGBX KGNC KPRC KSTP KTBS KTHS KVOO KYW WBAP WBEN WCAE WCKY WCOL WCSH WDAF WDAY WEAF WEBC WFAA WFBR WGBF WGY WHO WIBA WIRE WJAR WKY WMAQ WNAC WOAI WOOD WOW WRC WTAG WTAM WTIC WTMJ

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

M -- The Lone Ranger WEIL WNBF WSYR WOR WXYZ

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

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

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

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

B - Gen. Hugh Johnson KDKA KOIL KSO KWK WBAL KFYR KPRC KSD KSTP KTBS KGW KHQ KMJ KOA KOMO KPO

WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WMT WREN WSYR WTCN WXYZ

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

C - Pick and Pat KFAB KMBC WABC WADC WBBM WBT WCAO WCAU WDRC WEAN WFBL WGR WGST WHEC WHK WJSV WHP WICC WJAS WJR WKRC WLBZ WMAS WNAC WOKO WORC WSPD

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

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

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

KFEL KGO KSO KVOD KWK KXYZ WBAL WBZ WBZA WEAN WEBR WENR WFIL WHAM WJTN WJZ WLS WMAL WREN WRTD WSPD WSYR WTCN WXYZ

C - Lux Radio Theater CFRB CKAC KFAB KFH KFPY KLRA KLZ KMBC KMOX KNOW KOIN KOL KNX KOH KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI WABC WADO WBBM WBNS WBRC WBT WCAO WCCO WDAE WDBJ WDRC WEEL WFBL WFBM WGAR WGST WHAS WHEC WHIO WIBX WISN WJAS WJR WJSV WKBW WKRC WLAC WMAS WMBD WNAX WOKO WORC WPRO WQAM WREC WRVA WWL

R — Fibber McGee and Molly

KVOO KYW WAVE WBEN WCAE WCOL WCSH WDAF WDAY WEAF WEBC WEAA WFBR WFLA WGY WIS WIBA WIOD WIRE WHO WJAR WJAX WJDX WLW WMAQ WOAI WOOD WOW WMC WNAC WSM WSMB WPTF WRC WSB WSOC WSUN WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

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

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

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

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

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

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

R - Burns and Allen KARK KDYL KFBK KFI KFYR KFBX KGHL KGIR KGNC KGO

MONDAY (Continued)

KPRC KSD KSTP KTAR KTBS KVOO KWG WAVE WDAF WDAY WEBC WFAA WIBA WJDX WKY WMC WOAI WOW WSB WSMB WTMJ

M — The Lone Ranger
KDB KDON KFRC KFXM KGB
KGDM KHJ KPMC KVOE KXO
Available also to West Coast Section

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C — Poetic Melodies; Jack Fulton KERN KFAB KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMOX KOIN KOL KOMA KRLD KRNT KSL KTRH KTSA KVI WBBM WBRC WCCO WFBM WGST WLAC WREC WWL

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

WOW WSB WSM WSMB
E-11:15 p.m., C-10:15, M-9:15, P-8:15

C — Boake Carter KFPY KLZ KNX KOIN KOL KSFO KSL KVI

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

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Pick and Pat

KFPY KGKO KLRA KLZ KMOX KNX KOIN KOL KOMA KRLD KRNT KSCJ KSFO KSL KTUL KVI KWKH WACO WBRC WCCO WFBM WHAS WLAC WREC

TUESDAY

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

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

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

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C — Geo. McCall, Hollywood Talk
KFAB KFH KLRA KMOX KNOW
KOMA KRLD KRNT KTRH KTSA
KWKH WABC WADC WBDM
WBNS
WBT WCAO WCAU WCCO WCHS
WDAE WDBO WDDO WDRC WELI
WFBL WGAR WGBI WGST WHAS
WHEC WHIO WINW WISN WJAS
WJR WJSY WKRC WLAC WMAS
WMBR WOC WOKO WORC WPRO
WQAM WREC WRVA WWL

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

C — Helen Menken, Drama KFAB KFPY KIRO KLZ KMBC KMOX KNX KOIN KRNT KSFO KSL KVI WABC WBBM WCAO WCAU WDRC WEEI WFBL WGAR WGR WHAS WHEC WHIO WJAS WJR WJSV WKRC WOKO WORC

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

KPYR KPRC KSD KSTP KTBS
KTHS KVOO KYW WAVE WBAP
WBEN WCAE WCSH WDAF WDAY
WEAF WEBC WFBR WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMC WNAC WOW WPTF WRC
WRVA WSB WSM WSMB WSOC
WSUN WTAG WTAM WTAR WTIC
WTMJ WWJ WWD.

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

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Al Jolson; Parkyakarkus

C—AI Joison; Parkyasarus
CFRB CRCM KFAB KFH KLRA
KMBC KMOX KNOW KOMA KRLD
KRYT KTRH KTSA KTUL WABC
WADC WBBM WBNS WBRC WBT
WCAO WCAU WCCO WDAE WDBJ
WDRC WEEI WFBL WFBM WGAR
WGR WGST WHAS WHEC WHIO
WIBX WISN WJAS WJR WJSV
WKRC WLAC WMAS WMBD WNAX
WOKO WORC WPRO WQAM WREC
WRVA WWL

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

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

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Al Pearce and Gang CFRB CKAC KFAB KFH KGKO

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

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

B — Horace Heldt Orchestra KANS KDKA KFI KFSD KGA KGO KGW KJR KLO KOIL KPRC KSO

KTHS KVOD KWK WAVE WBAL WBAP WBZ WBZA WEAN WEBR WFIL WFLA WHAM WHK WICC WIOD WIS WJAX WJZ WKY WLS WLW WMAL WMC WMT WOAI WPTF WREN WSB WSM WSMB WSOC WSPD WSUN WSYR WTAR WTON WXYZ

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R — Hollywood Mardi Gras

CFCF CRCT KDYL KFI KGHL
KGW KHQ KOA KOMO KPO KPRC
KSD KSTP KTAR KTBS KVOO
KYW WAVE WBAP WBEN WCAE
WCOL WCSC WCSH WDAF WDEL
WHO WIBA WIOD WIRE WIS
WJAR WJAX WKY WMAQ WMBG
WMC WNAC WOAI WOOD WOW
WRC WSB WSM WSMB WSOC
WTAG WTAM WTAR WTIC WTMJ
WWJ

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

KFAB KFH KFPY KGKO KIRO
KLRA KIZ KMBC KNOX KNOW
KNX KOIN KOMA KOY KRLD
KRNT KSCJ KSFO KSL KTRH
KTSA KTUL KVI KVOR KWKH
WABG WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCHS WDAE WDBJ
WDBO WDNC WDOD WDRC WEEI
WFBL WFBM WGAR WGST WHAS
WHIFC WHIO WHP WIBW WIBX
WISN WJAS WJR WJSV WKBB
WKBN WKBW WKRC WLAC WLBZ
WMAS WMBD WMBR WNAX
WNBF WNOX WOC WOKO WORC
WPG WPRO WQAM WREC WRVA

B — Gen. Hugh Johnson KDKA KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WMT WOWO WREN WSPD WSYR WTCN WXYZ

M — Eddie Duchin Orchestra

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

E-10:30 p.m., C-9:30, M-8:30, P-7:30
R — Jimmy Fidler Hollywood Gosslp
KDYL KFI KGW KHQ KOA KOMO
KPO KSD KTAR KYW WBEN
WCAE WCSH WDAF WEAF WFBR
WGY WHO WJAR WLW WMAQ
WNAC WOOD WOW WRC WTAG
WTAM WTIC WWJ

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

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

E-Midn't; C-11:00, M-10:00, P-9:00 C — Al Pearce and Gang KERB KEPY KGVO KLZ KN

KFBB KFPY KGVO KLZ KNX KOH KOIN KOL KOY KSFO KSI, KVI KVOR

WEDNESDAY

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

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Poetic Melodies, See Monday R — Amos 'n' Andy, See Monday[®] B — Easy Aces, See Tuesday

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

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

R - Uncle Ezra, See Monday

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

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

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

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

R - One Man's Family

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

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

R — Wayne King, See TuesdayB — Skolsky from Hollywood

KDKA KECA KFEL KFSD KGA KGO KGW KJR KLO KOIL KSO KWK WBAL WBZ WBZA WCKY WEAN WEBR WFIL WHAM WHK WICC WJZ WLS WMAL WHT WOWO WREN WSPD WSYR WXYZ

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C— Chesterfield; Andre Kosteianetz KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KGMB KHJ KLKA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD
KRNT KSCJ KSL KTRH KTSA
KTUL KVI KVOR KWG KWKH
WABC WACO WADC WALA WBBM
WBIG WBNS WBRC WBT WCAO
WCAU WCCO WCOA WDAE WDBG
WDBO WDNC WDOD WDRC WEAN
WFBL WFBM WFEA WGST WHAS
WHEC WHK WHP WIBW WIBX
WICC WISN WJAS WJR WJSV
WKBH WKBW WKRC WLAC WUBZ
WMAS WMBD WMBG WMBR
WNAC WNAX WNBF WNOX WOC
WOKO WORC WOWO WPG WQAM
WREC WSFA WSJS WSPD WTOC

R — Town Hall Tonight
KFYR KPRC KSD KSTP KTBS
KTHS KVOO KYW WAVE WBEN
WCAE WCSH WDAF WDAY WEAF
WEBC WEEI WFAA WFBR WFLA
WGY WHO WIBA WIOD WIS WJAR
MGY WHO WIBA WIOD WIS WJAR
WMC WOAI WOW WPTF WRC WSB
WSM WSMB WSOC WTAG WTAM
WTAR WTIC WTMJ WWJ WWNC

E-10:00 p.m., C-9:00, M-8:00, P-7:00
C— Crime Crusade; Phil Lord
KDB KERN KFAB KFBK KFH
KFPY KFRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOIN KOL
KOMA KRLD KRNT KSL KTRH
KTSA KTUL KVI KWG KWKH
WABC WACO WBBM WBNS WBRC
WBT WCAO WCAU WCCO WDAE
WDBJ WDBO WDRC WEAN WFBL
WFBM WGST WHAS WHEC WHK
WICC WISN WJAS WJR WJSV
WKBW WKRC WLAC WLBZ WMBG
WMBR WNAC WOKO WORC WOW
WQAM WREC WTOC WWL

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

B — Gen. Hugh Johnson, See Tues.

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

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

M — Lone Ranger, see Mon.

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

R — Amos 'n' Andy, See Monday

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

KOH KOIN KOL KOMA KRLD E-11:30 p.m., C-10:30, M-9:30, P-8:30 KRNT KSCJ KSL KTRH KTSA C—Eddie Cantor; Deanna Durbin KTUL KVI KVOR KWG KWKH KFBB KFPY KGVO KLZ KNX WABC WACC WALA WBBM KOH KOIN KOL KOY KSFO KSL WBIG WBNS WBRC WBT WCAO KVI KVOR

THURSDAY

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

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

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

B - Easy Aces, See Tuesday

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

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

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

C—Kate Smith; Henny Youngstan
CFB CRCM KDAL KFAB KFH
KGKO KLRA KMBC KMOX KNOW
KOMA KRLD KRNT KSCJ KTRH
KTSA KTUL KWKH WABC WACO
WADC WBBM WBNS WBRC WBT
WCAO WCAU WCOO WDAE WDBJ
WDBO WDOD WDRC WEEI WEOA
WFBL WFBM WGAR WGR WGST
WIAS WHEC WHIO WHP WIBW
WISN WJAS WJR WJSV WKBN
WKIRC WLAC WLBZ WMBD WMBR
WNAX WNOX WOC WOKO WORC
WPRO WQAM WRVA WREC WSFA
WTAQ WWL

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

B — Gen. Hugh Johnson, See Mon.

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

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

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Major Bowes' Amateurs

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

THURSDAY (Continued)

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

MGM Program

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

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

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

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

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

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

FRIDAY

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

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

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

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

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

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

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

- Cities Service Concert

CRCT CFYR KOA KPRC KSD KSTP KTBS KTHS KVOO KYW WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WGY WHO WIBA WIOD WJAR WKY WMAQ WOAI WOW WRC WRVA WSAI WTAG WTAM WTIC WTMJ WWJ

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

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

R - Death Valley Days

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

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

CFRB CKAC KDB KERN KFAB KFBK KFH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ 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 WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIBX WICC WJAS WJR WJSV WKBW WKRC WLAC WLBZ WMBR WMAS WMBD WMBG WNAC WNAX WNOX WOKO WORC WPG WQAM WREC WSPD WWL

- Frank Munn; Abe Lyman

KSD KYW WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WJAR WLW WMAQ WOW WRC WTAG WTAM WWJ

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

R - True Story Court

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

B -- Tommy Dorsey's Orchestra KARK KDKA KECA KFSD KGA KGO KJR KLO KOIL KPRC KSO KTBS KTHS KVOD KWK WABY WAVE WBAL WBZ WBZA WCKY WCOL WDSU WEAN WEBR WENR WFAA WFIL WFLA WHAM WHK C WIOD WIS WJAX WMAL WMPS WMT WIZ WKY WOOD WOWO WPTF WREN WRTD WSGN WSM WSPD WSOC WSUN WXYZ

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

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

R — First Nighter; Drama

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

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

R - Jimmy Fidler

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

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

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

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

B - Lum and Abner, See Monday

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

SATURDAY

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

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

SATURDAY (Continued)

WFBL WGAR WGR WHAS WJAS WJR WKRC WPRO

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

E-8:00 p.m., C-7:00, M-6:00, P-5:00 R - "Believe-it-or-not." Ripley

KANS KDYL KFYR KGNC KOA KPRC KSD KSTP KYW WAPI WAPI WAVE WBAP WBEN WCAE WCSH WDAF WDAY WDEL WEAF WEBC WFBC WFBR WGY WHO WIBA WIRE WJAR WKY WLW WMAQ WMBG WNAC WMC WOAI WOOD WRC WSB WSMB WPTF WOW WSOC WSPD WTAG WTAM WTAR WTIC WTMJ WWJ

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

C - Johnny Presents Russ Morgan KFAB KFH KMBC KMOX KRNT WABC WADC WBBM WBIG WBNS WBT WCAO WCAU WCCO WCOA

WDRC WEEI WFBL WFBM WGR WGST WHAS WHEC WHIO WHK WKRC WMBD WMBG WNBF WOC WOKO WPRO WSBT WWVA

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

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

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

B — National Barn Dance

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

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

KFAB KFH KFPY KGKO KLRA KLZ KMBC KMOX KNOW KNX KOIN KOL KOMA KRLD KSFO KTRH KTSA KTUL KVI KWKH WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCOA WDAE WDBO WDOD WEEI WFBL WFBM WGAR WGST WHAS WHEC WJAS WJR WJSV WKBW WLAC WMBD WMBR WMMN WNOX WOC WQAM

WWVA

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

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

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

E-11:00 p.m., C-10:00, M-9:00, P-8:00 B — National Barn Dance

KDYL KFI KFSD KFYR KGHL KGIR KGU KGW KHQ KOA KOMO KPO KSTP KTAR WDAY WEBC WIBA WLW WTMJ

CBC --- Northern Messenger To Mideast and Western Networks of the CBC

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C - Johnny Presents Russ Morgan KFBB KFPY KGVO KIRO KLZ KNX KOIN KSFO KSL KVI KVOR

E-12:00 p.m., C-11:00, M-10:00, P-9:00 C — Professor Quiz

KFBB KFPY KIRO KNX KOH KOIN KOY KSFO KSL KVI

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

SUNDAY

E-11:30 a.m., C-10:30, M-9:30, P-8:30 C - Major Bowes' "Family"

CFRB KERN KFAB KFBH KFBK KFH KFPY KFRC KGB KGVO KMBC KOH KOL KRLD KSL KTRH KTSA KVI KVOR KWG KWKH WABC WACO WADC WALA WBNS WBRC WCAO WCCO WDAE WDBJ WDBO WDNC WESG WFBL WFEA WHAS WHK WIBX WJAS WJR WLBZ WMBD WMBR WKRC WMMN WOC WOKO WORC WPG WQAM WSBT WSJS WSPD WTOC

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

– Sait Lake Tabernacie Choir

CFRB KFAB KFBB KFBK KFH KFPY KFRC KGB KLZ KOH KOL KRLD KSL KTRH KTSA KVI KVOR KWG WABC WACO WADC WALA WRIG WBNS WBRC WCAO WCCO WDAE WDBJ WDBO WESG WFBL Available to Red Network

WREC WRVA WSFA WTOC WWL WFEA WGR WHAS WICC WJAS WJR WKRC WLBC WMBR WMMN WOC WOKO WORC WQAM WSBT WSJS WSPD WTOC

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

Church of the Air

KFBK KFH KFPY KFRC KGB KHJ KMOX KOH KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KVI KVOR KWG WABC WALA WBNS WRT WCAO WCCO WDAE WDBJ WDBO WDRC WESG WFBL WFBM WGR WHAS WHP WIBX WJAS
WJSV WKBN WKRC WLAC WLBZ
WMBR WNBF WOC WOKO WORC WPG WQAM WREC WSBT WSJS WSPD WTOC WWVA

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

B - Magic Key of RCA

CFCF CRCT KDKA KDYL KFI KFYR KGU KGW KHQ KOA KOIL KOMO KPO KPRC KSO KSTP KTBS KTHS KVOO KWK WAPI WAVE WBAL WBZ WBZA WCKY WDAY WEBC WENR WFAA WFIL WFLA WGAR WHAM WHIO WIBA WIOD WIRE WIS WJAX WJDX WJZ WKY WMAL WMC WMT WOAI WPTF WREN WRVA WSB WSM WSMB WSOC WSYR WTAR WTMJ WWNC WXYZ

E-2:30 p.m., C-1:30, M-12:30, P-11:30 C — Jean Hersholt, "Dr. Christian."

CFRB KFAB KFH KMBC KMOX KNOW KOMA KRLD KRNT KSCJ KTRH KTSA KWKH WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WCHS WDAE WDBO WDRC WEEI WFBL WFBM WGAR WGST WHAS WHEC WHIO WHP WIBW WJAS WJR WJSV WKBW WKRC WLAC WLBZ WMAS WMBR WOKO WORC WPRO WQAM WREC WRVA WWL

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

CFRB CKAC KFAB KFBB KFH KGKO KGVO KLRA KLZ KMBC KMOX KNOW KOL KRLD KSCJ KSL KTRH KTSA KWKH WABC WADC WALA WBNS WBT WCAO WCCO WCHS WDAE WDBJ WDBO WDRC WEEI WESG WFBL WFBM WHAS WHK WHP WIBW WIBX WJAS WJR WJSV WKBB WKBN WKBW WKRC WLAC WLBZ WMAS WMBG WMBR WMMN WMBD WNBF WOC WOKO WORC WPAR WPRO WQAM WSBT WSJS WTAQ WTOC WWL

Also on Canadian Network

R - The Radio News Reel

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

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

SUNDAY (Continued)

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

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

- Marion Talley

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

 Metropolitan Opera Auditions CFCF CRCT KARK KDKA KECA KEX KFEL KFI KFSD KFYR KGA KGIR KGNC KGO KGU KJR KLO KPRC KSO KTBS KVOO KOIL KPRC KSO KTBS KVOO KWK WABY WAPI WAVE WBAL WBAP WBZ WBZA WCKY WCSC WDAY WEAN WEBR WENR WFIL WFLA WHAM WHK WICC WIOD WIS WJAX WJDX WJZ WKY WMAL WMC WMT WOAI WOWO WPTF WREN WRTD WSB WSM WSMB WSOC WSPD WSUN WSYR WTAR WTCN WWNC WXYZ

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

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

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

R — Mickey Mouse Theater Station list unavailable

WSPD WWVA

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C - Joe Penner; Gene Austin

KFAB KFPY KGLO KLZ KMBC KMOX KNOW KNX KOIN KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KVI WABC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBO WDRC WEEI WFBL WFBM WGAR WGST WHAS WHEC WJAS WJR WJSV WKBW WKRC WOKO WORC WPRO WQAM WREC WRVA

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

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

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

R - A Tale of Today

WBEN WEAF WGY WJAR WMAQ WOW WRC WTAM

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

KFAB KFH KFPY KLZ KMOX KNOW KNX KOIN KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI KWKH WABC WCAO WCAU WCCO WDRC WEEI WFBL WFBM WGAR WGBI WGR WGST WHAS WHEC WILLO WJAS WJR WJSV WKRC WOKO WPRO WREC WRVA WTOC WWL

R - lack Renny: Mary Livingstone

KSD KYA KYW WBEN WCAE WCSH WDAF WEAF WFBR WGY WHO WJAR WLW WMAQ WNAC wwi

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

C - Phil Baker; Oscar Bradley

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

B --- Ozzie Nelson; Harriet Hilllard KARK KDKA KECA KFEL KEX KFSD KFYR KGA KGO KJR KLO KOIL KPRC KSO KSTP KTAR KTBS KTHS KVOO KWK WABY WAPI WAVE WBAL WBAP WBZ WBZA WCKY WCOL WDAY WEAN WEBC WEBR WFIL WFLA WHAM

WHK WIBA WICC WIOD WIS WJAX WJDX WJZ WKY WLEU WLS WMAL WMC WMT WOAI WPTF WREN WRTD WSB WSM WSMB WSOC WSUN WSYR WTAR WTMJ WWMC WXYZ

E-8:00 p.m., C-7:00, M-6:00, P-5:00 R - Don Ameche: Edgar Bergen

CFCF CRCT KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD KSTP KTAR KTBS KVOO KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WOW WPTF WRC WNAC WOAT CFRB CKAC KDAL KFAB KFH WRVA WSB WSM WSMB WSOC

WSUN WTAG WTAM WTAR WTIC WIMI WWI WWNC

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

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

- Tyrone Power: Drama

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

R — Manhattan Merry-Go-Round

CFCF KDYL KFI KFYR KGW KHQ KOA KOMO KPO KPRC KSD WHEN WCAE WCKY WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R — Album of Familiar Music

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

B - Walter Winchell

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

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

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

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

KFAB KFPY KLRA KLZ KMBC KMOX KNOW KNX KOIN KOL

SUNDAY (Continued)

KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI WABC WBBM WBNS WBRC WBT WCAU WCCO WDAE WDBO WDRC WEEI WFBL WFBM WGAR WGST WHAS WHEC WJAS WJR WJSV WKBW WKRC WMBR WNOX WOKO WORC WPRO WQAM WWL

R — Rising Musical Stars

KDYL KFI KGBX KGW KHQ KOA KPO KPRC KSD KSTP KTAR KTBS KTHS KYW WAVE WBAP WBEN WCAE WCSH WDAF WEAF WFIR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX

WKY WMAQ WMC WNAC WOAI WOOD WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-11:00 p.m., C-10:00, M-9:00, P-8:00 B — Irene Rich, Drama

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

E-11:15 p.m., C-10:15, M-9:15, P-8:15 B — Walter Winchell

KDYL KFI KFSD KGHL KGIR

KGW KHQ KOA KOMO KPO KPRC KTAR KTBS KTHS WAPI WAVE WBAP WJDX WKY WMC WOAI WSB WSM WSMB

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

R — Jack Benny-Mary Livingstone

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

B — Tyrone Power; Drama

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

CLASSIFIED INDEX TO CHAIN PROGRAMS

Time in Eastern Standard

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

COMEDY

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

CONCERTS

Frank Black, 2:00 p.m. Sun., Blue Ford Sunday Evening Hour, 9:00 p.m. Sun., CBS Andre Kostelanetz, 9:00 p.m. Wed., CBS Met. Opera Auditions, 5:00 p.m. Sun., Blue NBC Symphony Orchestra, 10:00 p.m. Sat., Red and Blue

N. Y. Philharmonic, 3:00 p.m. Sun., CBS Philadelphia Symphony, 9:00 p.m. Sun., Blue

DANCE BANDS

Robert Armbruster, 8:00 p.m. Sun., Red Oscar Bradley, 7:30 p.m. Sun., CBS Tommy Dorsey, 10:00 p.m. Fri., Blue Eddle Duchin, 10 p.m. Tues., MBS Ted Flo Rito, 8:30 p.m. Sat., Red Al Goodman, 10:00 p.m. Sat., CBS Benny Goodman, 10:00 p.m. Tues., CBS Jimmy Grier, 6:00 and 11:00 p.m. Sun., CBS Gustav Haenschen, 9:30 p.m. Sun., Red; 10:00 p.m. Fri., CBS Phil Harris, 7 and 11:30 p.m., Sun., Red Horace Heldt, 9:00 p.m. Tues. Blue Carl Hoff, 9 and 12 p.m. Tues, CBS Wayne King, 8:30 p.m. Tues., Wed., Red; 10 p.m. Mon., CBS

Benny Kreuger, 8:30 p.m. Mon., CBS Guy Lombardo, 5:30 p.m. Sun., CBS Abe Lyman, 9:00 p.m. Fri., Red Frankie Masters, 8:30 p.m. Tues., Blue Jack Miller, 8 and 11:15 p.m. Thurs., CBS Russ Morgan, 8:30 and 11:30 p.m. Sat., CBS; 8:00 p.m. Tues., Red

Ozzie Nelson, 7:30 p.m. Sun., Blue Ray Noble, 8 and 10:30 p.m. Mon., Red Raymond Paige, 9:30 p.m. Tues., Red: 9:00 p.m. Fri., CBS

Jacques Renard, 8:30 and 11:30 p.m. Wed., CBS B. A. Rolfe, 8:00 and 12:00 p.m. Sat., Red Harry Salter, 7:15 and 10:30 p.m. Wed., CBS Seymour Simons, 6:30 p.m. Sun., CBS Phill Spitalny, 9:30 p.m. Mon., Red Johnny Trotter, 10:00 p.m. Thurs., Red Johnny Trotter, 10:00 p.m. Thurs., Red Tommy Tucker, 6:00 p.m. Sun., MBS Rudy Vallee, 8:00 p.m. Thurs., Red Peter Van Steeden, 9:00 p.m. Mon., Red Don Voorhees, 8:00 p.m. Wed., CBS Mark Warnow, 7:30 and 10:30 p.m. Thurs., CBS Ted Weens, 9:00 p.m. Mon., Red Paul Whiteman, 8:30 and 11:30 Fri., CBS Meredith Willson, 9:00 p.m. Thurs., Red Victor Young, 8:30 and 11:30 p.m. Tucs., Red

DIALOG

Amos 'n' Andy, 7:00 and 11:00 p.m. Mon. through Fri., Red Easy Aces, 7:00 p.m. Tues., Wed., Thurs., Blue

Easy Aces, 7:00 p.m. Tues., Wed., Thurs., Blue Fibber McGee and Molly, 9:00 p.m. Mon., Red Lum and Abner, 7:30 and 11:15 p.m. Mon., Wed., Fri., Blue

Pick and Pat, 8:30 and 11:30 p.m. Mon., CBS Stroud Twins, 8:00 p.m. Sun., Red

DRAMA

Campana's First Nighter, 10:00 p.in. Fri., Red Campana's Grand Hotel, 8:30 p.m. Mon., Blue Death Valley Days, 8:30 p.m. Fri., Blue Gang Busters, 10:00 p.m. Wed., CBS Eddie Guest, 8:30 p.m. Tues., Blue
Jean Hersholt, 2:30 p.m. Sun., CBS
Hollywood Hotel, 9:00 p.m. Fri., CBS
Hollywood Playhouse, 9:00 and 11:30 p.m. Sun., Blue
Lone Ranger, 7:30 and 10:30 p.m. Mon., Wed., Fri.,
MBS
Lux Radio Theater, 9:00 p.m. Mon., CBS
Helen Menken, 7:30 p.m. Tues., CBS
One Man's Family, 8:00 p.m. Wed., Red
Tyrone Power, 9:00 and 11:30 p.m. Sun., Blue
Irene Rich, 9:45 and 11:00 p.m. Sun., Blue
Edward G. Robinson, 8:00 p.m. Tues., CBS
Silver Theater, 5:00 p.m. Sun., CBS
A Tale of Today, 6:30 p.m. Sun., Red
Claire Trevor, 8:00 p.m. Tues., CBS

POPULAR PROGRAMS

American Album of Familiar Music, 9:30 p.m. Sun., Believe It Or Not, 8:00 and 12:00 p.m. Sat., Red Major Bowes' Amateurs, 9:00 p.m. Thurs., CBS Major Bowes' Family, 11:30 a.m. Sun., CBS Brave New World, 10:30 p.m. Mon., CBS Carborundum Band, 7:30 p.m. Sat., CBS Cavalcade of America, 8:00 p.m. Wed., CBS Chase and Sanborn Hour, 8:00 p.m. Sun., Red Cities Service Concert, 8:00 p.m. Fri., Red Contented Program, 10:00 p.m. Mon., Red Death Valley Days, 8:30 p.m. Fri., Blue Double Everything, 6:30 p.m. Sun., CBS Gang Busters, 10:00 p.m. Wed., CBS Gang Busters, 10300 p.m. wed., CBS Jack Halev's Variety Show, 8:30 p.m. Sat., Red Hammerstein Music Hall, 8:00 p.m. Fri., CBS Hobby Lobby, 7:15 and 10:30 p.m. Wed., CBS Hollywood Mardi Gras, 9:30 p.m. Tues., Red Hour of Charm, 9:30 p.m. Mon., Red It Can Be Done, 8:30 p.m. Tues., Blue Jello Program, 7:00 and 11:30 p.m. Sun., Red Johnny Presents-, 8:00 p.m. Tues., Red; 8:30 and 11:30 p.m. Sat., CBS Kraft Music Hall, 10:00 p.m. Thurs., Red Warden Lawes, 10:00 p.m. Mon., Blue Log Cabin Review, 8:30 p.m. Sat., Red Magic Key of RCA, 2:00 p.m. Sun., Blue Manhattan Merry-Go-Round, 9:00 p.m., Sun., Red March of Time, 8:30 p.m. Thurs., Blue MGM Program, 9:00 p.m. Thurs., Red Mickey Mouse Theater, 5:30 p.m. Sun., Red National Barn Dance, 9:00 and 11:00 p.m. Sat., Blue Northern Messenger, 11:00 p.m. Sat., CBC Jack Oakie's College, 9:30 p.m. Tues., CBS Poetic Melodies, 7:00 and 11:00 p.m. Mon. through Fri., CBS Professor Quiz, 9:00 and 12:00 p.m. Sat., CBS Radio News Reel, 3:00 p.m. Sun., Red Salt Lake City Tabernacle, 12:30 p.m. Sun., CBS Saturday Night Serenade, 9:30 p.m. Sat., CBS Saturday Night Swing Club, 7:00 p.m. Sat., CBS Kate Smith Hour, 8:00 and 11:15 p.m. Thurs., CBS Songshop, 10:00 p.m. Fri., CBS Station E-Z-R-A, 7:15 p.m. Mon., Wed., Fri., Red Swing School, 10:00 p.m. Tues., CBS Texaco Town, 8:30 and 11:30 p.m. Wed., CBS Town Hall Tonight, 9:00 p.m. Wed., Red True Story Court, 9:30 p.m. Fri., Red Uncle Jim's Question Bee, 7:30 p.m. Sat., Blue Vick's Open House, 7:00 p.m. Sun., CBS Voice of Firestone, 8:30 p.m. Mon., Red Vox Pop. 9:00 p.m. Tues., Red Waltz Time, 9:00 p.m. Fri., Red Watch the Fun go By, 9:00 and 12:00 p.m. Tues., CBS We, The People, 7:30 and 10:30 p.m. Thurs., CBS Your Hit Parade, 10:00 p.m. Sat., CBS Your Hollywood Parade, 10:00 p.m. Wed., Red Zenith Foundation, 10:00 p.m. Sun., CBS

SINGERS

Stuart Allen, 10:00 p.m. Sat., CBS

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

Gene Austin 6:00 p.m. Sun., CBS

TALKS

Boake Carter, 7:45 and 11:15 p.m. Mon., Wed., Fri., CBS

Jimmy Fidler, 10:30 p.m. Tues., Fri., Red

Gabriel Heatter, 7:30 and 10:30 p.m. Thurs., CBS

Gen. Hugh Johnson, 8:00 p.m. Mon., Thurs., Blue;
10:00 p.m. Tues., Wed., Blue

John B. Kennedy, 8:00 p.m. Sun., Blue

Geo. McCall, 7:15 p.m. Tues., Thurs., CBS

Robert L. Ripley, 8:00 and 12:00 p.m. Sat., Red

Sidney Skolsky, 8:30 p.m. Wed., Blue

Deems Taylor, 9:00 p.m. Wed., CBS; 8:30 and 11:30
p.m. Fri., CBS

Lowell Thomas, 6:45 p.m. Mon. through Fri., Blue

Dorothy Thompson, 10:45 p.m. Fri., Red

Walter Winchell, 9:30 and 11:15 p.m. Sun., Blue

"Snoppyquops," the current rage in Hollywood, is the invention of Feg Murray who appears on the Seein' Stars program on NBC every Sunday at 7:30 p.m., EST. "Snoppyquops" are fantastic fable animals including ants with alarm-clock ears, and elephants with vacuum-cleaner trunks.

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

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

1.715	to 2.000	Amateur Stations.	5.975	OAX4P	Huancayo, Peru. (.25).
2,500	XEXP	Monterrey, N. L. (.03).	5.980	HJ4ABD	Medellin, Colombia. 2000-2230.
3.500 1	to 4.000	Amateur Stations.	5.990	HJ2ABD	Bucaramanga, Colombia. (.67).
3.040	YDA	Tandjong Priok, Java, N.E.I. (10.).			1900-2300.
4.107	НСЈВ	Quito, Ecuador (1.). "Broadcasting Provincial." 0700-0815; 1130-1430; 1645-2215.	6.000	CXA2 OAX5C XEBT	Montevideo, Uruguay. (.5). Ica, Peru. (.1). Mexico City, D. F. (1.). 1800-2400.
4.273	RV15	Khabarovsk, USSR (Siberia). (20.). 0100-1000.	6.005	CFCX	Alderney, Channel Islands. Montreal, P. Q. (.075). 0700-2400.
4.600	HC2ET	Guayaquil, Ecuador. Wed., Sat., 2100-2230.		HP5K VE9DN	Colon, Panama. 1800-2300. Montreal, P. Q. (6.).
4.780	HJ1ABB	Barranquilla, Colombia (.3). Apartado 715.	6.010	XZ1GY CJCX	Rangoon, Burma. Sydney, N. S. (1.).
4.787	HJ2ABC	Cucuta, Colombia. (.25). "La Voz de Cucuta."		coco	Havana, Cuba. (2.5) Sun., 2000-2200. Weekdays 1030-1300; 1600-2000.
4.810	YDE2	Solo, Java, N.E.I. (.1).		OLR2A	Prague, Czechoslovakia. (35.), Mon., Wed., Fri., 1600-1630.
4.840	HJ3ABD	Bogota, Colombia. 1930-2400. Aptdo. 509.			Saigon, French Indo-China.
5.003	нст	Guayaquil, Ecuador. "Radio Tele-	6.012	HJ3ABH	Bogota, Colombia. (1.2). 1800-2300.
5.415	PMY	fonica." Bandoeng, Java, N.E.I. (.45). 0530- 1000.	6.015	HI3U	Santiago de los Cabalieros, D. R. (,025). Mon. 2000-2100. Daily 0730-0930; 1200-1430; 1700-1930.
5.500	ТІ5НН	San Ramon, Costa Rica. (.2). 2000- 2330.	6.020	DIC	Berlin, Germany. (50.). 1040-1630; 1650-2245
5.710	TGS	Guatemala City, Guat. (.2). Wed.,		XEUW	Veracruz, Ver. (.02). 1800-2400.
5.735	HC1PM	Thurs., Sat., 1800-2100. Quito, Ecuador. Sat., 2100-2300.	6.025	HJ2ABJ	Santa Marta, Colombia. (.05). 1800-2230.
-5.763	YNOP	Managua, Nicaragua. 2000-2130.	6.030	HP5B	Panama City, Panama. (.1). 1700-
5.765	YV2RA	San Cristobal, Venez. 1800-2330.		OLR2B	2200. Prague, Czecho. (35.).
5.800	YV5RC	Caracas, Venez. (1.). Sun., 0830-		VE9BJ	St. John, N. B. (.05).
		2130. Weekdays 0700-2200.		XEBQ	Mazatlan, Sin. (.05).
5.813	TIGPH2	San Jose, Costa Rica.	6.033	HJ4ABP	Medeilin, Colombia. (2.5). 1800-2300.
5.825	TIGPH	(also TIXGP3), San Jose, Costa Rica. 1100-1300; 1800-2200.	6.038	HJ1ABC	Barranquilla, Colombia. (.15). 1100-2300.
5.850	YV1RB	Maracaibo, Venex. Sun., 1145-1245. Weekdays 0845-0945; 1115-1215; 1645-2145.	6.040	PRA8	Pernambuco, Brazil. (3.), 1500-2000.
5.855	ніл	San Pedro de Macoris, D. R. (.04). 1200-1400; 1830-2100.		W1XAL	Boston, Mass. (20.). Daily exc. Sat. and Sun., 1900-2100.
5.875	HRN	Tegucigalpa, Honduras, (.4). Sun.,		W4XB	Miami, Fla. (5.).
		2030-2130. Weekdays 2030-2200.		YDA	Tandjong Priok, Java, N.E.I. (10.).
5.885	HI9B	Santiago, D. R. 1800-2300.	6.045	XETW	Tampico, Tams.
5.895	YV3RA	Barquisimeto, Venez. 1800-2200.	6.050	GSA	Daventry, Gt. Britain. (20.).
5.905	TILS	San Jose, Costa Rica. 1800-2300.		HJ6ABA	Pereira, Colombia (6054 assigned). 1800-2200.
5.913	YV4RH	Vaincia, Venez. 1700-0100.	6.060	VQ71 0	Nairobi, Kenya. 1100-2430.
5.925	HH2S	Port-au-Prince, Haiti. 1900-2200.			Philadelphia, Pa. (10.). 2000 -2300.
5.935	YV1RL	Maracalbo, Venez. (.3). 1700-2230.		W8XAL	Cincinnati, Ohio. (10.). Dally 2300- 0200. Sun. 0800-2000. Weekdays 0600-2000.
5.945	TG2X	Guatemala City, Guat. (.2). Sun., 1300-1400; Mon., Thurs., Sat., 1600-	6.062	SBG	Motala, Sweden. (.5). 1330-1700.
		1800; 2200-2400.	6.064	VP3MR	,
5.947	PJC1	Willemstad, Curacao, N.W.I. (.15) 1835-2035.	J. VU-	-1 3miR	(assigned 6010). 0745-1015; 1645-2045.

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6.065	HP5F	Colon, Panama.	6.296	OAX4G	Lima, Peru. (.4). 1900-2130.
6.070	CFRX	Toronto, Ont. (1.), 1000-2300.	6.300	YV4RD	Maracay, Venez. 1700-2300.
	HJ3ABF	Bogota, Colombia. (.05). 1900-2230.	6.310	HIZ	Trujillo, D. R. (.1). Villarrica, Paraguay (1.). 1100-1700.
	YV1RD	Maracalbo, Venez. 1900-2400.	6.312 6.330	ZP14 COCW	Havana, Cuba. 0700-2400.
6.075	XEBW	Guadalajara, Jal. (.045). Guadalajara, Jal.	6.335	OAX1A	Chiclayo, Peru. (.2). Dally 2000-
6.077	OAX47	Lima, Peru. (10.) (6082 assigned).	******	• • • • • • • • • • • • • • • • • • • •	2300; Sat. 2000-2400.
0.077	UAAAL	1900-2330.	6.340	HI1X	Trujillo, D. R. (.5). Tues., Frl.,
6.080	DJM	Berlin, Germany. (50.).			2000-2200.
	VE9CS	Berlin, Germany. (50.). Vancouver, B. C. (.01). 1400-2400.	6.357	HRP1	San Pedro Sula, Honduras.
	W9XAA	Chicago, III. (20.). Daily 1900-2200.	6.365	YV1RH	Maracaibo, Venez. 1900-2400.
		Weekdays 0600-0730.	6.380 6.383	YV5RF VP2LO	Caracas, Venezuela.
6.085		Cali, Colombia. 1900-2200.	6.400	YV5RH	St. Kitts, Brt. West Indles. (.5). Caracas, Venezuela.
6.090	CRCX	Toronto, Ont. (1.). 0745-1700. Ibague, Colombia. 2000-2200.	6.410	TIPG	San Jose, Costa Rica. (1.). 1800-
6.095	ZGE	Kuala Lampur, F.M.S.			2230.
6.097		Johannesburg, U. of S. Africa.	6.416	YV6RC	Bollvar, Venez.
*		Mon. to Fri. 1145-1600; Sat. 1145-	6.420	HLIS	Santiago, D. R. (.02). 1800-2300.
		1645.	6.425	OAX4K	Lima, Peru. (.2).
6.100		Bound Brook, N. J. (35.). 2100-0100.		W3XL	Bound Brook, N. J. (100.). Irrreg.
	W9XF	Chicago, fil. (10.). 1700-2005.			A Effie M. Morrissey (.1).
		Belgrade, Jugoslavia. (1.). 1200- 1700.	6.450	HI4V	San Francisco de Macoris, D. R.
6.108	HIARR	Manizales, Collombia. 1800-2400.		HISA	(.025). Trujillo, D. R.
6.110	GSL	London, Gt. Britain. (20.). 1800-	6.479 6.485	HIIL	Santiago de los Caballeros, D. R.
0.220		2030; 2115-2300.	0,403	*****	"Emisora Nacional." 0630-0800;
	VUC	Calcutta, India.			1730-1900; 2000-2100.
6.115	OLR2C	Prague, Czecho. (35.).	6.479	HI8A	Trujillo, D. R.
6.118	XEUZ	Mexico Gity, D. F. (5.). 2300-0300.	6.500	HIL	Trujillo, D. R. (.05).
6.120	W2XE	New York, N. Y. (10.). Veracruz, Ver. (.012).		YV1RM	Maracalbo, Venez.
	XEFT YDA5	Randoeng, Java, N.E.I. (1.5).	6.508	Radio G	Ruardia Civil, Tetuan, Sp. Morocco.
6.122		Bandoeng, Java, N.E.I. (1.5). Bogota, Colombia. 1730-2230.	6.520	YV4RB	1900-2000. Valencia, Venezuela. 1700-2200.
0.11.2		Arequipa, Peru. (.1).	6.534	EDR4	Palma, Majorca, Balearic Isl.
6.125	CXA4	Montevideo, Uruguay. (1.). 1600-	6.540	YN1GG	Managua, Nicaragua.
		2145.	6.545	YV6RB	Bolivar, Venez. 2100-2300.
	HP5H	Panama City, Panama	6.550	TIRCC	San Jose, Costa Rica. (.5). Tues.,
	X EPW	Mexico City, D. F. 2100-2400.			Thurs., Sat. 1700-1800.
6.128	OAX7A	Cuzco, Peru. (.1).	6.555	HI4D	Trujillo, D. R. (.025). 1700-2000.
6.130	COCD	Havana, Cuba. (.35). 1700-0100	6.575	HC1VT	Ambato, Ecuador.
	VE9HX	Hallfax, N. S. (.5). 1700-2300.	6.590	COCU	Havana, Cuba. Sun. 1900-2400;
6.132	VP3BG	Georgetown, British Guiana.			Weekdays 1900-0100.
6.137	CR7AA	Lourenco Marques, Port. East	6.622	Prado	Rio Bamba, Ecuador. Thur. 2100-
		Africa. Sun. 9600-0900. Weekdays			2300.
		9500-0700.	6.630	HIT	Trujillo, D. R. (.2). Weekdays,
6.138 6.140	W8XK	Medellin, Colombia. Pittsburgh, Pa. (40.). 2200-sign off.			1800-2100.
6.145		Medellin, Colombia (1.). "La Voz	6.635	HC2RL	Guayaquil, Ecuador. Sun. 1745-
0.2.0		de Antioquia." 1800-2230.			1945. Tues. 2115-2315.
6.150	CJRO	Winnipeg, Man. (2.). 1800-2400.	6.690	TIEP	San Jose, Costa Rica. 1600-2300.
	CSL	Lisbon, Portugal. 0700-0830; 1400-	6.700	TIVL	San Jose, Costa Rica.
		1900.	6.720	PMH	Bandoeng, Java, N.E.I. (1.5).
	VPB	Colombo, Ceylon. (.3). Sun. 0700-			
6.153	HISN	1130; Weekdays 0630-1230. Ciudad Moca, D. R. (.1). 1900-2000.	6.730	H13C	La Romana, D. R. 1745-2000.
6.156	YV5RD	Caracas, Venez. 1030-1330; 1530-	6.780	HIH	San Pedro de Macoris, D. R. (.15).
0.130	ITIND	2200.			1900-2000.
6.174	XEXA	Mexico City, D. F. 1700-2100.	6.800	HITP	Trujillo, D. R. 1930-2100.
		- '		PZH	Paramaribo, Surinam.
6.180	TG2	Guatemala City, Guatemala.	6.850	TIOW	Puerto Limon, Costa Rica. (.4).
6.190	HI1A	Santiago de los Caballeros, D. R.			Sun., 1600-1700. Daily 1200-1300.
_		(.05). Weekdays 2000-2200.	6.990	VK8XI	Port Moresby, Papua. (Doubtful).
6.198	HISQ	Trujillo, D. R. 1700-1900.	7.000	to 7.300	Amateur stations.
6.200	COKG	Santiago, Cuba. (.05). Daily exc.	7.100	FO8AA	Papeete, Tahiti. (.2). Tues., Fri
	V=5	Sat. 0900-2300.			2300-2400.
	XEXS	Mexico City, D. F.			Guadalajara, Jal. "Voice of the
6.205	YV1RI	Coro, Venez. (.15). 1700-2200.			Revolutionary Party."
6.225	YV1RG	Valera, Venez. 1730-1930.	7.200	YNAM	Managua, Nicaragua. 2000-2400.
6.235	HRD	La Celba, Honduras. (.25). 2000-	7,380	XECR	Mexico City, D. F. (20.). Sun.,
		2300.			1800-2000.
6.243	HIN	Trujillo, D. R. (.75).			Radio Liberte. 1900-2000.
6.250	YV5RJ	Caracas, Venez.	7.540	RKI	Moscow, U. S. S.R. (Assigned 7526).
			7.797	нвр	Geneva, Switz. (20.). Sat., 1730-
6.270	YV5RP	Caracas, Venez. (1.2).			1830.
6.280	HIG	Trujillo, D. R. (.05).	7.894	YSD	San Salvador, E. S. 2100-2230.
6.282	СОНВ	Sancti-Spiritus, Cuba. (.15). 2100-	8.400		Guayaquil, Ecuador.
		2300.	0.740	.102011	~~~,~~~~~~~

See Norm						
MCIEC Quite, Ecuador. 1309-0190. 1508-0190. 150	8.580	YNPR	Managua, Nicaragua. (.5). "Radio	9.562	OAX4T	Lima, Peru. (10.). 1130-1330.
8.655 COLM Camaguey, Cuba. (2.4). 1890-9100. 18.830 HCJB Camaguey, Cuba. (2.4). 1890-9100. 18.830 HCJB Camaguey, Cuba. (2.4). 1890-9100. 1819-1819. 18.830 HCJB Camaguey, Cuba. (2.4). 1819-480. 18.830 HCJB Camaguey, Cuba. (2.4). 1819-480. 18.830-1800. 18.8300-1800. 18.830-1800. 18.830-1800. 18.830-1800. 18.830-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300-1800. 18.8300. 18.8300. 18.8300. 18.8300. 18.8300. 18.8300. 18.8300. 18.8300. 18.8300. 18.8300. 18		HOIFO	Pilot". 1330-1430; 2000-2200.	9.565		Bombay, India. (4.5).
8.655 COJK Camaguey, Cuba. (2.4), 1800-0100. Month of the property of the prop					YV3RB	Barquisimeto. Venez.
MCJB MCJB Quito, Ecuador (L.), "La Voz de los Anders," 0700-8155; 1130-1430; 1204-1215, MAPT Mappers, M			Campagner Cube (3.4) 1900 0100	9.570	KZRM	Manila, P. I. Mon, through Fri.
105			Quito Equador (1) "La Voz de			
145.2715. 1471 Maria Cuba. 1472 Mary Maria Cuba. 1473 Maria Cuba. 1474 Maria Cuba. 1474 Maria Cuba. 1475 Maria Cuba. 1475 Maria Cuba. 1475 Maria Cuba. 1476 Maria Cuba. 1476 Maria Cuba. 1476 Maria Cuba. 1477 Maria Cuba. 1477 Maria Cuba. 1477 Maria Cuba. 1477 Maria Cuba. 1478 Maria Maria. 1478 Maria.	0.030		los Andes." 0700-0815: 1130-1430:			1000; 1630-1800. Sun. 0500-1000.
3.030 CORZ Havana, Cuba. Budapest, Hungary. (20.) Sun. Wed., 1900-2000. Sat., 1800-1900. Sat.,					W1XK	
3.25	9.030	COBZ	Havana, Cuba.			
COCK	9.125	HAT4	Budapest, Hungary. (20.). Sun.,			=
COBX			Wed., 1900-2000. Sat., 1800-1900.	9.580	GSC	Daventry, Gt. Britain. (20.). 1800-
9.345 ABL Caneva Switz (20), Fri. 1430- 1445; 1930-1345; 2000-2015. Hallern Ablahama Cuba. Aption 132. Hallern Ablahama Cuba. Aption Colonbia. Co			Havana, Cuba. P. O. Box 3488.		WW 2L D	
9.345 HBL					VK3LK	
Section Sect	3.340	0////		0.500	001	
9.350 COBC MSPP Brana, Cuba, Aptelo, 132. Brana, Cuba, Aptelo, 132. Brana, Cuba, Aptelo, 132. Brana, Cuba, Class, Communication, Comm	9.345	HBL	Geneva, Switz, (20.), Fri. 1430-	3.550	PCJ	1400_1500: 1900_2115: Mam 2100_
Name			1445; 1930-1945; 2000-2015.			2230: Tues 1400-1530: 1900-2130:
Name	9.350					Wed., 1900-2130; Thurs., 1900-2130.
PICE PICE PICE PICE Randons, Java, N.E.I. (80.). 100-100.		HS8PJ	Bangkok, Siam. Mon., Thurs.,		VK2ME	Sydney, Australia. (20.), Sun.,
PLV Bandoeng, Java, N.E.I. (80.), 1000-1100.	9 /15	PIC2				
1100	3.413				VK6ME	
3.445 COCH					Waye	
Name			Havana, Cuba. (.15). 0700-0100.			
1.50	9.445	HC2RA	Guayaquil, Ecuador. Sun. 1600-			Thurs., 2200-2300.
9.460			2200. Daily 2100-2200.		W8XAL	Cincinnati, Ohio. (10.). (Under
9.450 PJC1 Willemstad, Curacao, N.W.I. (.15), Sun. 133-1235,		X COX	Nanking China (5)			construction).
Sun. 1035-1235. Sun. 1035-				9.595	HBL	Geneva, Switzerland. (18.). Sat.
Secondary Seco						
Name	9.480	EAR	Madrid, Spain. (20.). Mon. at 2000;			Moscow, USSR. 1900-2115.
Second				9.600	CB960	Santiago, Chile. 1800-1930.
HJ1ABE Cartagena Colombia 1700-1800; 2000-2230. XEWW Mexico City, D. F. (10.) 0800-2400. 9.606				9.605	HP5J	Panama City, Panama. (1.). 1830-
2000-2230.	9.500		Cartagona Colombia 1700-1800			2300.
Name		**********		9.606		
1745. 1745. 2200. 3.504. 3.50		XEWW				0045. Add: P. O. Box 4559.
1745. 200.	9.501	PRF5	Rio de Janeiro, Brazil, (60.), 1645-	9.618	HJ1ABP	
Signature Section Se					-	2200.
See	9.504	OLR3B	Prague, Czecho. (35.).	9.630	HJ7ABD	Bucaramanga, Colombia. "Radio
1200 1210-1600; 1615-2030; 2115- 2300. 1230-2100.	9.510	GSB	Daventry, Gt. Britain. (20.). 0315-			
HJU Buenaventura, Colombia, Mon., Wed., Frl. 2000-2300. H58PJ Bangkok, Siam. Mon., Thurs., 0800-1000. Wish Melbourne, Australia. (5.). Week. days 0400-8700. 9.650 CS2WA Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. 1400; 1900-2000. 1500-2200. 1			0530; 1220-1600; 1615-2030; 2115-	0.635		
Wed., Frl. 2000-2300. Bangkok, Slam. Mon., Thurs., 0800-1000. Wisher Melbourne, Australia. (5.). Weekdays 0400-9700. 9.650 CS2WA Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. 1400-1900-2000. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Sat., 1445-1645. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1460-1400. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1600-1900. Lisbon, Portugal. (2.). Tues Thurs., Sat., 1460-1400. Sat., 1445-1645. Lisbon, Portugal						
HS8PJ Bangkok, Siam, Mon., Thurs., 8000-1000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1900-2000. 1400; 1800 1400; 1900-2000. 1400; 1800-2000. 1400;		טנח				
No.		HS8PJ		9.645	HH3W	
Adays 0400-7700. Adays 0400-2700. Adays 0400-2200. Adays 0400-2200. Adays 0400-2200. Adays 0400-2000. Adays 0400-2000. Adays 0400-0000. Adays 0400-			0800-1000.			
9.520		VK3ME	Melbourne, Australia. (5.). Week-	9.650	CS2WA	
1800-2200, 1800-2200, 1800-2200, 1840- 1840, 18440, 1846, 1846, 1840, 1846			-			
OZF Copenhagen, Denmark. (6.). 1409-1840. San Salvador, E. S. 1840. San Salvador, E. S. 1840. San Salvador, E. S. San Salvador, E. S. Radio Liberte. 1900-2000. 9.670 TiANRH Heredia, Costa Rica. 2100-2200: 2330-2400. 2330-2400. 2330-2400. San Salvador, E. S. San Salvador, E. San Salvador, E. S. San Salvador, E. S. San Salvador, E. San Salvador, E	9.520	HJ4ABH		9.660	CREAA	Lobito, Angola, Port. West Africa.
1840		07E				
YSH		UZF			LKX	1030-2430
Second Color Seco		YSH		0.070	THURDH	
Section Sect			Radio Liberte. 1900-2000.	3.670	114111111	
9.525 ZBW3 Hong Kong. (2.5). Sat. 2100-2400. Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Possible value of the control of the	9.523		Pretoria, U. of S. Africa. (5.). Add:	9.025	TGWA	
Sun. 0000-0100; 0300-0930. Other days 0400-1000; 2330-0100. Other days 0400-1000; 2330-0100. Sat. 2200-2400. Sat. 2200-2400. Other days 1600-2400. Sat. 1200-2300. Sat. 2200-2400. Sat. 2200. Sat. 2200-2400. Sat. 2200-2400	9 535	70 W2		J.00J	10117	"Radio Nacional." Sun. 2000-2200.
August A	7.323	70 M2	Sun 0000-0100: 0300-0930 Other			
9.536			days 0400-1000: 2330-0100.			Sat. 2200-2400.
W2XAF Schenectady, N. Y. (40.). Sat. 1200-2400. 2400. Other days 1600-2400. General Elec. Co. (Under construction). 9.790 COCM Martinique." (.2). Box 136. 1845-1945. 1945.	9.530	LKJ1	Jeloy, Norway. (1.). 0500-0800.	9.700	COCQ	Havana, Cuba. (assigned 9750).
Wexage		W2XAF	Schenectady, N. Y. (40.). Sat. 1200-			0700-0100.
Secondary Seco		WAY BE				Fort de France, Martinique. "Radio
9.535 JZ1 Nazaki, Japan. (50.). 1500-1600; 9.790 COCM Havana, Cuba. (assigned 9833). 1630-1730. 9.860 EAQ Madrid, Spain. (20.). 9.860 EAQ Madrid, Spain. (20.). 1650-2245. 9.925 JDY Darien, Manchukue. 0715-0800. 1650-2245. 9.940 CSW Lisbon, Portugal. (5.). 1300-2000. 1650-2245. 10.000 COBC Havana, Cuba. 1640. Weekdays 0925-1010; Mon., Wed., Fri., 2000-2235. XEFT Veracruz, Ver. (402). 1930-2400. 10.070 COBC Macau, Portuguese China. Communistic Station. 9.560 DJA Berlin, Germany. (50.). 0005-1100; 10.020 PSH Rio de Janeiro, Brazil. (12.). 1900-2100. 1650-2245. 10.000 Eandoeng, Java, N.E.I. (1.5). 0530-		WOABE				
9.536 VPD2 Suva, Fiji. (2.). 0530-0700. 9.860 EAQ Madrid, Spaln. (20.). 9.540 DJN Berlin, Germany. (50.). 0005-1000; 9.940 CSW Lisbon, Portugal. (5.). 1300-2000. 9.550 OLR3A Prague, Czecho. (35.). Dalily 1255-1600; Meckdays 0925-1010; Mon. Wed, Fri., 2000-2235. XEFT Veracruz, Ver. (02). 1930-2400. 10.070 Communistic Station. 9.560 DJA Berlin, Germany. (50.). 0005-1100; 1650-2245. 10.020 PMN Rio de Janeiro, Brazil. (12.). 1900-2100. 1650-2245. 10.020 PMN Bandoeng, Java, N.E.I. (1.5). 0530-	9.535	JZ1				-
9.540 DJN Berlin, Germany. (50.). 0005-1000; 9.940 CSW Llsbon, Portugal. (5.). 1300-2000. 9.550 OLR3A Prague, Czecho. (35.). Dalily 1255-1640. Weekdays 0925-1010; Mon. Wed., Fri., 2000-2235. Tol., 2000-2235. To			1630-1730.			
9.550 OLR3A Prague, Czecho. (35.). Dalily 1255- 1640. Weekdays 0925-1010; Mon., Week, Fri., 2000-2235. XEFT Veracruz, Ver. (.02). 1930-2400. 9.560 DJA Berlin, Germany. (50.). 0005-1100; 1650-2245. HJ1ABB Barranquilla, Colombia. (.3). 9.940 CSW Lisbon, Portugal. (5,). 1300-2000. COBC Havana, Cuba. Macau, Portuguese China. Communistic Station. Rio de Janeiro, Brazil. (12.). 1900-2100.	9.536	VPD2	Suva, Fiji. (2.). 0530-0700.		-	
9.550 OLR3A Prague, Czecho. (35.). Dalily 1255- 1640. Weekdays 0925-1010; Mon., Wedt, Frit, 2000-2235. XEFT Veracruz, Ver. (02). 1930-2400. 9.560 DJA Berlin, Germany. (50.). 0005-1100; HJ1ABB Barranquilla, Colombia. (.3). 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2246. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2245. 1650-2240. 1650-2245	9.540	DJN	Berlin, Germany. (50.). 0005-1000;			
1640. Weekdays 0925-1010; Mon., 10.065 CQN Macau, Portuguese China.			1650-2245.	9.940	CSW	Lisbon, Portugal. (5.). 1300-2000.
1640. Weekdays 0925-1010; Mon., 10.065 CQN Macau, Portuguese China.	9.550	OLR3A	Prague, Czecho. (35.). Daily 1255-	10.000	COBC	Havana, Cuba.
Variable			1640. Weekdays 0925-1010; Mon.,	10.065		-
9.560 DJA Berlin, Germany. (50.). 0005-1100; 10.220 PSH Rio de Janeiro, Braxil. (12.). 1900- 1650-2245. HJ1ABB Barranquilla, Colombia. (.3). 18.260 PMN Bandoeng, Java, N.E.I. (1.5). 0530-		VEET	Wed., Fri., 2000-2235.			
1650-2245. 2100. HJ1ABB Barranquilla, Colombia. (.3). 18.260 PMN Bandoeng, Java, N.E.I. (1.5). 0530-						
HJ1ABB Barranquilla, Colombia. (.3). 18.260 PMN Bandoeng, Java, N.E.I. (1.5). 0530-	9.560	DJA		±0.22U		
YDB Sourabaya I, Java, N.E.I. (1.). 1100.		HJ1ABR		18,260		
		YDB	Sourabaya I, Java, N.E.I. (1.).			

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

10.330	ORK	Brussels, Belglum. (11.). 1330-1500.	11.855	DJP	Berlin, Germany. (50.).
10.370	EAJ43	Santa Cruz de Tenerife, Canary Isl. 2000-2100.	11.860	GSE	Daventry, Gt. Britain. (20.).
	•••••	"Radio Nacional," Salamanca,		YDB	Soerabaja I, Java, N.E.I. (1.).
		Spain. 1700-1825; 2000-2045.	11.870	W8XK	Pittsburgh, Pa. (40.). 1900-2200.
10.430		Pirate station announcing "Radio Milan."	11.875 11.885	OLR4C TPA3	Prague, Czecho. (35.). Pontoise, France. 0200-0500; 1215-
10.530	JIB	Taihoku, Taiwan. (6.). 0900-1030.	11 005	MOST	1800.
10.660	ZIK2 JVN	Belize, British Honduras. Tues., Thurs., Sat., 1930-1945.	11.895 11.900	HP5I CD1190	Aguadulce, Panama. 1930-2130. Valdivia, Chile. 1000-1300; 1900- 2200.
10.670	CEC	Nazaki, Japan. (50.). Santiago, Chile. (4.).		OLR4D	Prague, Czecho. (35.).
10.740	JVM	Nazaki, Japan. (50.).		XEWI	Mexico City, D. F. (.25). 1930-2400.
10.823	"Radio	Nacional," Salamanca, Spain. 1630-	11.955	IUC	Addis Ababa, Ethiopia.
11.000	PLP	1800. Bandoeng, Java, N.E.I. (1.5).	11.960	HI2X	Trujillo, D. R. (.5). Tues., Frl., 2000-2200. Sun. 0740-1040.
11.040	CSW	Lisbon, Portugal. (5.). 1800-2009.	12.000	RNE	Moscow, USSR. (20.). Sun. 1000-
11.402	нво	Geneva, Switz., Fri. 1400-1415; Sat. 1845-2030.	40.400		1100. Sun., Wed., 0600-0700. Sun., Mon., Wed., Fri., 1600-1700.
11.435	COCX	Havana, Cuba. Sun. 1800-2100.	12.120		Algiers, Algeria.
11.535	SPD	Other days 0800-2400. Warsaw, Poland. (2.). Daily 1800-	12.235	TFJ GBU	Reykjavik, Iceland. (7.5). Sun., 1345-1430.
		1900. Sun. until 2000.	12.290 12.295	CB615	Rugby, Gt. Britain.
11.698	SBG	Motala, Sweden. (.5). 0180-0130.	12.500	HIN	Santiago, Chile. Trujillo, D. R. (.75).
11.700	CB1170 HP5A	Santiago, Chile. 1000-1400; 1530- 2300. Panama City, Pan. (.5). 2000-2330.	12.675		Guayaquil, Ecuador. "Radio Paris."
		Saigon, Fr. Indo-China. 0500-1100.	12,765	VP2LO	St. Kitts, Brt. West Indles. (.5).
11.710	XEWB YSM	Guadalajara, Jal. San Salvador, E. S.	13.635	SPW	Warsaw, Poland. (10.). Mon., Wed., Frl., 1230-1330. Daily 1800-
11.713	TPA4	Pontoise, France. 0615-1300.			1900.
11.718	CR7BH	Lourenco Marques, Port. East Africa. (.2). Sun. 0530-0700. Other days 0430-0630.	13.740	DJS DJS	Terry-Holden Expedition, Brt. Gui- ana. (.2).
11.720	CJRX	Winnipeg, Man. (2.). 1800-2400.		to 14.400	Berlin, Germany. (20.).
11.730	PHI XETM	Hilversum, Netherlands. (23.6). Villahermosa, Tab.	14.050	EA9AH	Amateur Stations. Tetuan, Sp. Morocco. (.5). Aptdo. 124. At 1645 and 1900.
11.740	HP5L GSD	David, Panama. (.35).	14.400	UPOL	North Pole, 1400-1605.
11 750	GSD	Daventry, Gt. Britain. (20.). 0315- 0530; 0855-1200; 1220-1600; 1615- 1800; 2115-2300.	14.420 14.535	HC1JB HBJ	Quito, Ecuador. "Radio Rodante." Geneva, Switz. Sat. 1845-2100.
11.760	OLR4B	Prague, Czecho. (35.).	14.900	LZA	Sofia, Bulgaria,
	TGWA	Guatemala City, Guat. (10.).	15.040	RKI	Moscow, USSR. 1900-2115.
11,770	DID	Mon., Thurs., 2000-2200. Berlin, Germany. (50,). 1040-1630; 1650-2245.	15.110	DJL	Berlin, Germany. (50.). 0000-0200; 0800-0900; 1040-1630.
11.790	W1XAL	Boston, Mass. (20.). Sat. 1345-1830.	15.116	OLR5C	Prague, Czecho. (35.).
		Sun. 1500-1800. Other days 1645-	15,120	HVJ	Vatican City. (10.), 1000-1030.
11.795	OLG	1830. Berlin, Germany. (8,).	15.140	GSF	Daventry, Gt. Britain. (15.). 0315- 0530; 0545-1200.
11.796	OAX5A		15.150	YDC	Bandoeng, Java, N.E.I. (3.).
11.800	COGF	Matanzas, Cuba. (1.). 1300-1600; 1800-2200.	15.160	XEWW JZK	Nazaki, Japan. (50.). Mexico City, D. F. (10.).
	JZJ	Nazaki, Japan. (50.), 1500-1600;	15,170	CXA14	Montevideo, Uruguay.
	OER2	1630-1730; 0800-0900; 0030-0130. Vienna, Austria. (1.5). Weekdays 0900-1800.		TGWA	Guate mala City, Guat. (10.). 1200- 1400. "Radio Nacional," Lima, Peru.
			45 475	RV96	Moscow, USSR.
	*****	Copenhagen, Denmark. 1830-2100.	15.175		
11.810	I2RO	Rome, Italy. (25.). 0500-1220.	15.175	GSO	Daventry, Gt. Britain. 0315-0530;
11.820	I2RO GSN	Rome, Italy. (25.). 0500-1220. Daventry, Gt. Britain.	15.180		0545-0855; 1600-1800.
11.810 11.820	I2RO GSN KZRM	Rome, Italy. (25.). 0500-1220. Daventry, Gt. Britain. Manila, P. I.		GS0 BLD	0545-0855; 1600-1800. Berlin, Germany. (8.). Sun. 1110-
11.810	I2RO GSN KZRM W2XE	Rome, Italy. (25.). 0500-1220. Daventry, Gt. Britain. Manila, P. I. New York, N. Y. (10.). Daily 1830- 1900. Sun. 1900-2400.	15.180		0545-0855; 1600-1800.
11.810 11.820 11.830	I2RO GSN KZRM W2XE W9XAA	Rome, Italy. (25.). 0500-1220. Daventry, Gt. Britain. Manila, P. I. New York, N. Y. (10.). Daily 1830-1900. Sun. 1900-2400. Chicago, III. (28.).	15.180 15.200	M8XK D1B	0545-0855; 1600-1800. Berlin, Germany. (8.). Sun. 1110- 1225. Daily 0005-1100; 1650-2245. Pittsburgh, Pa. (40.). 0900-1900. Huizen, Netherlands. (20.). Sun.
11.810 11.820 11.830	I2RO GSN KZRM W2XE	Rome, Italy. (25.). 0500-1220. Daventry, Gt. Britain. Manila, P. I. New York, N. Y. (10.). Daily 1830- 1900. Sun. 1900-2400.	15.180 15.200 15.210	M8XK D1B	0545-0855; 1600-1800. Berlin, Germany. (8.). Sun. 1110-1225. Daily 0005-1100; 1650-2245. Pittsburgh, Pa. (40.). 0900-1900. Huizen, Netherlands. (20.). Sun. 0330-0500. Wed. 0800-1030. Prague, Czecho. (35.). Sun. 0600-
11.810 11.820	I2RO GSN KZRM W2XE W9XAA CSW KZRM	Rome, Italy. (25.). 0500-1220. Daventry, Gt. Britain. Manila, P. I. New York, N. Y. (10.). Daily 1830-1900. Sun. 1500-2400. Chicago, Ill. (28.). Lisbon, Portugal. (5.). 1300-2000.	15.180 15.200 15.210 15.220	M8XK D1B	0545-0855; 1600-1800. Berlin, Germany. (8.). Sun. 1110- 1225. Daily 0005-1100; 1650-2245. Pittsburgh, Pa. (40.). 0900-1900. Huizen, Netherlands. (20.). Sun. 0330-0500. Wed. 0800-1030.

SHORTWAVE BROADCASTING STATIONS OF THE WORLD

		2200; Sun. 1015-1200; Daily exc. Sat. and Sun. 1415-1600.		W8XK W9XAA W9XF	Pittsburgh, Pa. (40.). Chicago, III. (5.). Chicago, III. (10.).
15.260	GSI	Daventry, Gt. Britain. 1220-1600.	17.790	GSG	Daventry, Gt. Britain. (15.). 0315-
15.270	HI3X	Trujillo, D. R. (.5). Sun., 0800-1100.	11.130	asa	0530: 0545-1200: 1220-1600.
	W2XE	New York, N. Y. (10.). Sat., Sun. 1430-1800; 2000-2400. Mon. through	17.800	TGWA	Guatemala City, Guat. (10.).
		Fri. 1300-1800; 2030-2400.	19.020	HS8PJ	Bangkok, Siam. (5.). Mon. 0800-
15.280	DIG	Berlin, Germany. (50.). Sun. 1110- 1225. Daily 0005-0545; 0600-0800;	21,450	OLR6A	
		1225. Daily 0005-0545; 0600-0800; 0815-1100; 1650-2245.	21.460	W1XAL	
15.290	LRU	Buenos Aires, Arg. (5.). 0800-1000.	21.460	WIXAL	regularly.
15.300	XEBM	Mazatlan, Sin. 1000-2300.	21.470	GSH	Daventry, Gt. Britain. 0545-0855;
15.310	GSP	Daventry, Gt. Britain. 1345-1600.			0855-1200.
15.320	OLR5B	Prague, Czecho. (35.).	21.480	W2XAD	Schenectady, N. Y. (25.).
15.330		Schenectady, N. Y. (25.). 1100-2100.	21.520	W2XE	New York, N. Y. (10.). Sat., Sun.,
13.330		Belmont, Calif. (20.), (Under		W2 V 4 11	0800-1300; Other days 0730-1000. Philadelphia, Pa.
		construction).	04 530	GSJ	Daventry, Gt. Britain. 0545-0855;
15.340	DJR	Berlin, Germany. (50.). 0800-0900;	21.530	GSJ	0915-1030.
		1650-2245.	21.540	W8XK	Pittsburgh, Pa. (40.). 0700-0900.
15.370	HAS3	Budapest, Hungary. (20.). Sun. 0900-1000.	21.550	GST	Daventry, Gt. Britain.
15,440	XEBM	Mazatlan, Sin. (.05). 1000-2300.	25.950	W4XH	Spartanburg, S. C. (.05) (WSPA). Los Angeles, Calif. (.1) (KGFJ).
15.555	CO9WX	Tuinicu, Cuba. (2.).		WOARG	24 hours daily.
17.310	W3XL	Bound Brook, N. J. (20.).		W9XUP	St. Paul, Minn. (1.) (KSTP).
17.375	LSY	Buenos Aires, Arg. Fri. 1600-1700.	26.100	GSK	Daventry, Gt. Britain.
17.760	DJE	Berlin, Germany. (50.). Sun. 1110-		W9XJL	Superior, Wis. (.08) (WEBC).
		1225. Daily 0005-1000.	26.400	W9XAZ	Milwaukee, Wis. (.5) (WTMJ).
	W2XE	New York, N. Y. (10.). 1830-2000.			1300-2400.
17.770	PHI	Hilversum, Netherlands. (23.6).	26.550	W2XQ0	Flushing, N. Y. (.1) (WMCA).
		Sun., 0725-1025, Mon., Tues.,	27.100	W10XD	A Effie M. Morrissey (.1).
		Thurs., Fri., 0825-1000. Sat., 0825-1040.	28.000	to 30.000	Amateurs.
17.780	W3XAL		56.000	to 60.000	Amateurs.
11.100		1800-2100.	110.000	to infinit	ty, Amateurs.

Time Conversion Table

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

	EST 24-hr.						
	Clock	EST	CS	T	MST	PST	GMT
	0000	Midn't	11	pm	10 pm	9 pm	0500
	0100	1 am	Mid		11 pm	10 pm	0600
	0200	2 am			Midn't	11 pm	0700
	0300	3 am	2	am	1 am	Midn't	0800
	0400	4 am	3.	am	2 am	1 am	0900
	0500	5 am	4.	am	3 am	2 am	1000
	0600	6 am	5 .	am	4 am	3 am	1100
	0700	7 am	6	am	5 am	4 am	1200
	0800	8 am	7	am	6 am	5 am	1300
	0900	9 am	8	am	7 am	6 am	1400
	1000	10 am	9	am	8 am	7 am	1500
	1100	11 am	10	am	9 am	8 am	1600
	1200	Noon	11	am	10 am	9 am	1700
	1300	1 pm	N	oon	11 am	10 am	1800
	1400	2 pm	1	pm	Noon	11 am	1900
	1500	3 pm	2	pm	1 pm	Noon	2000
	1600	4 pm	3	pm	2 pm	1 pm	2100
	1700	5 pm	4	pm	3 pm	2 pm	2200
r	1800	6 pm	5	pm	4 pm	3 pm	2300
	1900	7 pm		pm	5 pm	4 pm	2400
	2000	8 pm	7	pm	6 pm	5 pm	0100
	2100	9 pm	8	pm	7 pm	6 pm	0200
	2200	10 pm		pm	8 pm	7 pm	0300
	2300	11 pm	10	pm	9 pm	8 pm	0400
	2400	Midn't	11	pm	10 pm	9 pm	0500
	For times	throughout	: th	e entire	world	consult the	RADEX

For times to Time Converter.

KEY TO SYMBOLS

As shown in the Index by Frequencies and Dial Numbers

Frequency is given in kilocycles; wave lengths in meters. Night power is shown in watts in third column. Daytime power is shown in parentheses in fourth column in kilowatts, thus (.25) indicating 250 watts. Some stations outside the United States use a "split frequency." Their exact frequency is shown in fourth column.

Second Column Symbols Verifies reception for return postage. Verifies only occasionally. Does not verify. Verification 10c; letter 25c. Sends own station stamp for 10c. Sends own station stamp for 5c. Sends own station stamp for 5c. Sends own station stamp	n Weather or time only. z No information available. Fourth Column Symbols B National "Blue" network. C Columbia network. D Day time only. Dn Day time with occasional evening hours. F Canadian Brdestg. Corp. M Mutual Brdestg. Sys. N National "Red" and "Blue" networks. P Has construction permit	R National "Red" network. S Sunday only. Sy Synchronized. X Has permit to increase power. Y Has permit to change location. Z Has permit to change frequency. a-b-c. Small letters show stations using same transmitter. 1-2-3. Figures denote stations sharing time.
k Has no stamps. My Verifies for 5c.	P Has construction permit only.	sharing time No information.
	stations is shown in Eastern Standa	rd Time. "ss" means "sunset."

540 keys. (555.2) -9:30 am-1:30 am ak 1000 Regina, Sask. -1:30 pm-9:30 pm Nassau, Bahamas 400 550 keys. (545.1) F (1) 2 (1) N (5) CFNB KFUO KFYR Bredericton, N. B. St. Louis, Mo. Bismarck, N. Dak. Corvallis, Ore. St. Louis, Mo. San Antonio, Tex. Fredericton, N. B. -7:00 am—11:00 pm 500 500 -8:00 am—Midnight -8:00 am—1:00 am ak ak 1000 Noon-Midnight KOAC ak 1000 KSD KTSA WDEV 1000 2R (5) San Antonio, T Waterbury, Vt. Buffalo, N. Y. ak 1000 C(5)500 D ak -7:00 am-midnight Č (5) C (5) WGR ak 1000 Cincinnati, Ohio WKRC ak 1000 ak 500 Ď Harrisonburg ,Va. XEFC 100 Merida, Yuc. ak 560 keys. (535.4) (1) N C (5) C (5) KFDM 500 Beaumont, Texas ak -8:30 am-2:00 am KLZ KSFO Denver, Colo. San Francisco, Cal. ak 1000 -10:00 am-4:00 am ak 1000 Springfield, Mo. Philadelphia, Pa. D KWTO ak 5000 -7:00 am-ВM midnight WFIL ak 1000 6:00 am-4:00 am WIND WIS ak 1000 (5)Gary, Ind. Golumbia, S. C. -7:00 am midnight ak 1000 N (5) 7:00 am-midnight WOAM ak 1000 Miami, Fla. 570 keys. (526.0) X Havana, Cuba CY (1) Wichita Falls, Tex. 5000 CMCY ak ak 250 KGKO Los Angeles, Calif. KMTR ak 1000 Tacoma, Wash, Youngstown, Ohio New York, N. Y. Yankton, S. Dak, Columbus, Ohio C(5)-9:00 am-3:00 am KVI WKBN ak 1000 ak 500 C1 WMCA ak 1000 C (5) 1 (1) WNAX ak 1000 -9:00 am-11:00 pm WOSU ak 750 B (WSYU) Syracuse, N. Y. N. Asheville, N. C. -7:00 am-1:00 am WSYR WWNC ak 1000 -7:30 am-1:00 am ak 1000 ht ht ht

580	kcy	s. ((516.	9)	
CFPR CHRC CKCL	ak ak ak	50 100 100	F F	Prince Rupert, B. C. Quebec, P. Q. Toronto, O. Alto	-8:00 am—midnigh -8:00 am—midnigh -8:00 am—midnigh
CKUA KMJ	ak ak	500 1000	F N	Edmonton, Alta. Fresno, Calif.	-10:00 am-3:00 am

```
KSAC
WCHS
                    2 (1)
C (1)
                           Manhattan, Kans.
Charleston, W. Va.
          ak
               500
                                                  -10:30 am-6:30 pm
         ak
               500
 WDBO
         ak
              1000
                            Orlando, Fla.
                                                  —7:00 am—midnight
                    2C (5)
 WIBW
         ak
              1000
                           Topeka, Kans.
Urbana, III.
WILL
         ak
              1000
                                                  —9:00 am—ss
WTAG
             1000
                            Worcester, Mass.
         ak
                    R
                                                   -7:30 am-1:00 am
XEMU
         7
                           Piedras Negras, Coah.
590 keys. (508.2)
KHQ
              1000
                    R (5)
C (5)
                           Spokane, Wash,
WÉĚI
         ak
              1000
                           Boston, Mass
WKZO
         ak
             1000
                    BDX
                           Kalamazoo, Mich.
             1000
                    R (5)
                           Omaha, Nebr.
                                                  -7:00 am-3:30 am
600 kcys. (499.7)
CBW
                    F (1)
BF
               500
         ak
                           Windsor, Ont.
                                                  -4:30 pm-11:30 pm
CFCF
         ak
               500
                           Montreal, P. Q.
CJOR
         ak
              500
                           Vancouver, B. C.
                    . . . .
                                                  —7:45 am—1:00 am
         ak 25000
CMQ
                           Havana, Cuba
KF$D
                    Ė
             1000
                           San Diego, Calif.
Baltimore, Md.
                    \tilde{\mathbf{C}} (1)
WCAO
              500
         ak
                    BM (1) Bridgeport, Conn.
BM (5) Cedar Rapids, Iowa
C (5) Memphis, Tenn.
WICC
         ak
               500
                                                  -5:00 am-1:00 am
             1000
WMT
         ak
                                                 -6:30 am-1:00 am
WREC
             1000
                                                    7:30 am—1:00 am
         ak
610 kcys. (491.5)
             1000
KFRC
WCLE
         c
                   M (5)
DM
                          San Francisco, Cal.
         ak
                                                   7:00 am-
              500
                           Cleveland, Ohio.
                   R (5) Kansas City, Mo. N(WMBF) Miami, Fla.
WDAF
         ak
             1000
                                                  -7:30 am-1:00 am
WIOD
             1000
         ak
             1000
                           Philadelphia, Pa
                                                  -7:00 am-1:00 am
620 keys. (483.6)
KGW
KTAR
         ak
             1000
                   R (5)
                           Portland, Ore.
                                                 -9:00 am-2:00 am
         ak
             1000
                           Phoenix, Ariz.
                                                   -9:00 am—1:15 am
TIPG
                    625
         z
             2000
                           San Jose, Costa Rica
WFLA
         ak
             1000
                    Na (5) Clearwater, Fla.
                                                   -7:00 am—1:00 am
WHJB
         ak
              250
                   CD
                           Greensburg, Pa.
                                                   8:00 am-5:00 pm
              500
WLBZ
         ak
                    CM (1) Bangor, Maine
                   Na (5) St. Petersburg, Fla.
N (5) Milwaukee, Wis.
WSUN
             1000
                                                   -7:00 am-1:00 am
WTMJ
             1000
                                                 -7:15 am-1:00 am
630 keys. (475.9)
CFCO
         ak
              100
                                                   -8:00 am-10:30 pm
                           Chatham, Ont.
CFCY
         ak
             1000
                           Charlottetown, P.E.I.—9:00 am—11:00 pm
CJRC
CKOV
CMBC
                   F (1)
                           Winnipeg, Man.
Kelowna, B. C.
         ak
              500
                                                 -8:30 am-12:30 am
         ak
              100
                                                   11:00 am-1:30 am
         z
           10000
                           Havana, Cuba
                                                   6:55 am-midnight
KFRU
         ak
              500
                   1(1)
                           Columbia, Mo.
Pierre, S. Dak.
                                                   7:00 am-9:30 pm
KGFX
         ak
              200
                   Ď
                   N1 (1)
B (.5)
C (1)
WGBF
              500
                           Evansville, Ind.
         ak
WMAL
        ak
              250
                           Washington, D. C.
                                                 -7:00 am-2:00 am
WPRO
              500
                          Providence, R. I.
Merida, Yuc.
                                                 -7:00 am-1:00 am
         ak
              500
XEZ
         7.
                   \dot{\mathbf{P}}
            10000
                           Havana, Cuba
640 kcys. (468.5)
CMCB
        ak
              150
                           Havana, Cuba
KFI
        ak 50000
                           Los Angeles, Calif.
Portland, Maine
                                                 -9:45 am-3:00 am
WGAN
WHKC
                   DΡ
              500
        ak
              500
                           Columbus, Ohio
                                                 -6:30 am-8:15 pm
             5000
                   Ď
                           Ames, Iowa
XEBX
              250
                           Sabinas, Coah.
650 kcvs. (461.3)
WSM
        ak 50000 MN
                          Nashville, Tenn.
                                                 -7:30 am-1:00 am
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			abitional bi of	STATION BY THE
660 1	cys. ((454.:		
WAAW WEAF XEAL XEAO	ak 500 ak 50000 z 1000 ak 250	D R 	Omaha, Nebr. New York, N. Y. Mexico City, D. F Mexicali, B. Cfa.	—7:00 am—ss —7:30 am—1:00 am
670 1	cys.	(447.	5)]
WMAQ XELO XERO	ak 50000 ak 50000 z	R 	Chicago, III. Tijuana, B. Cfa. Chapultepec, D. I	-7:00 am-1:00 am 72:00 am-2:30 am
680 1	cys. ((440.9	9)]
CMBQ CMCG KFEQ KPO VAS VOWR WLAW WPTF	z 5000 ak 1000 ak 2500 ak 50000 akn 2000 ck 500 z 1000 ak 1000	P D R 685 681 D N (5)	Havana, Cuba Havana, Cuba St. Joseph, Mo. San Francisco, Ca Glace Bay, N. S, St. John's, Nfld. Lawrence, Mass. Raleigh, N. C.	-7:00 am-midnight -7:00 am-ss :l11:00 am-3:00 am -7:00 am-11:00 pm
600 I	cys. (•		7
CFRB CJCJ XET	ak 10000 ak 100 ak 5000	C F	Toronto, Ont. Calgary, Alta. Monterrey, N. L.	8:00 am—midnight 9:30 am—1:00 am 8:30 am—10:00 pm
700 1	ccys. ((428.3	3)]
WLW			. · · <u></u>	0. =6:30 am—1:30 am
710 l	Cys. (ak 1000 ak 500 ak 5000	(422.; с м	Seattle, Wash. Beverly Hills, Cali Newark, N. J.	—9:00 am—5:00 am f. —9:00 am—4:00 am
720 l	ccys. (416.4	4)	7
CMK WGN XEH	ak 3000 ak 50000 ak 250	M	Havana, Cuba Chicago, III. Monterrey, N. L.	—10:00 am—9:00 pm
730 1	-	410.2	7)]
CFPL CJCA CKAC CKPR CMCL XEPN XERB	ak 100 ak 1000 ak 5000 ak 100 z 10000 ak 100000 z 100000	F F C F P	London, Ont. Edmonton, Alta, Montreal, P. O. Fort William, Ont Havana, Cuba Piedras Negras, Co Rosarito Bch., B. C	ah.
740 1	ccys. (405.2	2)]
KMMJ KTRB WHEB WSB	ak 1000 ak 250 ak 250 ak 50000	D D D R	Clay Center, Nebr Modesto, Calif. Portsmouth, N. II Atlanta, Ga.	—9:00 am—8:30 pm —6:55 am—1:00 am
750 l	ccys. (399.8	8)] .
CMBL KGU» WJR XEAA XEAM	aj 2500 ak 50000 ak 200 z 25	N C	Havana, Cuba Honolulu, Hawail Detroit, Mich. Mexicali, B. Cfa. Matamoros, Tams	—8:00 am—12:15 am —11:30 am—4:30 am —5:30 am—2:00 am
760 l	•	394.5	5)	
CKY CMHX	ak 15000 ak 200	F .	Winnipeg, Man, Cienfuegos, Cuba	8:00 am1:00 am

NORTH AM	IERICAN B. C. S	TATIONS BY FREC
KXA ak 250 (.5) WBAL ak 2500 BMSy WEW ak 1000 D WJZ ak 50000 BSy XEOK ak 2500	Seattle, Wash. Baltimore, Md. St. Louis, Mo. New York, N. Y. Tijuana, B. Cfa.	9:00 pm1:00 am 8:00 amss 7:30 am1:00 am
770 kcys. (389. CMBF z 10000 CMBS ak 150 KFAB ak 10000 CSy WBBM ak 50000 CSy	Havana, Cuba Havana, Cuba Lincoln, Nebr. Chicago, Ill.	—8:00 am—10:30 pm —7:00 am—1:00 am
780 kcys. (384.	4)	
CHWK dk 100 F CKSO ak 1000 F CMJK ak 250 KEHE ak 1000 (5) KFDY ak 1000 D	Chilliwack, B. C. Sudbury, Ont. Camaguey, Cuba Los Angeles, Calif. Brookings, S. Dak.	—11:00 am—1:15 am —9:00 am—midnight —11:00 am—10:00 pm —1:30 pm—3 pm
KFOD ck 250 KGHL ak 1000 N (5)	Anchorage, Alaska Billings, Mont.	-10:00 am-1:00 am
KWLK z 250 DP WEAN ak 1000 BM WMC ak 1000 R (5) WTAR ak 1000 N XEL z 1000	Longview, Wash. Providence, R. I. Memphis, Tenn. Norfolk, Va. Mexico City, D. F.	7:45 am1:00 am
790 kcys. (379.	5)	
CMGH ak 500 KGO ak 7500 B	Matanzas, Cuba San Francisco, Cal.	—10:00 am—3:00 am —7:00 am—1:00 am
KOAM z 1000 DN WGY ak 50000 R	Pittsburg, Kans. Schenectady, N. Y.	-7:00 am-1:00 am
800 kcys. (374.	8)	
HIX ak 700	Trujillo, D. R.	7.00 am_midnight
WBAP ak 50000 Na WFAA ak 50000 Na	Fort Worth, Texas Dallas, Texas	—7:00 am—midnight —9:00 am—12:30 am
WTBO ak 250 D	Cumberland, Md.	—8:30 am—ss
810 kcys. (370.	· -	
CMCF ak 600 X WCCO ak 50000 C	Havana, Cuba Minneapolis, Minn.	-7:30 am-1:00 am
WNYC ak 1000 D	New York, N. Y.	—7:00 am—7:00 pm . —11:00 am—8:15 pm
XEXC z 350	Aguascalientes, Ags.	
820 kcys. (365.	6)	
CMHW ak 100 WHAS ak 50000 C XEBG z 1000	Clenfuegos, Cuba Louisville, Ky. Tijuana, B. Cfa.	
830 kcys. (361.	2)	
CMJX ak 500 KOA ak 50000 R! WEEU ak 1000 D WHDH ak 1000 Dn WRUF ak 5000 Dn	Camaguey, Cuba Denver, Colo. Reading, Pa. Boston, Mass. Gainsville, Fla.	—9:00 am—11:30 pm —9:00 am—2:00 am —8:00 am—5:00 pm —7:00 am—6:30 pm
840 kcys. (356.	.9)	
CRI. 7 50000 P	Toronto, Ont. Saskatoon, Sask. Toronto, Ont. St. John's, Nfld.	
CFOC ak 1000 F CRCT ak 5000 FN VOGY ak 400 XERA ck 350000	St. John's, Nfld. Villa Acuna, Coah.	
850 kcys. (352	.7)	
CMCM z	Havana, Cuba	—8:00 am—midnight
KIEV ak 250 D WESG ak 1000 CD	Glendale, Calif. Elmira, N. Y.	7:30 am6:00 pm

	NORI	H AIVI	ERICAN B. C. S.	IATIONS BI TRE
WKAR WWL	ak 1000 ak 10000		E. Lansing, Mich. New Orleans, La.	-7:00 am-5:00 pm -7:30 am-1:00 am
860 k	cys. (348.6)	
WABC	ak 50000	C (WBC	OQ) New York, N. Y.	-7:30 am-1:00 am
WHB XEMO	ak 1000 ak 5000	DM	Kansas City, Mo. Tijuana, B. Cfa.	-9:45 am-3:00 am
	z 50	1411	Mexico City, D. F.	7.20 4111 0.00 4111
870 k	cys. (344.6)	
WENR WLS	ak 50000 ak 50000	Ba	Chicago, Ill. Chicago, Ill.	-Noon-midnight -8:00 am-3:00 pm
WLS XEFB	ak 50000 ak 200	Ba	Monterrey, N. L.	8:00 am3:00 pm
	z		Mexico City, D. F.	
880 k	cys. (340.7	')	
CBO	ak 1000	<u>F</u>	Ottawa, Ont.	-10:30 am-midnight -12:30 pm-1:15 am
	ak 1000 ak 1400	F X	Kamloops, B. C. Havana, Cuba	-7:00 am-midnight
KFKA	ak 500	2M (1)	Greeley, Colo. Oakland, Calif.	-7:30 am-1:00 am
	ak 1000 ak 500	2	Oakland, Calif.	—10:30 am—2:30 am
TIEP	ak 1000		Oakland, Cam. Denver, Colo. San Jose, Costa Rica Meridian, Miss. Scranton, Pa. Scranton, Pa.	
WCOC	ak 500	CX (1)	Meridian, Miss.	_12:30 pm_10:30 pm
WOAN	ak 500 ak 500			
WRNL	ak 500 ak 500	D` (1)	Richmond, Va. Iowa City, Iowa	-7:30 am-ss -10:00 am-11:00 pm
WSUI	ak 500	(1)	iowa orty, rowa	20100 Will 12100 P
	cys. (
	ak 500 ak 500	N (1) 2 (1) C (5)	Little Rock, Ark. Shenandoah, Iowa	—7:00 am—1:00 am —7:00 am—1:00 am
KFPY	ak 1000	C(5)	Spokane, Wash.	—9:50 am—3:00 am
KUSD	ak 500	2	Vermillion, S. Dak.	-Noon-6:00 pm
WCST	ak 500 ak 1000	(1) C (5) R (5)	W. Lafayette, Ind. Atlanta, Ga.	
WJAR	ak 1000	R (5)	Providence, R. I.	7:30 am1:00 am 7:00 am1:00 am
WMMN XEW	ak 50000 ak 50000	C (1)	Providence, R. I. Fairmont, W. Va. Mexico City. D. F.	-7:00 am-1:00 am
	cys. (333.1		
KGBU KHJ	ak 500 ak 1000	X M (5)	Ketchikan, Alaska Los Angeles, Calif.	
KSEI	ak 250	(1)	Pocatello, Idaho	—9:30 am—1:00 am —7:00 am—1:00 am
WBEN WELI	ak 1000 ak 500	Ř (5) D	Buffalo, N. Y. New Haven, Conn.	-6:00 am—ss
WFMD	ak 500	D	Frederick, Md. Jacksonville, Fla. Oklahoma City, Ok. Stevens Point, Wis.	—6:30 am—ss
WJAX WK Y	ak 1000	N (5) N (5)	Jacksonville, Fla.	—6:45 am—1:00 am —7:45 am—1:00 am
WLBL	ak 1000 ak 5000	D	Stevens Point, Wis.	-9:00 am-2:00 pm
WTAD	ak 1000	D	Quincy, Ill.	8:00 am5:45 pm
910 1	cys.	(329.	6)	
CBF	z 50000	FN	Montreal, P. Q. Trail, B. C.	10.00 2.00
CJAT XENT	ak 1000 ak 150000	F	Nuevo Laredo, Tams	10:00 am2:00 am
	cys.	(325.		
CMX	ak 1000	\mathbf{x}	Havana, Cuba Denver, Colo. Seattle, Wash. Houston, Texas Denver, Colo.	-8:00 am-1:00 am
KFEL	ak 500	Ma	Denver, Colo.	—8:00 am—2:30 am
KOMO KPRC	ak 1000 ak 1000	R (5) R (5)	Houston, Texas	
KVOD WAAF	ak 500	Ba	Denver, Colo.	—6:00 am—ss
WAAF WORL	ak 1000 ak 500	D D	Chicago, Ill. Boston, Mass.	- U;UU AIII - 88
WPEN	ak 1000	-	Philadelphia, Pa.	

	HOR	III A	MERICAN B. C.	STATIONS BI FRE
WSPA WWJ	ak 1000 ak 5000		Spartanburg, S. C. Detroit, Mich.	—6:00 am—12:30 am
930	kcys.	(322.	.4)	
CFAC CFCH CFLC CHNS CKPC	ak 1000 ak 100 ak 100 ak 1000 ak 1000	F F F	Calgary, Alta. North Bay, Ont. Prescott, Ont. Halifax, N. S. Brantford, Ont.	-9:00 am-2:00 am -7:00 am-10:00 pm -7:30 am-11:00 pm
KMA KROW WBRC WDBJ XEBH XEFO	ak 1000	(5) R C (5)	Shantford, Ont. Shenandoah, Jowa Oakland, Calif. Birmingham, Ala. Roanoke, Va. Hermosillo, Son. Mexico City, D. F.	—9:00 am—5:00 am —8:00 am—12:30 am —7:00 am—midnight —1:00 pm—midnight
940	kcys.	(319.	0)	
KOIN VOAS WAAT WAVE WCSH WDAY WHA WICA XEYO	ak 1000 ak 100 ak 500 ak 1000 ak 1000 ak 1000 ak 2500 ak 250 z 500	C (5) D N R (2.5 N (5) D D	Portland, Ore. St. John's, Nfld. Jersey City, N. J. Louisville, Ky. Portland, Maine Fargo, N. Dak. Madison, Wis. Ashtabula, Ohio Mexico City, D. F.	-6:30 am-6:00 pm -8:00-1:00 am -8:00 am-midnight -7:00 am-1:00 am -9:00 am-5:30 pm
	kcys.	-		
CJOC CMCD CRCK KFWB	ak 100 ak 250 ak 1000 ak 1000	F (5)	Lethbridge, Alta. Havana, Cuba Quebec, P. Q. Hollywood, Calif.	—9:00 am—1:00 am —Noon—1:00 am
KMBC WHAL WRC	ak 1000 z 500 ak 500	C (5) DP RX (1	Kansas City, Mo. Saginaw, Mich.) Washington, D. C.	6:55 am1:00 am
	kcys.	(312.	3)	
CFRN CHNC CRCY XEAW	ak 100 ak 1000 ck 100 c 50000	F F F	Edmonton, Alta. New Carlisle, P. Q. Toronto, Ont. Reynosa, Tams.	—9:30 am—2:00 am —7:30 am—11:00 pm
970 1	kcys.	(309.		
CMBY KJR WCFL WIBG	z 150 ak 5000 ak 5000 ak 100	B N D	Havana, Cuba Seattle, Wash, Chicago, Ill, Glenside, Pa.	—8:55 am—11:00 pm
980 1	kcys. ((306.	0)	
KDKA XEAC XEFE	bk 50000 ak 5000 z 150	B	Pittsburgh, Pa. Tijuana, B. Cfa. Nuevo Laredo, Tams	·•
990 1	kcys. ((302.	8)	
WBZ WBZA XEAF XEK XES	ak 50000 ak 1000 ak 750 ak 100 ak 250	BSy BSy	Boston, Mass. Springfield, Mass. Nogales, Son. Mexico City, D. F. Tampico, Tams.	—6:30 am—1:00 am —6:30 am—1:00 am
1000	kcys.	(299	0.8)	
CMBZ KFVD VOCM	ak 500 ak 1000 z 200	(1) X Dn 1006	Havana, Cuba Los Angeles, Calif. St. John's, Nfld.	—7:45 am—midnight —9:00 am—8:15 pm

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who
          ak 50000
                      R
                              Des Moines, Iowa
                                                       --7:00 am-1:00 am
XEBI
          ak
                 25
                              Aguascalientes, Ags.
                              Nuevo Laredo, Tams. —10:00 am—8:30 pm
XEBK
          ak
                 60
XEXS
                100
                              Portable in Mexico
1010 kcys.
                     (296.9)
CHML
CKCD
CKCK
                      F
          ak
                100
                              Hamilton, Ont
                                                      -8:00 am-midnight
          ak
                100
                              Vancouver, B. C.
          ak
               1000
                      F
                              Regina, Sask.
                                                        -9:30 am-2:00 am
CKCO
          ak
                100
                     Ē
                              Ottawa, Ont.
                                                      -Noon-11:30 pm
ČKÍĆ
CKWX
          ak
                 50
                              Wolfville, N. S
                             Vancouver, B. C.
Camaguey, Cuba
Coffeyville, Kans.
San Jose, Calif.
                100
          ak
                     1
                                                      -Noon-4:00 am
CMJA
          ak
                300
KGGF
KOW
WHN
WNAD
WNOX
               1000
                      2M
          ak
          ak
               1000
                     M
                                                      -9:30 am-3:00 am
          ak
               1000
                      (5)
                              New York, N. Y.
          ak
               1000
                              Norman, Okla.
                                                        -3:00 pm--10:15 pm
                              Knoxville, Tenn.
Veracruz, Ver.
               1000
                     C (5)
                                                       -6:30 am-2:00 am
XEU
                250
                                                        -8:00 am—1:00 am
         kcys.
                     (293.9)
1020
K YW
WDZ
                              Philadelphia, Pa
          ak 10000
                                                      -7:05 am-10:00 pm
          ak
                250
                              Tuscola, III.
Juarez, Chih.
                                                      -7:00 am-6:00 pm
              1000
XEJ
          ak
                     (291.1)
1030
         kcys.
                             Calgary, Alta.
Rimouski, P. Q.
Windsor, Ont.
Havana, Cuba
Mexico City, D. F.
CFCN
          ak 10000
                                                      -6:45 am-1:30 am
CJBR
CKLW
              1000
5000
                     F
M
          āk
                                                      —6:45 am—1;30 am
CMCK
XEB
          ak 10000
                                                      —10:00 am—12:15 am
1040
                     (288.3)
         kcys.
KRLD
          ak 10000
                     \mathbf{C}
                              Dallas, Texas
                                                      -7:00 am-1:00 am
KWJJ
KYOS
WTIC
                             Portland, Ore.
Merced, Calif.
               500
         bk
                250
         ah 50000
                     R
                              Hartford, Conn.
                     (285.5)
1050
         kcys.
                             Montreal, P. Q.
Santiago, Cuba
Abilene, Kans
CBM
         ak
              5000
CMKD
         ak
                250
KFBI
KNX
              5000
                     Ď'n
                                                        -7:00 am—7:45 pm
-9:30 am—3:15 am
         ak
                             Los Angeles, Calif.
Eau Claire, Wis.
         ak 50000
                     C
WEAU
              1000
                     D
         7.
WGVA
                             Indianapolis, Ind.
              1000
                     ĎΡ
1060 kcys.
                    (282.8)
KTHS
         ak 10000
                             Hot Springs, Ark. St. John's, Nfld.
                                                      -9:00 am-ss
                     1065
VOAC
                 40
WBAL
         ak 10000
                     BM
                                                       -7:00 am-9:00 pm
                             Baltimore, Md.
                             Norfolk, Nebr.
College Park, Md.
Guadalajara, Jal.
WJAG
W3XJ
         ak
              1000
                                                        7:30 am-ss
                100
                                                        Midnight to 6:00 am
XEAD
         яk
                125
XEMG
               100
                             Atzcapotzalco, D. F.
                     (280.2)
1070
         kcys.
CMBX
                             Havana, Cuba
Sagua la Grande, Cuba
         ak
               500
CMHA
KJBS
                50
         7.
         ak
               500
                             San Francisco, Calif. -1:00 am-8:30 pm
WCAZ
                     Ď
                             Carthage, Ill.
Cleveland, Ohio
               100
WTAM
         ak 50000
                     R
                                                      --6:00 am-midnight
                     (277.6)
1080
         kcys.
                     C
WBT
         ak 50000
                             Charlotte, N
Chicago, III.
                                         N. C.
                                                        6:45 am-midnight
WCBD
         ak
              5000
                     Dnl
WMBI
         ak
              5000
                     Dnl
                             Chicago, III.
XEBA
XEDP
                             Guzman, Jal
         āk
               500
                             Mexico City, D. F.
```

				_
1090	kcys.	(275.1)		
	ak 50000		Mo. —7:00 am—1:00 am	
1100	kcys.	(272.6)		
CBR KGDM KWKH WBIL WPG XECL	ak 5000 ak 1000 c 10000 ak 5000 ak 5000 z 1700	F Vancouver, DM Stockton, C C Shreveport 1 New York, C1 Atlantic Ci Mexicali, B	Calif. —9:00 am— ss , La. —7:30 am—1:00 am N. Y. ity, N. J.	
1110	kcys.	(270.1)		
CMCH CMCJ KSOO WRVA	z 5000 ak 500 ak 2500 ak 5000	P Havana, C X Havana, C DnN Sloux Falls CM Richmond,	uba uba s, S. Dak. —7:00 am—6:45 pm , Va. —7:00 am—midnight	
1120	kcys.	(267.7)		
CHLP CHSJ CKOC	ak 100 ak 500 ak 500	F Montreal, F (1) St. John, M F (1) Hamilton, F Brandon, M	Ont.	
CKX CMGF CMKM CRCS	ak 1000 ak 250 ak 200 ak 100	Manzanille F Chicoutim	Cuba. o, Cuba —8:00 am—10:00 pm i, P. Q.	
KFIO KFSG KRKD KRSC	ak 100 ak 500 ak 500 ak 250	a (2.5) Los Angele a (2.5) Los Angele Seattle, Wa	e Calif	
WCOP WDEL WISN WJBO WTAW	z 1000 ak 500 ak 250 ak 250 ak 500 ak 500	DP Austin, Te D Boston, Ma R (.5) Wilmingto C (1) Milwaukee B Baton Rou College St	e, Wis. —8:00 am—1:00 am	•
1130	kcys.	(265.3)		
CMJI KSL WJJD WOV XEJP	ak 150 ak 50000 ak 20000 ak 1000 z 100	Ciego de Av C Salt Lake Dn Chicago, II D New York, Mexico Cit	City, Ut. —8:30 am—3:00 am ll. —6:00 am—6:45 pm N. Y.	
1140	kcys.	(263.0)		
CMCW KVOO WAPI WSPR	dk 500 ak 25000 ak 5000 ak 500	Havana, C N1 Tulsa, Okl C1 Birmingha DM Springfield	im, Ala.	
1150	kcys.	(260.7)		
CMJF WHAM XEC XEDW	z 200 ak 50000 ak 100 z 20	B Rochester, Tijuana, B Minatitlan	, Cuba N. Y. —7:00 am—midnight s. Cfa. _{n.} Ver.	
1160	kcys.	(258.5)		
CMHJ CMKG WOWO WWVA XEAS XEBJ XEBZ XED XEP	ak 175 z ak 10000 ak 5000 ak 50 z 20 ad 100 ak 2500 ak 500	Clenfuegos Santiago, C B1 Fort Wayn C1 Wheeling Saltillo, Co Merida, Y Mexico Cit Guadalaja Juarez, Ch	Cuba e, Ind. W. Va. para uc. y, D. F. ra, Jal. —Noon—midnight	

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

WOLS	7.	100	D	Florence, S. C.	
WRBL	ak	100	(.25)	Columbus, Ga.	-8:00 am-10:30 pm
WSAL	z	250	Ď	Salisbury, Md.	olio alli Tollo pili
WTHT	ak	100	M	Hartford, Conn.	-7:00 am-4:15 pm
WTOL	z	100	DP	Toledo, Ohio	7.100 um 7.10 pm
WWAE	ak	100	8	Hammond Ind	

1210 kcys. (247.8)

CHLT	z	100	0.11	Sherbrooke, P. Q.	
CJCS	ak	50		Stratford, Ont.	-8:00 am-9:00 pm
CJCU	z	50		Aklavik, N.W.T.	olou am y too pin
CKBI	āk	100	F	Prince Albert, Sask.	-9:45 am-1:00 am
CKCH	ak	100	Ť	Hull, P. O.	
CKMC	ak	50			—8:00 am—11:00 pm
				Cobalt, Ont.	
CMHI	ak	150		Santa Clara, Cuba	
KALB	ak	100	X	Alexandria, La.	
KANS	ak	100	N	Wichita, Kans.	-7:30 am-midnight
KASA	C.	100	M	Elk City, Okla.	-7:00 am-8:00 pm
KDLR	ak	100		Devils Lake, N. D.	—7:30 am—9:30 pm
KDON	Z	100	M	Monterey, Calif.	_
KFJI	ak	100		Klamath Falls, Ore.	
KFOR	ak	100	CM(.2	5) Lincoln, Nebr.	-8:00 am-11:15 pm
KFPW	ak	100		Fort Smith, Ark.	•
KFVS	ak	100	5 (.25)	Cape Girardeau, Mo.	
KFXM	ak		M2		-9:00 am-3:00 am
KGLO	z	100		Mason City, Iowa	7.00 am 5.00 am
KGY	ak	100	M	Olympia, Wash.	
KHBG		100	Ď	Olympia, Wash.	
	Z ote			Okmulgee, Okla.	0.00 10.00 .
KIUL	ak	100		Garden City, Kans.	-8:00 am-10:00 pm
KLAH	ak	100	(25)	Carlsbad, N. Mex.	
KOCA	Z	100	(.25)	Kilgore, Texas Helena, Mont.	
KPFA	Z.	100	(.25)	Helena, Mont.	
KPPC	ak	100	2	Pasadena, Calif.	—10:00 am—12:30 am
KROY	ak	100	D	Sacramento, Calif.	,
KVSO	ak	100	M	Ardmore, Okla.	-8:00 am-11:00 pm
KWTN	ak	100		Watertown, S. Dak.	-
WALR	ak	100		Zanesville, Ohio	-7:00 am-9:00 pm
WBAX	ak	100		Wilkes-Barre, Pa.	
WBBL	ak	100	S	Richmond, Va.	
WBLY	ak	100	Ď	Lima, Ohio	-6:00 am-5:15 pm
WBRB	ak	100	3	Red Bank, N. J.	0.00 am 5.15 pm
WCOL	ak	100	Ň		7.00 am 11.00 mm
				Columbus, Ohio	-7:00 am-11:00 pm
WCRW	ak	100	4 (25)	Chicago, Ill.	—11:00 am—7:00 pm
WEBO	ak	100		Harrisburg, Ill.	
WEDC	ak	100	4	Chicago, Ill.	
WFAS	ak	100	3	White Plains, N. Y.	
WFOY	ak	100	(.25)	St. Augustine, Fla.	
WGBB	ak	100	3	Freeport, N. Y.	
WGCM	ak	100	(.25)	Gulfport, Miss.	
WGNY	ak	100	3	Newburgh, N. Y.	-7:30 am-midnight
WGRM	ak	100		Grenada, Miss.	
WHAI	Z	250	DP	Greenfield, Mass.	
WHBF	ak	100	(.25)	Rock Island, Ill.	-7:00 am-1:05 am
WHBU	ak	100	(.25)	Anderson, Ind.	
WIBU	ak	100	(.25)	Poynette, Wis.	
WJBY	ak	100	(.25)		-8:00 am-10:30 pm
WJEJ				Gadsden, Ala.	-6:00 am-10:30 pm
	ak	50		Hagerstown, Md.	7.17
WJIM	z.	100	(.25)	Lansing, Mich.	7:15 am12:30 am
WJTN	ak	100		Jamestown, N. Y.	
WJW	ak	100	(.25)	Akron, Ohio	—8:00 am—10:30 pm
WKOK	ak	100		Sunbury, Pa.	-6:00 am-midnight
WLMU	Z	100	P (.25)	Middlesboro, Ky.	
WMFG	ak	100	(.25)	Hibbing, Minn.	-7:30 am-10:00 pm
WOMT	ak	100		Manitowoc, Wis.	-
WPAX	ak	100	D	Thomasville, Ga.	-8:00 am-6:00 pm
WSAY	z	100	D	Rochester, N. Y.	
WSBC	ak	100	4 (.25)	Chicago, Ill.	-6:00 am-midnight
WSIX	ak	100	(.25)	Nashville, Tenn.	-7:00 am-1:00 am
WSNJ	Z	100	D	Reidoton N I	v am 1v am
WSOC				Bridgeton, N. J.	7.00 am midelabe
	ak	100		Charlotte, N. C.	-7:00 am-midnight
WTAX	ak	100		Springfield, III.	11.00 0.00
XEAT	ak	250		Parral, Chih.	—11:00 am—9:00 pm
XEE	aķ	50		Durango, Dgo.	
XEFV	ak	100		Juarez, Chih.	
XETH	ak	100		Puebla, Pue.	

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1220 kcys. (245.8)
CMJE
                               Camaguey, Cuba
Lawrence, Kans.
KFKU
KTMS
KTW
                      a (5)
B
          ak
               1000
                                                         -3:30 pm-7:30 pm
                500
                               Santa Barbara, Cal.
Seattle, Wash.
          7
          ak
                      \tilde{S}_2
               1000
KWSC
WCAD
WCAE
                      2(5)
          ak
                               Pullman, Wash.
Canton, N. Y.
                                                        -9:45 am-12:30 am
               1000
                                                        -12:30 pm-4:00 pm
-7:00 am-2:30 am
          ak
                500
                      MR (5) Pittsburgh, Pa. C (5) Tampa, Fla.
          ak
               1000
WDAE
               1000
                                                           -7:30 am-
          ak
                              Lawrence, Kans.
Mazatlan, Sin.
WREN
               1000
                      Ba(5)
                                                          -8:00 am-7:00 pm
XEBL
XEDA
XEG
XETF
                 50
          z
                              Gra, Anaya, D. F.
Monterrey, N. L.
Veracruz, Ver.
                200
          7
                250
          7
          ãk
                 30
                                                        -11:00 am-1:00 am
1230 kcys.
                      (243.8)
KGBX
                               Springfield, Mo.
Albuquerque, N. M.
                500
KGGM
KYA
TGW
          ak
               1000
                                                          -9:30 am—11:30 nm
          ak
               1000
                               San Francisco, Cal.
          ak
             10000
                              Guatemala City, Gt.
Indianapolis, Ind.
Boston, Mass.
WFBM
WNAC
                      G (5)
R (5)
         ak
               1000
                                                           7:30 am-1:00 am
               1000
          ak
                                                        -5:00 am-1:00 am
XEEL
          ak
                100
                               Monterrey, N. L.
                                                        -11:00 am-8:00 pm
1240 kcys.
                      (241.8)
                              Syndey, N. S.
Sancti Spiritus, Cuba
Mandan, N. Dak,
Minot, N. Dak,
Fort Worth, Texas
Twin Falls, Idaho
San Juan, P. R.
Detroit Mich
              1000
                      F
                                                          -7:00 am--11:00 pm
CMHB
                 50
          7
KGCU
          ak
                250
KLPM
KTAT
                      iXZ
M
                250
         ak
ak
               1000
KTAT
KTFI
WKAQ
WXYZ
XEAP
XEAY
               1000
          ak
               1000
                      В
                                                        -6:00 am-9:30 pm
          ak
                               Detroit, Mich.
          ak
               1000
                              Obregon, Son.
Mexico City, D. F.
Mexico City, D. F.
                 50
          Z
                100
          z
                      . . . .
XEBS
                200
          z
XEKL
XELA
                500
                               Leon, Guan.
          z
                 50
                              Saltillo, Coah.
1250 kcys.
                      (239.9)
CMCK
                150
          ak
                               Santiago, Cuba
          ak
KFOX
               1000
                               Long Beach, Calif.
                               Yakima, Wash.
Winst.-Salem, N. C. -6:00 am—ss
KIT
          ak
                250
                      M (.5)
WAIR
                250
          ak
                      D
WCAL
                      \frac{5}{2}XZ
          ah
               1000
                              Northfield, Minn.
WDSU
               1000
                      ñ
                              New Orleans, La.
Newark, N. J.
                                                        -7:00 am-midnight
          ak
WIIBI
                      a (2.5)
2XZ
          ak
               1000
                              Minneapolis, Minn.
New York, N. Y.
Minneapolis, Minn.
WLB
          ak
               1000
                      a (2.5)
WNEW
          ak
               1000
WTCN
               1000
                      B (5)
                                                        -7:00 am-midnight
XEXH
                250
                               San Luis Pot., S.L.P.
1260 kcys.
                      (238.0)
CMC
                150
                               Havana, Cuba
                                                         -8:00 am-midnight
KGVO
KHSL
          ak
               1000
                                                        ---9:00 am--1:00 am
                               Missoula, Mont.
          ak
                250
                               Chico, Calif.
                      BM(5)
KOIL
               1000
          ak
                                Omaha, Nebr.
                              Port Arthur, Texas
KPAC
          ak
                500
                                                        -6:00 am-5:45 pm
KRGV
          ak
               1000
                               Weslaco, Texas
                                                        -8:00 am-11:00 pm
KUOA
          ak
               5000
                               Siloam Spgs., Ark.
Tucson, Ariz.
KVOA
               1000
                      C (5)
WHIO
          ak
               1000
                               Dayton, Ohio
                                                          -6:00 am-1:00 am
                500
                      CM(1) Springfield, Vt.
          ak
WTOC
               1000
                               Savannah, Ga.
                                                         -7:00 am-midnight
                      (236.1)
         kcys.
1270
CMHD
          dk
                250
                               Caibarien, Cuba
KGCA
                100
                      2D
                                                        -9:30 am-3:30 pm
          аk
                               Decorah, Iowa
Seattle, Wash.
               1000
KOL
          ak
                      M (5)
KVÕR
          ak
               1000
                               Colo. Springs, Colo.
                                                        -9:00 am-1:00 am
KWLC
          ak
                100
                      2D
                               Decorah, Iowa
                               Grd, Rpds., Mich.
Baltimore, Md.
WASH
          ak
                500
                      DaN
                                                          -7:00 am—midnight
WFBR
                500
                                                        -7:00 am-midnight
                      R (1)
```

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

```
WBOW
                       N (.25) Terre Haute. Ind.
           ak
                                                          -7:00 am-midnight
 WBRE
                 100
                                Wilkes-Barre, Pa.
           ak
 WBRK
                       P (.25) Pittsfield, Mass.
                 100
           7
 WCLS
WCMI
                                                          -8:00 am-9:30 pm
-6:00 am-11:30 pm
           ak
                 100
                                Joliet, Ill
                       (.25) Ashland, Ky.
S (.25) El Paso, Texas
B (.25) Buffalo, N. Y.
                        (.25)
           ak
                 100
                                                           -11:30 am-10:30 pm (Sun. only)
 WDAH
           ak
                 100
 WEBR
           ak
                 100
                                                            7:00 am-
                                                                       midnight
 WEMP
                 100
                       Ď
                                Milwaukee, Wis.
Royal Oak, Mich.
           ak
                                                            7:30 am
                                                                        88
 WEXL
                  50
           ak
                                                            -8:00 am-
                                                                       4:00 am
                       3
 WFBG
           ak
                 100
                                Altoona, Pa.
                                                            7:00 am
                                                                       -10:30 pm
                                Flint, Mich.
 WFDF
                 100
                                                            7:00 am
           ak
                                                                       -midníøht
 WGH
                 100
                       (.25)
D
                                Newport News, Va.
Wilson, N. C.
           ak
                                                            -7:00 am-
                                                                       -midnight
 WGTM
WHAT
                 100
           z
           ak
                 100
                       4
                                Philadelphia, Pa.
 WJAC
WLAK
           ak
                 100
                       3 (.25)
                                Johnstown, Pa.
                 100
                                Lakeland, Fla.
           7.
                       Laketand, Fla.
(.25) Muncie, Ind.
M Laconia, N. H.
...
Auburn, N. Y.
(.25) Plattsburg, N. Y.
M (.25) New Bedford, Mass.
MXZ Washington, D. C.
 WLBC
           ak
                 100
                                                          -7:00 am-midnight
 WLNH
                 100
           ak
 WMBO
           ak
                 100
 WMFF
           яk
                 100
 WNBH
           ak
                 100
 WOL
WRAW
           ak
                 100
           ak
                 100
                               Reading, Pa.
Knoxville, Tenn.
                                                         -7:00 am-11:00 pm
                       N(.25)
 WROL
           ak
                 100
 WSAJ
           ak
                 100
                                Grove City, Pa.
                       B (.25) Birmingham, Ala.
 WSGN
                 100
           ak
                                                          -8:00 am
                                                                       midnight
 WSJS
           ak
                 100
                       Ċ
                                Winston-Salem, N. C .-
                                                            -8:00 am
                                                                       -10:00 pm
                                                                       midnight
 WTAL
           ak
                 100
                                Tallahassee, Fla.
                                                            8:00 am-
 WTEL
           ak
                 100
                                Philadelphia, Pa.
                                                            -8 ·00 am-
                                                                       -midnight
                       (.25)
 WTJS
                 100
                               Jackson, Tenn.
Elkhart, Ind.
           ak
 WTRC
                                                         -7:00 am-10:30 pm
           ak
                 100
                       (.25)
 XEAG
XEBO
XECW
XEFW
XETB
                  10
                                Cordoba, Ver.
           z
                       . . . .
                               Irapuato, Guan.
Mexico City, D. F.
Tampico, Tams.
Torreon. Coah.
                  25
           ak
                  10
           ak
                 250
                                                         -11:00 am-10:00 pm
           ak
                 125
 XEX
                 125
                                Monterrey, N. L.
 1320 kcys.
                       (227.1)
 CMOX
                 200
                                Havana, Cuba
 KGHF
KGMB
           ak
                 500
                               Pueblo, Colo.
Honolulu, Ilawaii
                                                         -9:30 am-11:45 pm
                       С́М
          ak
                1000
                                                           1:30 am -6:00 pm
                               Idaho Falls, Idaho
Des Moines, Iowa
                 500
                       (1)
C (5)
          аk
 KRNT
                1000
          ak
                                                           -6 ⋅30 am-
                                                                      -1:00 am
 WADC
                1000
                       Č
                               Akron, Ohio
York, Pa.
                                                         -7:00 am-1:00 am
          яk
 WORK
          ak
                1000
                                                           8:00 am -10:00 pm
                               New Orleans, La.
 WSMB
          ak
               1000
1330 kcys.
                      (225.4)
CMHK
                 250
                               Cruces, Cuba
                               San Diego, Calif.
Tacoma, Wash,
Corpus Christi, Tex.
KGB
          ak
               1000
                       M
                                                           -10:00 am-4:00 am
                                                           -9:00 am-3:00 am
KMO
          ak
               1000
                       M
KRIS
                 500
          7.
                      C (5) Sioux City, Iowa
C (5) Hartford, Conn.
MN(2.5) Cincinnati, Ohio
KSCJ
               1000
          ak
                                                           -7:00 am-1:00 am
WDRC
          ak
               1000
                                                           7:00 am-midnight
 WSAI
               1000
          ak
ak
                                                           7:00 am-1:00 am
WTAO
               1000
                               Green Bay, Wis.
                      (223.7)
1340
          kcys.
CMAB
                               Pinar del Rio, Cuba
CMJL
                 75
                               Camaguey, Cuba
Dubuque, Iowa
                500
                      DP
KDTH
                      D Huron, S. Dak,
N (2.5) Butte, Mont,
Dodge City, Kans,
CX Pensacola, Fla,
KGDY
          ak
                250
                                                         -10:00 am-1:00 am
KGIR
KGNO
WCOA
               1000
          ak
          ak
                250
                                                         —8:30 am—midnight
                500
          ak
WFEA
          ak
                500
                       MN(1)
                              Manchester, N. H.
                                                          -6:30 am-1:00 am
WSPD
                               Toledo, Ohio
Jalapa, Ver,
               1000
                       B (5)
          ak
XEXD
                350
1350
                      (222.1)
         kcys.
CMCA
CMKW
                      \mathbf{x}
          ak
                450
                               Havana, Cuba
          Z
                               Santiago, Cuba
                      N (2.5) Boise, Idaho
                                                         —10:00 am—midnight
—6:30 am—1:00 am
KIDO
          ak
               1000
KWK
               1000
                      BM(5) St. Louis, Mo.
```

```
Zarephath, N. J.
New York, N. Y.
Richmond, Va.
WAWZ ak
                  500
                        1(1)
WBNX ak
WMBG ak
                1000
                 500
                        R
1360 kcys. (220.4)
                                  Ciego de Avila, Cuba
CMJH
           Лk
                   50
                                  Enid, Okla.
Long Beach, Calif.
                                                              -8:00 am-11:00 pm
                  250
KCRC
KGER
                        M
           ak
           ak
                 1000
                        N (1)
C (5)
                                 Charleston, S. C.
Syracuse, N. Y.
Chicago, Ill.
                                                                7:00 am—midnight
WCSC
                  500
           ak
WFBL
                 1000
                                                              —7:00 am—1:00 am
           ak
                                                                8:00 am-9:00 pm
                  500
                        1(1)
WGES
           ak
                                  Vicksburg, Miss.
WOBC
WSBT
                        Ď
                 1000
           ak
                                  South Bend, Ind.
                  500
                        (218.8)
1370 kcys.
                                  Flin Flon, Man.
Moncton, N. B.
Cardenas, Cuba
                  100
CFAR
CKCW
           ak
                  100
                                                              -10:00 am-10:30 pm
CMGE
           ak
                  150
                                  Astoria, Ore.
Kansas City, Mo.
Seattle, Wash.
                                                              —11:00 am—8:30 pm
—7:00 am—2:00 am
KAST
KCMO
                  100
                         D
           ak
           ak
ak
                  100
                        3
                                                              -3:00 pm-1:00 am
KEEN
                  100
                                  El Dorado, Ark
KELD
                  100
           Z.
                                                              —11:00 am—3:00 am
—7:00 am—2:00 pm
—7:30 am—midnight
                                  Bakersfield, Calif.
KERN
           ak
                  100
                                  Boone, Iowa
Fort Worth, Texas
Longview, Texas
KFGQ
KFJZ
                        D
                  100
           ak
                  100
                         (.25)
           ak
                                                                -7:00 am—ss
                  250
                         Ò
 KFRO
           ak
                                  Longview, 1 exas
Tucson, Arizona
Roswell, N. Mex.
San Angelo, Texas
Clovis, N. Mex.
Durango, Colo.
Galveston, Texas
                         (.25)
 KGAR
           ak
                  100
 KGFL
           ak
                  100
                         (.25)
 KGKL
                  100
           ak
                                                                -9:00 am-11:00 pm
 KICA
                  100
           ak
                                                              -10:00 am-11:00 pm
 KIUP
                  100
           ak
                         . . . .
 KLUF
KMAC
                                                              -9:00 am-midnight
           ak
                  100
                                                                 -8:00 am-
                                                                             9:00 pm
                         5 (.25)
                                  San Antonio, Tex.
Rapid City, S. Dak.
La Junta, Colo.
           ak
                   100
                                                                 8:00 am-midnight
 KOBH
           ak
                   100
 KOKO
KONO
                  100
           z
                                                              -7:00 am-11:00 pm
                                  San Antonio, Tex.
                        (.25)
3
           ak
                   100
                  100
50
                                  Berkeley, Calif.
Everett, Wash.
                                                                 -24 hours daily
 KRE
           ak
 KRKO
           ak
                         (,25)
M
                                  Jamestown, N. D.
                  100
 KRMC
                                  Salem, Ore.
                                                               —10:00 am—1:00 am
 KSLM
            ak
                   100
                                  Temple, Texas
Oklahoma City, Ok.
Walla Walla, Wash.
Great Bend, Kans.
 KTEM
            ak
                   250
                         D
 KTOK
            bk
                   100
                         M
                                                              -9:30 am-1:00 am
 KUJ
            ak
                   100
 KVGB
KVRS
KWYO
                   100
            Z
                                  Rock Springs, Wyo.
Sheridan, Wyo.
Albany, N. Y.
                         (.25)P
                   100
                                                              -9:00 am-
                                                                             -midnight
                         (.25)
            ak
                   100
 WABY
WAGF
WATL
WBLK
WBNY
                                                              -7:00 am-
                                                                             -midnight
            ak
                   100
                         È
                                  Dothan, Ala.
Atlanta, Ga.
Clarksburg, W. Va.
Buffalo, N. Y.
                                                                 9:00 am
                                                                             -88
                   250
                         D
            ak
                                                                             -1:00 am
                   100
                         (.25)
                                                              -7:00 am
            ak
            ak
                   100
                         2 (.25)
(.25)
(.25)
(.25)
                                                              —7:30 am—midnight
                   100
            ak
                                                              -7:00 am-10:00 pm
                                  Danville, Va.
 WBTM
                   100
            ak
                                  Baltimore, Md.
 WCBM
            ak
                   100
                                  Philadelphia, Pa.
Champaign, Ill.
                                                                -8:00 am-midnight
 WDAS
            ak
                   100
 WDWS
            ak
                   100
                         Ď
                         C(,25)
                                  Evansville, Ind.
 WEOA
            ak
                   100
                                   Hattiesburg, Miss.
                                                              -8:00 am-9:00 pm
 WFOR
            ak
                   100
                                   Fort Wayne, Ind.
 WGL
            ak
                   100
 WĞRC
                   250
                         D
                                   New Albany, Ind.
            ak
                                  Memphis, Tenn,
Calumet, Mich.
Virginia, Minn.
Jackson, Mich.
                                                              -8:00 am-11:30 pm
 WHBO
                   100
            ak
                         C(.25)
                                                              -10:30 am-6:30 pm
 WHDF
                   100
            ak
            ak
                   100
                         (.25) Jackson, Mich.
Sy Lawrence, Mass.
MSy(.25) Lowell, Mass.
                                                               —6:30 am—12:30 am
            ak
                   100
 WIBM
                                                               -7:30 am-midnight
 WLLH
            ak
                   100
                                                                 7:30 am—midnight
                   100
 WLLH
            яk
                         C (.25) Jacksonville, Fla.
                                                                 -7:30 am—midnight
                   100
 WMBR
            ak
                         Ď
                                   Wilmington, N. C.
 WMFD
            ak
                   100
                                  Decatur, Ala.
St. Paul, Minn.
                                                              -8:00 am-6:30 pm
                         D
 WMFO
            ak
                   100
                                                                 -7:00 am-1:00 am
                         (.25) St. Paul, Minn.
C (.25) Davenport, Iowa
            ak
                   100
 WMIN
                                                                 -7:00 am—1:00 am
 WOC
            ak
                   100
                                  Davenport, Iowa
Portsmouth, Ohio
Mayaguez, P. R.
Williamsport, Pa.
Augusta, Maine
Racine, Wis.
                                                                 -7:00 am-10:15 pm
 WPAY
                   109
                         (.25)
 WPRA
                   100
                         (.25)
 WRAK
            ak
                   100
                                                              -8:00 am-11:15 pm
 WRDO
            ak
                   100
                         M
                                                                -8:25 am-midnight
-7:00 am-11:15 pm
                         (.25)
            ak
                   100
 WRJN
 WSAU
WSVS
            ak
                   100
                                  Wausau, Wis.
Buffalo, N. Y.
            ak
                    50
                         2D
                                  San L. Pot., S.L.P.
                   100
 XECZ
            7.
```

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

```
KWBG
                100
                              Hutchnison, Kans.
                      4 (.25)
C
KXL
          ak
                100
                              Portland, Ore.
WACO
          ak
                100
                              Waco, Texas
                              Presque Isle, Me.
WAGM
          ak
                100
                                                       -11:00 am-7:00 pm
WAPO
          ak
                100
                      (.25)
2
                              Chattanooga, Tenn.
                                                        -7:00 am-7:00 pm
-9:00 am-10:00 pm
WAZL
          ak
                100
                              Hazleton, Pa
                      (.25)
3 (.25)
3 (.25)
WCBS
                100
                                                          -8:00 am-11:00 pm
          ak
                               Springfield, Ill.
                              Charlottesville, Va.
Rocky Mount, N. C.
Battle Creek, Mich.
WCHV
          ak
                100
                                                          -7:00 am—midnight
WEED
          ak
                100
WELL
          ak
                100
                                                         -7:30 am—midnight
WGPC
          ak
                100
                              Albany, Ga.
Cicero, Ill.
                      (.25)
WHFC
          ak
                100
                                                        —7:00 am—1:00 am
                              Wilmington, Del.
WILM
          aj
ak
                100
WJMS
                100
                              Ironwood, Mich.
                      (.25) Lexington, Ky.
(.25) B Erie, Pa.
C (.25) Springfield, Ma
(.25) Detroit, Mich.
(.25) Joplin, Mo.
WLAP
          ak
                100
WLEU
          ak
                100
WMAS
          ak
                100
                              Springfield, Mass.
Detroit, Mich.
Joplin, Mo.
                                                        —7:00 am—midnight
WMBC
                100
                                                        -7:30 am-midnight
          ak
WMBH
          ak
                100
WMBS
                      ö
          ak
                250
                               Uniontown, Pa.
                                                        -6:00 am-6:00 pm
                100
WMFJ
          ak
                              Daytona Bch., Fla.
WMSD
WNNY
WPAD
          ak
                100
                              Sheffield, Ala.
                                                        -8:00 am-11:00 pm
                      (.25) P
(.25)
                              Watertown, N. Y.
          z
                100
          ak
                100
                              Paducah, Ky.
                                                       -7:00 am-midnight
WPAR
          ak
                100
                               Parkersburg, W. V.
                      (.25)
WPRP
          z
                100
                              Ponce, Puerto Rico
                100
                               Kenora, Ont.
1430 kcys.
                     (209.7)
CMJP
          ak
                              Moron, Cuba
               1000
                      (5) B
                              Los Angeles, Cal.
North Platte, Neb.
KECA
KGNF
          ak
                                                        —10:00 am—3:00 am
                      Ď
                                                        -8:00 am-6:15 pm
          ak
               1000
                      BM(2.5) Des Moines, Iowa
KSO
          ak
                500
WBNS
                      C (1)X Columbus, Ohio
C (1) Rochester, N. Y.
C (1) Harrisburg, Pa.
          ak
                500
WHEC
          ak
                500
                                                        -7:00 am-midnight
-6:30 am-midnight
                              Harrisburg, Pa.
Memphis, Tenn.
Albany, N. Y.
WHP
          ak
                500
WMPS
          ak
                500
                      (1) B
                500
                      \hat{\mathbf{C}} (1)
WOKO
          ak
                                                       -8:00 am-1:00 am
1440 kcys.
                      (208.2)
CMOA
KDFN
                              Havana, Cuba
Casper, Wyo.
Centralia, Wash.
Houston, Texas
                150
          7.
          ak
                500
                      MP
KELA
                500
          ak
KXYZ
          ak
               1000
                      B
WBIG
          ak
               1000
                      \mathbf{c}
                              Greensboro, N. C.
                                                         -6:30 am-11:30 pm
                                                        --7:30 am--11:30 pm
--7:00 am--midnight
WCBA
                500
                              Allentown, Pa.
WMBD
          аk
               1000
                      C(5)
                              Peoria, Ill.
                      Ñà
                                                          -1:00 pm-11:30 pm
WSAN
                500
                              Allentown, Pa
XEFI
                250
                              Chihuahua, Chih.
                      (206.8)
1450 kcys.
CFCT
                500
                              Victoria, B. C.
                                                        -10:45 am-12:15 am
          ak
                              Summerside, P.E.I.
Cienfuegos, Cuba
Wolf Point, Mont.
Eureka, Calif.
                      Ė
                                                       -6:30 am-10:00 pm
                 50
CHGS
          яk
CMHM
                100
         z
KGCX
          ak
               1000
KIEM
          ak
                500
                      M(1)
                                                       -10:00 am-1:00 am
KTBS
          ak
               1000
                              Shreveport, La.
                                                        -7:30 am-1:00 am
                      B (1)
WAGA
          ak
                500
                               Atlanta, Ga
WGAR
          ak
                500
                      C (1)
                              Cleveland, Ohio
                                                          -7:00 am—midnight
                              Jersey City, N. J.
Fall River, Mass.
WHOM
                250
                                                        -7:00 am-midnight
          ak
               1000
                      M
WSAR
          ak
                100
                              Juarez, Chih.
                      (205.4)
1460 kcys.
CMKF
          z
                              Holguin, Cuba
          ak 10000
                      R (25) St. Paul, Minn.
C Washington, D. C.
KSTP
                                                        -7:00 am-2:00 am
          ak 10000
1470 kcys.
                      (204.0)
                              Spokane, Wash.
Nashville, Tenn.
          ak
               5000
KGA
WLAC
          ak 5000
                      \mathbf{c}
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1480	kcys.	(202	.6)	
KOMA WHIP	ak 5000 z 5000	C DP	Oklahoma City, Ok.	—7:30 am—1:00 am —7:30 am—5:30 pm
WKBW	ak 5000	Č,	Hammond, Ind. Buffalo, N. Y.	-8:00 am-1:00 am
1490	kcys.	(201	.2)	
KFBK WCKY	ak 5000 ak 10000	N X N	Sacramento, Calif. Covington, Ky.	-7:00 am-midnight
1500	kcys.	(199	.9)	
CJIC KAWM	ak 100 z 100		S. S. Marie, Ont. Gallup, N. Mex.	-10:00 am-10:00 pm
KBIX KBST	ak 100 z 100	M	Muskogee, Okla. Big Spring, Texas	-8:00 am-11:00 pm
KDAL	ak 100 ak 100	M C M(25)	Duluth, Minn.	
KDB KGFI	ak 100	M(.25) (.25) (.25)	Santa Barbara, Cal. Brownsville, Tex.	
KGKB KGKY	ak 100 ak 100	(.25)	Tyler, Texas Scottsbluff, Neb.	-8:30 am-11:00 pm
KNEL KNOW	ak 250 ak 100	D C	Brady, Texas Austin, Texas	-8:00 am-6:00 pm
KOTN KOVC	ak 100 ak 100	D (.25)	Pine Bluff, Ark.	—8:00 am—ss —8:00 am—10:00 pm
KPLC KPLT	ak 100	(.25) D	Valley City, N. D. Lake Charles, La. Paris, Texas	0,00 0111 10,00 p111
KPQ	z 250 ak 100N	4(.25)	Wenatchee, Wash.	
KRŇR KROD		4 (.25) P	Roseburg, Ore. El Paso, Texas Salina, Kans.	
KSAL KUTA	ak 100 z 100	(.25) P		
KVOE KXO	ak 100 ak 100	M	Santa Ana, Calif.	-Noon to 2:00 am -11:00 am-midnight
WCNW WDNC	ak 100 ak 100	1 (.25) C	Santa Ana, Calif. El Centro, Calif. Brooklyn, N. Y. Durham, N. C.	—9:00 am—midnight —7:30 am—12:30 am
WGAL	ak 100	(.25)	Lancaster, Pa. Selma, Ala.	
WHBB WHEF	ak 100	(.25)	Kosciusko, Miss. Detroit, Mich.	—7:30 am—ss —7:30 am—10:00 pm
WJBK WKAT	ak 100 z 100	(.25)	Miami Beach, Fla.	—24 hours daily
WKBB WKBV	ak 100 ak 100	(.25) (.25)	E. Dubuque, III. Richmond, Ind.	
WKBZ WKEU	ak 100 ak 100	(.25) D	Richmond, Ind. Muskegon, Mich. Griffin, Ga.	-7:00 am-10:00 pm
WMBQ	ak 100	1	Brooklyn, N. Y. Boston, Mass.	
WMEX WNBF	ak 100 ak 100	(.25) C(.25) DM	Binghamton, N. Y. New London, Conn.	
WNLC WOMI	ak 100 z 100	P (.25)	New London, Conn. Owensboro, Ky. Bristol, Tenn.	/
WOPI WRDW	ak 100 ak 100	C(.25)	Bristol, Tenn. Augusta, Ga.	—7:00 am—10:30 pm —7:00 am—9:00 pm
WRGA WRTD	ak 100 z 100	(.25) B	Rome Ga	-8:00 am-11:00 pm
WSYB WTMV	ak 100 ak 100	(.25)	Richmond, Va. Rutland, Vt.	—10:00 am—9:00 pm
WWRL	ak 100	1 (.25) (.25)	E. St. Louis, Ill. Woodside, N. Y.	-8:00 am-midnight
wwsw	ak 100	(.25)	Pittsburgh, Pa.	
1510	kcys.	(198	5.6)	
CFRC CKCR	ak 100 ak 100	F	Kingston, Ont. Waterloo, Ont.	Noon11:00 pm 8:00 am11:00 pm
1530	kcys.	(196	,	
KXBY WBRY	ak 1000 ak 1000	M	Kansas City, Mo. Waterbury, Conn.	—8:00 am—3:30 am —8:00 am—midnight
1550	kcys.	(193	5.4)	
KPMC WQXR	ak 1000 ak 1000	M	Bakersfield, Calif. New York, N. Y.	—10:00 am—2:00 am —10:00 am—9:15 pm

NORTH AMERICAN B. C. STATIONS BY LOCATIONS

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

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

NORTH	AMERICAN B. C. S	STATIONS BY LOC	ATIONS
Coeur d'Alene KGCI 1200 100	Fort Wayne WGL 1370 100 N	Kansas City KCKN 1310 100	MARYLAND
Idaho Falls	WOWO 1160 10000 B	Lawrence	Baltimore
KID 1320 500	Gary WIND 560 1000	KFKU 1220 1000 WREN 1220 1000 B	WBAL 760 2500 B WBAL 1060 10000 B
Lewiston KRLC 1390 250	WIND 560 1000 Hammond	Manhattan	WCAO 600 500 C
Nampa	WHIP 1480 5000	KSAC 580 500	WCBM 1370 100 WFBR 1270 500 R
KFXD 1200 100	WWAE 1200 100	Pittsburg	College Park
Pocatello KSEI 900 250	Indianapolis WFBM 1230 1000 C	KOAM 790 1000 N	W3XJ 1060 100
Twin Falls	WGVA 1050 1000	Salina KSAL 1500 100	Cumberland WTBO 800 250
KTFI 1240 1000	WIRE 1400 1000 R	Topeka	Frederick
ILLINOIS	Muncie WLBC 1310 100	WIBW 580 1000 C	WFMD 900 500
	New Albany	Wichita KANS 1210 100 B	Hagerstown
Bloomington WJBC 1200 100	WGRC 1370 250	KFH 1300 1000 C	WJEJ 1210 50 Salisbury
Carthage	Richmond WKBV 1500 100	KENTUCKY	WSAL 1200 250
WCAZ 1070 100	South Bend	KENTUCKT	MASSACHUSETTS
Champaign WDWS 1370 100	WFAM 1200 100 WSBT 1360 500	Ashland	
Chicago	Terre Haute	WCMI 1310 100	Boston WAAB 1410 500M
WAAF 920 1000	WBOW 1310 100 N	Covington WCKY 1490 10000 N	WBZ 990 50000 B
WBBM 770 50000 C WCBD 1080 5000	West Lafayette	Lexington	WCOP 1120 500 WEEI 590 1000 C
WCFL 970 5000 N	WBAA 890 500	WLAP 1420 100	WHDH 830 1000
WCRW 1210 100 WEDC 1210 100	IOWA	Louisville WAVE 940 1000 N	WMEX 1500 100 WNAC 1230 1000 R
WENR 870 50000 B	Ames	WHAS 820 50000 G	WORL 920 500
WGES 1360 500 WGN 720 50000M	WOI 640 5000	Middlesboro WLMU 1210 100	Fall River WSAR 1450 1000M
WJJD 1130 20000	Boone KFGO 1370 100	Owensboro	Greenfield
WLS 870 50000 B WMAQ 670 50000 R	Cedar Rapids	WOMI 1500 100	WHAI 1210 250 Lawrence
WMBI 1080 5000 WSBC 1210 100	WMT 600 1000 B	Paducah WPAD 1420 100	WLAW 680 1000
Cicero	Davenport WOC 1370 100 C	WPAD 1420 100	WLLH 1370 100 Lowell
WHFC 1420 100	Decorah	LOUISIANA	WLLH 1370 100M
Decatur WJBL 1200 100	KGCA 1270 100 KWLC 1270 100	Alexandria	New Bedford WNBH 1310 100M
East Dubuque		KALB 1210 100	Pittsfield
WKBB 1500 100	Des Moines KRNT 1320 1000 C	Baton Rouge	WBRK 1310 100 Springfield
East St. Louis WTMV 1500 100	KSO 1430 500 B WHO 1000 50000 R	WJBO 1120 500 B	WBZA 990 1000 B
Harrisburg	Dubuque	Lafayette KVOL 1310 100	WMAS 1420 100 C WSPR 1140 500M
WEBQ 1210 100	KDTH 1340 500	Lake Charles	Worcester WORC 1280 500 C
Joliet WCLS 1310 100	Iowa City WSUI 880 500	KPLC 1500 100	WTAG 580 1000 R
Peoria 100	Marshalltown	Monroe KMLB 1200 100	MICHIGAN
WMBD 1440 1000 C	KFJB 1200 100	New Orleans	
Quincy WTAD 900 1000	Mason City KGLO 1210 100 C	WBNO 1200 100 WDSU 1250 1000 B	Battle Creek WELL 1420 100
Rockford	Shenandoah	WJBW 1200 100	Bay City
WROK 1410 500	KFNF 890 500 KMA 930 1000	WSMB 1320 1000 R WWL 850 10000 C	WBCM 1410 500
Rock Island WHBF 1210 100	I Sioux City	Shreveport	Calumet WHDF 1370 100
Springfield	KSCJ 1330 1000 C KTRI 1420 100	KRMD 1310 100 KTBS 1450 1000 N	Detroit
WCBS 1420 100 WTAX 1210 100	K1K1 1420 100	KWKH 1100 10000 C	WJBK 1500 100 WJR 750 50000 C
Tuscola	KANSAS	MAKNE	WMBC 1420 100
WDZ 1020 250 Urbana	Abilene	MAINE	WWJ 920 5000 R WXYZ 1240 1000 B
WILL 580 1000	KFBI 1050 5000	Augusta	East Lansing
INDIANA	Coffeyville KGGF 1010 1000M	WRDO 1370 100M Bangor	WKAR 850 1000 Flint
	Dodge City	WABI 1200 100	WFDF 1310 100
Anderson WHBU 1210 100	KGNO 1340 250 Garden City	WLBZ 620 500 C	Grand Rapids WASH 1270 500 N
Elkhart WTRC 1310 100	KIUL 1210 100 Great Bend	Portland WCSH 940 1000 R	WOOD 1270 500 N
Evansville	KVGB 1370 100	WGAN 640 500	Ironwood WJMS 1420 100
WEOA 1370 100 C WGBF 630 500 N	Hutchinson KWBG 1420 100	Presque Isle WAGM 1420 100	Jackson WIBM 1370 100
M. ODE 620 200 IA	KWDG 1420 100	WAGM 1420 100	MIDM 13/0 100

HORITI	MIVIERTORITY B. C.	STITTIONS BY BEE	11110110
Valorena	Kansas City	Atlantic City	WBOO 860 50000
Kalamazoo WKZO 590 1000 B	KCMO 1370 100	WPG 1100 5000 C	WEAF 660 50000 R
··· ·	KMBC 950 1000 C	Bridgeton	WEVD 1390 1000
Lansing WJIM 1210 100	KXBY 1530 1000	WSNJ 1210 100	WFAB 1300 1000
	WDAF 610 1000 R	Camden	WHN 1010 1000
Lapeer WMPC 1200 100	WHB 860 1000M	WCAM 1280 500	WINS 1180 1000 WJZ 760 50000 B
	Poplar Bluff KPBM 1310 100	Jersey City	WJZ 760 50000 B WMCA 570 1000
Marquette WBEO 1310 100	St. Joseph	WAAT 940 500	WNEW 1250 1000
Muskegon	KFEQ 680 2500	WHOM 1450 250	WNYC 810 1000
WKBZ 1500 100	St. Louis	Newark	WOV 1130 1000
Royal Oak	KFUO 550 500	WHBI 1250 1000	WQXR 1550 1000
WEXL 1310 50	KMOX 1090 50000 C KSD 550 1000 R	WOR 710 50000M	Olean
Saginaw	KSD 550 1000 R KWK 1350 1000 B	Red Bank	WHDL 1400 250
WHAL 950 500	WEW 760 1000	WBRB 1210 100	Plattsburg
	WIL 1200 100	Trenton	WMFF 1310 100
MINNESOTA	Springfield	WTNJ 1280 500	Rochester
	KGBX 1230 500 N KWTO 560 5000	Whippany W3XDD 50000	WHAM 1150 50000 B WHEC 1430 500 C
Albert Lea	KWTO 560 5000		WSAY 1210 100
KATE 1420 250	MONTANA	Zarephath WAWZ 1350 500	Saranac Lake
Duluth		WAWZ 1330 300	WNBZ 1290 100
KDAL 1500 100 C WEBC 1290 1000 N	Billings	NEW MEXICO	Schenectady
Fergus Falls	KGHL 780 1000 N		WGY 790 50000 R
KGDE 1200 100	Butte KGIR 1340 1000 N	Albuquerque	Syracuse
Hibbing	Great Falls	KGGM 1230 1000	WFBL 1360 1000 C
WMFG 1210 100	KFBB 1280 1000 C	KOB 1180 10000 N	WSYR 570 1000 B
Minneapolis WCCO 810 50000 C	Helena	Carlsbad KLAH 1210 100	Troy
WCCO 810 50000 C WDGY 1180 1000 C	KPFA 1210 100	i i	WHAŽ 1300 1000
WLB 1250 1000	Kalispell	Clovis KICA 1370 100	Utica
WTCN 1250 1000 B	KGEZ 1310 100 Lewistown	Gallup	WIBX 1200 100 C
Moorhead KVOX 1310 100	KDNC 1200 100	KAWM 1500 100	Watertown
Northfield	Missoula	Roswell	WNNY 1420 100
WCAL 1250 1000	KGVO 1260 1000 C	KGFL 1370 100	White Plains WFAS 1210 100
Rochester	Wolf Point KGCX 1450 1000	Santa Fe KRQA 1310 100	
KROC 1310 100	KGGX 1450 1000	1010 100	Woodside WWRL 1500 100
St. Cloud KFAM 1420 100	NEBRASKA	NEW YORK	WWRD 1500 100
St. Paul	01 0 1		NORTH CAROLINA
KSTP 1460 10000 R	Clay Center KMMJ 740 1000	Albany	A -1
WMIN 1370 100	Kearney	WABY 1370 100 WOKO 1430 500 C	Asheville WWNC 570 1000 N
Virginia WHLB 1370 100 C	KGFW 1310 100	Auburn	Charlotte
Winona	Lincoln	WMBO 1310 100	WBT 1080 50000 C
KWNO 1200 250	KFAB 770 10000 C KFOR 1210 100 C	Binghamton	WSOC 1210 100 N
MICCICCIPPI	Norfolk	WNBF 1500 100 C Brooklyn	Durham WDNC 1500 100 C
MISSISSIPPI	WJAG 1060 1000	WARD 1400 500	Greensboro
Grenada	North Platte	WBBC 1400 500	WBIG 1440 1000 C
WGRM 1210 100	KGNF 1430 1000 Omaha	WBBR 1300 1000	High Point
Gulfport	KOIL 1260 1000 B	WCNW 1500 100 WLTH 1400 500	WMFR 1200 100
WGCM 1210 100 Hattiesburg	WAAW 660 500	WLTH 1400 500 WMBO 1500 100	Kinston WFTC 1200 100
WFOR 1370 100	WOW 590 1000 R	WVFW 1400 500	Raleigh
Jackson	Scottsbluff KGKY 1500 100	Buffalo	WPTF 680 1000 N
WJDX 1270 1000 R	KGKY 1500 100	WBEN 900 1000 R WBNY 1370 100	Rocky Mount WEED 1420 100
Kosciusko WHEF 1500 100	NEVADA	WEBR 1310 100 B	Wilmington
Laurel		WGR 550 1000 C	WMFD 1370 100
WAML 1310 100	Reno KOH 1380 500 C	WKBW 1480 5000 C	Wilson WGTM 1310 100
Meridian	KON 1380 500 C	WSVS 1370 50 Canton	WGTM 1310 100 Winston-Salem
WCOC 880 500 C Vicksburg	NEW HAMPSHIRE	WCAD 1220 500	WAIR 1250 250
WQBC 1360 1000		Elmira	WSJS 1310 100 C
	Laconia WLNH 1310 100M	WESG 850 1000 C	NORTH DAVOTA
MISSOURI	Manchester 100M	Freeport WGBB 1210 100	NORTH DAKOTA
Cane Girardeau	WFEA 1340 500 N	Jamestown	Bismarck
Cape Girardeau KFVS 1210 100	Portsmouth	WJTN 1210 100 B	KFYR 550 1000 N
Columbia	WHEB 740 250	Newburgh	Devils Lake
KFRU 630 500	MOW IPPORT	WGNY 1210 100	KDLR 1210 100
Jefferson City KWOS 1310 100	NEW JERSEY	New York WABC 860 50000 C	Fargo WDAY 940 1000 N
Joplin 100	Asbury Park	WBIL 1100 5000	Grand Forks
WMBH 1420 100	WCAP 1280 500	WBNX 1350 1000	KFJM 1410 500

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

NORTH	AMERICAN B. C. C	TATIONS BI BOO	11110110
Palestine KNET 1420 100	WRTD 1500 100 B WRVA 1110 5000 C	Manitowoc WOMT 1210 100	Winnipeg CJRC 630 500 F
Pampa KPDN 1310 100	Roanoke WDBJ 930 1000 C	Milwaukee WEMP 1310 100 WISN 1120 250 C	OKY 910 15000 F NEW BRUNSWICK
Paris KPLT 1500 250	WASHINGTON	WTMJ 620 1000 N Poynette	Fredericton
Pecos KIUN 1420 100	Aberdeen KXRO 1310 100M	WIBU 1210 100 Racine	CFNB 550 500 F Moncton
Port Arthur KPAC 1260 500 San Angelo	Bellingham KVOS 1200 100M	WRJN 1370 100 Sheboygan	CKCW 1370 100 F St. John
KGKL 1370 100 San Antonio	Centralia KELA 1440 500M	WHBL 1300 250 Stevens Point	CHSJ 1120 500 F
KABC 1420 100 KMAC 1370 100	Everett	WLBL 900 5000 Superior	N. W. TERRITORY
KONO 1370 100 KTSA 550 1000 C	KRKO 1370 50 Longview KWLK 780 250	WDSM 1200 100 Wausau	Aklavik CJCU 1210 50
WOAI 1190 50000 N Sherman	Olympia	WSAU 1370 100	NOVA SCOTIA
KRRV 1310 250 Temple	KGY 1210 100M Pullman KWSC 1220 1000	WYOMING	Glace Bay
KTEM 1370 250 Texarkana	Seattle KEEN 1370 100	Casper KDFN 1440 500	VAS 685 2000 Halifax
KCMC 1420 100 Tyler	KIRO 710 1000 C KIR 970 5000 B	Rock Springs KVRS 1370 100	CHNS 930 1000 F Sydney
KGKB 1500 100 Waco	KOL 1270 1000M KOMO 920 1000 R	Sheridan KWYO 1370 100	CJCB 1240 1000 F Wolfville
WACO 1420 100 C Weslaco	KRSC 1120 250 KTW 1220 1000	BAHAMAS	CKIC 1010 50 Yarmouth
KRGV 1260 1000 N Wichita Falls	KXA 760 250 Spokane	Nassau	CJLS 1310 100
KGKO 570 250 C	KFIO 1120 100 KFPY 890 1000 C	ZNS 540 400	ONTARIO
UTAH	KGA 1470 5000 B KHO 590 1000 R	CANADA	Brantford CKPC 930 100 F
Cedar City KSUB 1310 100	Tacoma KMO 1330 1000M	ALBERTA	Chatham CFCO 630 100 F
Ogden KLO 1400 500 B	KVI 570 1000 C Walla Walla	Calgary CFAC 930 1000 <u>F</u>	Cobalt CKMC 1210 50 Fort William
Price KEUB 1420 100	KUJ 1370 100 Wenatchee	CFCN 1030 10000 F CJCJ 690 100 F	CKPR 730 100 F
Salt Lake City KDYL 1290 1000 R KSL 1130 50000 C	KPO 1500 100M Yakima	Edmonton CFRN 960 100 F	CHML 1010 100 F CKOC 1120 500 F
KSL 1130 50000 C KUTA 1500 100	WEST VIRGINIA	CJCA 730 1000 F CKUA 580 500 F Grande Prairie	Kenora 1420 100
VERMONT		CFGP 1200 100 . Lethbridge	Kingston CFRC 1510 100 F
Burlington WCAX 1200 100	Bluefield WHIS 1410 500 Charleston	CJOC 950 100 F	London CFPL 730 100 F
Rutland WSYB 1500 100	WCHS 580 500 C	BRIT. COLUMBIA	North Bay CFCH 930 100 F
St. Albans WQDM 1390 1000	WBLK 1370 100 Fairmont	Chilliwack CHWK 780 100 F	GJKL 1310 100 CKGB 1420 100
Springfield WNBX 1260 500 C	WMMN 890 500 C	Kamloops CFJC 880 1000 F	Ottawa CBO 880 1000 F
Waterbury WDEV 550 500	WSAZ 1190 1000 Parkersburg	Kelowna CKOV 630 100 F	CKCO 1010 100 F Owen Sound
VIRGINIA	WPAR 1420 100 C Wheeling	Prince Rupert CFPR 580 50	Prescott
Charlottesville	WWVA 1160 5000 C	Trail CJAT 910 1000 F	CFLC 930 100 St. Catharines CKTB 1200 100 F
WCHV 1420 100 Danville	WISCONSIN	Vancouver CBR 1100 5000 F	Sault Ste. Marie
WBTM 1370 100 Harrisonburg	Eau Claire WEAU 1050 1000	CJOR 600 500 CKCD 1010 100	CJIC 1500 100 Stratford
WSVA 550 500 Lynchburg	Fond du Lac KFIZ 1420 100	CKFC 1410 50 CKMO 1410 100	CJCS 1210 50 Sudbury
WLVA 1200 100	Green Bay WHBY 1200 100	CKWX 1010 100 Victoria	CKSO 780 1000 F
Newport News WGH 1310 100	WTAQ 1330 1000 C Janesville	CFCT 1450 500	Toronto CBL 840 50000 CFRB 690 10000 C
Norfolk WTAR 780 1000 N	WCLO 1200 100 LaCrosse	MANITOBA	CKCL 580 100 F
Richmond WBBL 1210 100	WKBH 1380 1000 C Madison	Brandon CKX 1120 1000 F	CRCY 960 100 F
WMBG 1350 500 R WRNL 880 500	WHA 940 5000 WIBA 1280 1000 N	Flin Flon CFAR 1370 100	Waterloo CKCR 1510 100

Windsor	CMJI 1130 150	GUATEMALA	XEMX 1280 100
CBW 600 500 F	CMJO 1180 50	g . 1 g;	XENC 860 50
CKLW 1030 5000M	Cienfuegos	Guatemala City TGW 1230 10000	XEW 890 50000 XEXE 1270 17
Wingham CKNX 1200 100	CMHJ 1160 175 CMHM 1450 100	1 13 11 1250 10000	XEYO 940 500
CKNA 1200 100	CMHW 820 100	MEXICO	Tacuba
PRINCE EDWARD	CMHX 760 200	AGUASCALIENTES	XEFA 1180 500
ISLAND	Cruces		DURANGO
Charlottetown	CMHK 1330 250	Aguascalientes XEBI 1000 25	DURANGO
CFCY 630 1000 F	Havana	XEXC 810 350	Durango
CHCK 1310 50	CMBC 630 10000 CMBD 1170 500		XEE 1210 50
Summerside	CMBD 1170 500 CMBF 770 10000	BAJA CALIFORNIA	CHANATHATO
CHGS 1450 50 F	CMBL 750	Mexicali	GUANAJUATO
OUEBEC	CMBQ 680 5000	XEAA 750 200	Irapuato
OEBEC	CMBS 770 150 CMBX 1070 500	XEAO 660 250	XEBO 1310 25
Chicoutimi	CMBY 970 150	XECL 1100 1700 Rosarito Beach	Leon
CRCS 1120 100 F	CMBZ 1000 500	XERB 730 500	XEKL 1240 500
Hull	CMC 1260 150 CMCA 1350 450	Tijuana	JALISCO
CKCH 1210 100 F	CMCA 1350 450 CMCB 640 150	XEAC 980 5000	
Montreal CBF 910 50000 N	CMCD 950 250	XEBG 820 1000 XEC 1150 100	Guadalajara
CBM 1050 5000 F	CMCF 810 600	XELO 670 50000	XEAD 1060 125 XED 1160 2500
CFCF 600 500 B	CMCG 680 1000	XEMO 860 5000	
CHLP 1120 100 F CKAC 730 5000 C	CMCH 1110 5000 CMCJ 1110 500	XEOK 760 2500	Guzman XEBA 1080 20
New Carlisle	CMCJ 1110 500 CMCK 1030	CHIHUAHUA	
CHNC 960 1000 F	CMCL 730 10000		MICHOACAN
Quebec	CMCM 850 CMCO 1200 250	Chihuahua	Morelia
CHRC 580 100 CKCV 1310 100 F	CMCO 1200 250 CMCQ 1410 250	XEFI 1440 250	XEI 1370 125
CRCK 950 1000 F	CMCŬ 1280 500	Juarez XEFV 1210 100	
Rimouski	CMCW 1140 500	XEF 1450 100	NUEVO LEON
CJBR 1030 1000 F Sherbrooke	CMCX 1380 150 CMCY 570 5000	XEJ 1020 1000	Monterrey
CHLT 1210 100	CMK 720 3000	XEP 1160 500	XEFB 870 200
Three Rivers	CMOA 1440 150	Parral XEAT 1210 250	XEFJ 1230 100
CHLN 1420 100	CMOX 1320 200	ABAT 1210 250	XEG 1220 250 XEH 720 250
SASKATCHEWAN	CMQ 600 25000 CMW 880 1400	COAHUILA	XET 690 5000
	CMX 920 1000	Piedras Negras	XEX 1310 125
Moose Jaw CHAB 1200 100 F	630 10000	XEMU 580	PUEBLA
CHAB 1200 100 F Prince Albert	Holguin CMFK 1460 250	XEPN 730 100000	TOBBER
CKBI 1210 100 F	CMKO 1280	Sabinas XEBX 640 250	Puebla
Regina CJRM 540 1000 F	Manzanillo	Saltillo	XETH 1210 100
CKCK 1010 1000 F	CMKM 1120 200	XEAS 1160 50	SAN LUIS POTOSI
Saskatoon	Matanzas	XELA 1240 50 Torreon	g I : p : :
CFQC 840 1000 F	CMGC 1400 150 CMGF 1120 250	XETB 1310 125	San Luis Potosi XECZ 1370 100
Yorkton	CMGH 790 500	Villa Acuna	XEXH 1250 250
CJGX 1390 100 F	Moron	XERA 840 350000	
COSTA RICA	CMJP 1430 75	D. F.	SINALOA
_	Pinar del Rio CMAB 1340	Ataonnataalaa	Mazatlan
San Jose TIEP 880 1000		Atzcapotzalco XEMG 1060 100	XEBL 1220 50
TIPG 625 2000	Sagua la Grande CMHA 1070 50	Chapultepec	SONORA
OUD.	Sancti Spiritus	XERO 670	
CUBA	CMHB 1240 50	Gra. Anaya	Hermosillo XEBH 930 500
Caibarien	Santa Clara	XEDA 1220 200	
CMHD 1270 250	CMHI 1210 150 Santiago	Mexico City XEAL 660 1000	Nogales XEAF 990 750
Camaguey	CMKC 1250 150	XEAL 660 1000 XEAY 1240 100	Obregon
CMJA 1010 300 CMJC 1390 150	CMKD 1050 250	XEB 1030 10000	XEAP 1240 50
CMJE 1220 50	CMKG 1160 CMKR 1400 100	XEBS 1240 200	TAMAULIPAS
CMJF 1150 200	CMKW 1350	XEBZ 1160 100 XECW 1310 10	
CMJK 780 250 CMJL 1340 75	CMKX 1190	XEDP 1080 500	Matamoros XEAM 750 25
CMJX 830 500	DOMINICAN	XEFO 930 5000	
Cardenas	REPUBLIC	XEJP 1130 100 XEJW 870	Nuevo Laredo XEBK 1000 60
CMGE 1370 150	REPUBLIC	XEK 990 100	XEDF 810 75
Ciego de Avila	Trujillo	XEL 780 1000	XEFE 980 150
CMJH 1360 50	HIX 800 700	XELZ 1370 100	XENT 910 150000
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Reynosa XEAW 960 50000 Tampico XEFW 1310 250 XES 990 250	Jalapa XEXB 1270 50 XEXD 1340 350 Minatitlan XEDW 1150 20	YUCATAN Merida XEBJ 1160 20 XEFC 550 100 XEZ 630 500	VOAS 940 100 VOCM 1006 200 VOGY 840 400 VONF 1195 500 VOWR 681 500
VERACRUZ	Veracruz	NEWFOUNDLAND	
Cordoba XEAG 1310 10	XETF 1220 30 XEU 1010 250	St. John's VOAC 1065 40	

Special DX Calendar

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

DX Tips Periods

Mon., 2115-2130, CJCJ, 690 kcs.

Tues., 1735-1800, W2XAF, 9530 kcs, and W2XAD, 15330 kcs.

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

Thur., 0230-0245, KGMB, 1320 kcs. Sat., 0015-0030, W8XK, 6140 kcs.

0300-0345, KDB, 1500. 0230-0245, KLS, 1280 kcs.

"Programs of the Week"

The IDA "Programs of the Week", broadcast each Sunday morning, are full-hour programs, full of surprises, thrills, and laughs. Don't miss any of them. (CHWK requires ten cents for a verification.)

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

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

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

Feb. 13 (Sun.), 0100-0200, YSS, San Salvador, E. S., 640 kcs, and YSD, San Salvador, E. S., 7894 kcs.

Feb. 20 (Sun.), 0300-0400, KECA, Los Angeles, Calif., 1430 kcs.

Feb. 27 (Sun.), 0330-0400, KGU, 750 kcs.

Mar. 13 (Sun.), 0300-0400, WCKY, 1490 kcs.

Mar. 27 (Sun.), 0300-0400, KFOR, 1210 kcs.

Special Broadcasts

Jan. 31, 1600-1700, HRD, La Ceiba, Honduras, 6235 kcs. (IDA).

Feb. 5, 0245-0400, CHWK, 780 kcs (UDXC).

Feb. 8, 0510-0530, KAST, 1370 kcs (UDXC).

Feb. 12, 2330-2430, COGF, Havana, Cuba, 11805 kcs. (IDA).

Mar. 5, 0245-0400, CHWK, 780 kcs (UDXC).

Apr. 2, 0245-0400, CHWK, 780 kcs (UDXC).

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

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

TIME CONVERTER

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

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25c

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Case Fig. Case	_	1		2			,	
CBL 840 5000	1	CBF 910 50000 Montreal P. O.		CJAT 910	1000		CKSO 780	1000
Toronto, Ont. Rimouski, P. Q. CLCA 738 1000 CMB 130 500 CMB 130 CMB 13		CBL 840 50000			1000			100
Montreal, P. Q. Edmonton, Alta. Edmonton, Alta. CBO S8							St. Catharines, O	nt.
CEO 880 1000			İ		1000			500
CER 1100 5000 Vancouver, B. C.		CBO 880 1000	\vdash		1000			100
Vancouver, B. C. Calgary, Aita. Brandon, Man. CKW 600 500 CLCS 1210 50 CKY 750 1500 CKY 750 CKY 750 CKY 750 CKY 750 1500 CKY 750	-							
CEW 606 500 CJCS 1210 50 CKY 750 1500 Winnipes, Man. CFAC 330 1000 CJCU 1210 50 CJ					100			1000
CFAC 330 1000 CAIGNTY, AIRA CFAR 1370 100 CAIGNTY, AIRA CFAR 1370 100 CAIGNTY, AIRA	_			CJCS 1210	50		CKY 760	15000
Calgary, Alta. CFAR 1370 100 Film Flon, Man. CJGX 1389 100 CMBC 539 10000 CJGX 1389 100 CMBC 539 10000 CMBC 539 1000 CMB						<u> </u>		
CFAR 1370 100 Filin Flon, Man. CFCF 500 S00 CJIC 1500 100 CMBC 130 Elavana, Cuba Elavana,			1		50	1		ıba.
CFCF 500 SI Si Si Si Si Si Si Si					100		CMBC 630	
Montreal, Que. S. Ste. Marie, Ont. Havana, Cuba CFCH 330 100 CJKL 310 100 Havana, Cuba CFCN 1030 10000 CJLS 1310 100 Havana, Cuba CFCN 1030 CJCS 1310 CMBF 770 18000 CJLS 1310 CMBF 750 2500 CJCS 1310 CMBF 770 18000 CJCS CJCC 595 100 CMBR 770 15000 CMBR 770 CMBF 770						<u> </u>		500
CFCH 330 100 North Bay, Ont. CAMBF 770 1000 CAIGATY, Alta. CFC 1030 100 CAIGATY, Alta. CFC 1310 100 CAIGATY, Alta. CFC 1450 500 Varmouth, N S. CAMBC 750 2500 CABADAM, Ont. CAMBC 760 CAMBC 76			1					500
CFCN				CJKL 1310				10000
Caigary, Alta. CFC S30 100 CJC S50 CJOR CJOR S50 CJOR CJOR S50 CJOR			ļ			ļ		
CFCC 530 100 Chatham, Ont. CFCT 1450 500 Victoria, B. C. CFCT 1450 500 Victoria, B. C. CFCY 630 1000 Charlottetown, P.E.I. CFGP 1200 100 Grande Prairie, Alta. CFGP 1200 100 Grande Prairie, Alta. CFJC 830 1000 Kamloops, B. C. CFLC 330 100 Prescott, Ont. CFRN 550 500 Fredericton, N. B. CFPL 730 100 London, Ont. CFPR 580 500 Prince Rupert, B. C. CFC 840 1000 Saskatoon, Sask. CFRC 580 1000 CKCC 1510 CKCC 1010 CKCC 1310 CKCC 13					100			2500
CFCT 1450 500 Victoria, B. C. Vancouver, B. C. CHSY 1070 S00 ChmsX 1070 ChmsX 10					100		CMBQ 680	5000
Victoria, B. C. CFCY S30 1000 CJRC S30 500 CMEX 1070 500 CJRC CJRC S30 500 CMEX 1070 500 CJRC S30 500 CMEX 1070 CMEX 1070 500 CMEX 1070								450
CFCY \$30 1000 CJRC \$30 500 CMBX 1070 500 CMBY 970 150 CM	1		1		500			150
CFGP 1200 100					500		CMBX 1070	500
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CFJC	1	Grande Prairie, Alta.			1000			150
CFLC 930 100 Prescott, Ont. CKB 1220 100 Prince Albert, Sask. CKCD 1010 100 CMCC 1350 450 Havana, Cuba CKCH 1210 100 CMCC 640 150 CKCK 1210 100 CMCC 640 150 CKCK 1210 100 CMCC 640 150 CKCK 1210 100 CMCC 650 100 CMCC 650 100 CKCC 1310 CMCC 650 100 CMCC 1310 C				CKAC 730	5000		CMBZ 1008	500
Prescott, Ont. CFNB 550 500 CKCD 1010 100 CMCA 1350 450	-		-		100			150
CFNB 550 500 Fredericton, N. B. CFQL 730 100 CKCH 1210 100 CKCH 120 100 CKCH 1310 130 CKCH 1310 CKCH 13			L					130
CFPL 730 100				CKCD 1010				450
London, Ont. Hull, Que. CKCK 1010 1000 CKCCD 950 250 Prince Rupert, B. C. CKCL 580 1000 Regina, Sask. CKCL 580 1000 CKCC 680 1000 CKCC 1010 100 CMCG 680 1000 CKCC 1510 100 CMCK 1030 10000 1100 CMCK 1030 10000 CMCC 150	-		\vdash		100			150
Prince Rupert, B. C. Regina, Sask. Havana, Cuba CKCL 580 100 CKCL 580 100 CKCF 810 500 CKCG 500 CKCG 510 CMCH 1110 5000 CKCG 510 CKCG 510 CMCH 1110 5000 CKCG 510 CKCG 510 CMCH 1110 5000 CKCG 510 CKCG 5110 CMCH 1110 5000 CKCG 1310 CMCC 1110 500 CKCG 1310 CMCK				Hull, Que.			Havana, Cuba	
CFQC 840 1000 CKCL 580 100 CMCF 810 600 Saskatoon, Sask. Toronto, Ont. Toronto, Ont. CFRB 690 10000 CKCO 1010 100 CMCG 680 1000 CKCC 1510 CKCR 1510 100 CKCR 1510 100 CKCR 1510 CKCR 1					1000	1		250
Saskatoon, Sask. CKCO 1010 100 CKCG 680 1000 Toronto, Ont. CKCO 1010 100 CKCG 680 1000 CKCG 680 1000 CKCG 680 1000 CKCG 1510 100 CKCG 1510 100 CKCG 1110 5000 Havana, Cuba CMCJ 1110 5000 CKCV 1310 100 CMCJ 1110 500 CMCK 1310 CMCJ 1200 CMCK 1310 CMCJ 1200 CMC		CFQC 840 1000			100	 		600
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CFRN 960 100 Edmonton, Alta. Cube		CFRC 1510 100			100			5000
Edmonton, Alta. Quebec, Que. Havana, Cuba CKCW 1370 100 Moose Jaw, Sask. CKCK 1310 50 CKFC 1410 50 Havana, Cuba CMCK 1310 50 CKGB 1420 100 Mavana, Cuba CMCK 850 Moncton, N. B. CKFC 1410 50 CMCM 850 Mavana, Cuba CMCK 850 CMCM 850 Mavana, Cuba CMCM 1200 CMCM		1						
CHAB 1200 10	1				100			500
CHCK 1310				CKCW 1370	100			1.,
Charlottetown, P.E.J. Vancouver, B. C. Havana, Cuba CKGB 1420 100 EAVANA, Cuba CKGB 1420 100 EAVANA, Cuba EAVANA, Cub					50			10000
Summerside, P.E.I. North Bay, Ont. Havana, Cuba					30			10000
CHLN 1420				CKGB 1420	100			
Three Rivers, P. Q.					50			250
Montreal, Que. Windsor, Ont. Havana, Cuba CKMC 1210 50 CMCU 1280 500		Three Rivers, P. Q.		Wolfville, N. S.		1		230
CHLT 1210 100 CKMC 1210 50 CMCU 1280 500 Havana, Cuba CKMC 1410 CK					5000			250
Sherbrooke, P. Q. Cobait, Ont. Havana, Cuba CMCW 110 500 CMCW 110 500 Hawlinton, Ont. CKNX 1200 100 CMCX 1380 150 Havana, Cuba CMCX 1380 150 CMCY 570 5000 Hallfax, N. S. Hawlinton, Ont. Havana, Cuba CMCY 570 5000		CHLT 1210 100			50			500
Hamilton, Ont. Vancouver, B. C. Havana, Cuba								
CHNC 960 1000 CKNX 1200 100 CMCX 1380 150 New Carlisle, Que. CHNS 930 1000 CKOC 1120 500 CMCY 570 5000 Havana, Cuba CMCY 570 5000 Hawana, Cuba CMCY 570 5000 Hawana, Cuba CMCY 570 5000 Hawana, Cuba CMCY 630 100 CMGC 1400 150 CMGC 1400 150 CMGC 1400 CMGE 1370 150 CMGE 1370 150 CMGK 1300 CMGE 1370 150 CMGK 1300 CMGF 1370 150 CMGF 1370 CMGF 1370 150 CMGF 1370 15					100			500
CHNS 930 1000 CKOC 1120 500 CMCY 570 5000 Haulifax, N. S. CHRC 580 100 CKOV 630 100 CKOV 630 100 CMGC 1400 150 Matanzas, Cuba CHSJ 1120 500 CKPC 930 100 CMGE 1370 150 CSt. John, N. B. Brantford, Ont. Cardenas, Cuba CMGF 1120 250 CMCY 570 5000 CMCY 570 5700 CMCY 570 5000 CMCY 570 5700 CMCY 5700		CHNC 960 1000	—	CKNX 1200	100		CMCX 1380	150
Halifax, N. S.	-				5nn			
CHRC 580 100					500			5000
CHSJ 1120 500 CKPC 930 100 CMGE 1370 150 St. John, N. B. CKPC 930 Cardenas, Cuba CHWK 780 100 CKPR 730 100 CMGF 1120 250		CHRC 580 100		CKOV 630	100		CMGC 1400	150
St. John, N. B. Brantford, Ont. Cardenas, Cuba CMGF 1120 250	-				100			150
CHWK 780 100 CKPR 730 100 CMGF 1120 250		St. John, N. B.			100			730
Chiniwack, B. C. Fort William, Ont. Matanzas, Cuba					100		CMGF 1120	250
	Ь	Chillwack, B. C.		Fort william, Ont.		L	Matanzas, Cuba	

	CMGH 790 500 Matanzas, Cuba		CRCK 950 Quebec, Que.	1000		KECA 1430 1000 Los Angeles, Calif.
	CMHA 1070 50		CRCS 1120	100		KEEN 1370 100
	Sagua la Grande, Cuba CMHB 1240 50	-	Chicoutimi, Que.	5000		Seattle, Wash. KEHE 780 1000
	Sancti Spiritus, Cuba		Toronto, Ont.			Los Angeles, Callf.
	CMHD 1270 250 Caibarien, Cuba		CRCY 960 Toronto, Ont.	100		KELA 1440 500 Centralia, Wash.
	CMHI 1210 150		HIX 800	700		KELD 1370 100
	Santa Clara, Cuba CMHJ 1160 175		Trujillo, D. R.	100	· .	El Dorado, Ark.
	CMHJ 1160 175 Cienfuegos, Cuba		KABC 1420 San Antonio, Texas			KELO 1200 100 Sioux Falls, S. Dak.
	CMHK 1330 250		KABR 1420	100		KERN 1370 100
	Cruces, Cuba CMHM 1450 100		Aberdeen, S. Dak, KADA 1200	100	-	Bakersfield, Calif. KEUB 1420 100
	Cienfuegos, Cuba		Ada, Okla.			Price, Utah
	CMHW 820 100 Cienfuegos, Cuba		KALB 1210 Alexandria, La.	100		KEX 1180 5000 Portland, Ore.
	CMHX 760 200		KALE 1300	500		KFAB 770 10000
	Cienfuegos, Cuba CMJA 1010 300		Portland, Ore. KAND 1310	100		Lincoln, Neb. KFAC 1300 1000
	CMJA 1010 300 Camaguey, Cuba		Corsicana, Texas	100		KFAC 1300 1000 Los Angeles, Calif.
	CMJC 1390 150		KANS 1210	100		KFAM 1420 100
	Camaguey, Cuba CMJE 1220 50	-	Wichita, Kans KARK 890	500	-	St. Cloud, Minn. KFBB 1280 1000
	Camaguey, Cuba		Little Rock, Ark.			Great Falls, Mont.
	CMJF 1150 200 Camaguey, Cuba		KARM 1310 Fresno, Calif.	100		KFBI 1050 5000 Abilene, Kans.
-	CMJH 1360 50		KASA 1210	100	X	KFBK 1490 5000
	Ciego de Avila, Cuba CMJI 1130 150	-	Elk City, Okla. KAST 1370	100	1	Sacramento, Calif. KFDM 560 500
	Ciego de Avila, Cuba		Astoria, Ore.	100		Beaumont, Texas
	CMJK 780 250		KATE 1420	250	+	KFDY 780 1000
	Camaguey, Cuba CMJL 1340 75		Albert Lea, Minn. KAWM 1500	100		Brookings, S. D. KFEL 920 500
	Camaguey, Cuba	_	Gallup, N. Mex.			Denver, Colo.
	CMJO 1180 50 Ciego de Avila, Cuba		KBIX 1500 Muskogee, Okla.	100		KFEQ 680 2500 St. Joseph, Mo.
	CMJP 1430 75		KBPS 1420	100	1	KFGQ 1370 100
	Camaguey, Cuba CMJX 830 500	-	Portland, Ore. KBST 1500	100	<u> </u>	Boone, Iowa KFH 1300 1000
	Camaguey, Cuba		Big Spring, Texas			Wichita, Kans.
	CMK 720 3000 Havana, Cuba		Jonesboro, Ark.	100	1	KFI 640 50000 Los Angeles, Calif.
	CMKC 1250 150		KCKN 1310	100		KFIO 1120 100
	Santiago, Cuba CMKD 1050 250		Kansas City, Kans. KCMC 1420	100		Spokane, Wash. KFIZ 1420 100
	Santiago, Cuba		Texarkana, Texas	100		Fond du Lac, Wis.
	CMKF 1460 250	}	KCMO 1370	100	CF.	KFJB 1200 100 Marshalltown, Iowa
	Holguin, Cuba CMKG 1160		Kansas City, Mo.	250		KFJI 1210 100
	Santiago, Cuba		Enid, Okla.			Klamath Falls, Ore.
	CMKM 1120 200 Manzanillo, Cuba		KCRJ 1310 Jerome, Ariz.	100		KFJM 1410 500 Grand Forks, N. D.
	CMKO 1280		KDAL 1500	100		KFJZ 1370 100
	Holguin, Cuba CMKR 1400 100		Duluth, Minn. KDB 1500	100		Fort, Worth, Texas KFKA 880 500
	Santiago, Cuba		Santa Barbara, Ca	alif.		Greeley, Colo.
	CMKW 1350 Santiago, Cuba		KDFN 1440 Casper, Wyo.	500		KFKU 1220 1000 Lawrence, Kans.
	CMKX 1190		KDKA 980	50000		KFNF 890 500
	Santiago, Cuba CMOA 1440 150		Pittsburgh, Pa. KDLR 1210	100		Shenandoah, Iowa KFOR 1210 100
	Havana, Cuba		Devils Lake, N. D.		X	KFOR 1210 100 Lincoln, Neb.
	CMOX 1320 200		KDNC 1200	100		KFOX 1250 1000
	Havana, Cuba CMQ 600 25000	-	Lewistown, Mont.	100		Long Beach, Calif. KFPL 1310 100
	Havana, Cuba		Monterey, Calif.			Dublin, Texas
	CMW 880 1400 Hayana, Cuba		KDTH 1340 Dubuque, Iowa	500	K	KFPW 1210 100 Fort Smith, Ark.
	CMX 920 1000		KDYL 1290	1000	A	KFPY 890 1000
	Havana, Cuba		Salt Lake City, Uta	h	-	Spokane, Wash,

	KFQD 780 250		KGFX 630 200	KINY 1310 100
	KFQD 780 250 Anchorage, Alaska		Pierre, S. D.	Juneau, Alaska
Jam	KFRC 610 1000		KGGC 1420 100	KIRO 710 1000
	San Francisco, Calif.		San Francisco, Calif.	Seattle, Wash.
1	KFRO 1370 250 Longview, Texas	'	KGGF 1010 1000 Coffeyville, Kans.	Yakima, Wash.
	KFRU 630 500	V	KGGM 1230 1000	KIUL 1210 100
	Columbia, Mo.	4	Albuquerque, N. M.	Garden City, Kans.
	KFSD 600 1000 San Diego, Calif.	1	KGHF 1320 500 Pueblo, Coio.	KIUN 1420 100
. /	KFSG 1120 500	A 100	KGHI 1200 100	Pecos, Texas KIUP 1370 100
X.	Los Angeles, Calif.		Little Rock, Ark.	Durango, Colo.
	KFUO 550 500 St. Louis, Mo.	~-	KGHL 780 1000	KJBS 1070 500
	KFVD 1000 1000		Billings, Mont. KGIR 1340 1000	San Francisco, Calif.
	Los Angeles, Calif.	X	Butte, Mont.	Seattle, Wash.
	KFVS 1210 100		KGIW 1420 100	KLAH 1210 100
—	Cape Girardeau, Mo KFWB 95 1000		Alamosa, Colo. KGKB 1500 100	Carlsbad, N. Mex.
	Hollywood, Calif.		Tyler, Texas	La Grande, Ore.
	KFXD 1200 100		KGKL 1370 100	KLCN 1290 100
	Nampa, Idaho KFXJ 1200 100		San Angelo, Texas KGKO 570 250	Blytheville, Ark. KLO 1400 500
	Grand Junction, Colo.		Wichita Falls, Texas	Ogden, Utah
	KFXM 1210 100		KGKY 1500 100	KLPM 1240 250
14,	San Bernardino, Calif.		Scottsbluff, Neb.	Minot, N. D.
1	KFXR 1310 100 Oklahoma City, Okla.		KGLO 1210 100 Mason City, Iowa	KLRA 1390 1000 Little Rock, Ark.
	KFYO 1310 100		KGMB 1320 1000	KLS 1280 250
L	Lubbock, Texas		Honolulu, T. H.	Oakland, Calif.
4	KFYR 550 1000 Bismarck, N. D.		KGNC 1410 1000 Amarillo, Texas	KLUF 1370 100 Galveston, Texas
	KGA 1470 5000		KGNF 1430 1000	KLX 880 1000
	Spokane, Wash.		North Platte, Neb.	Oakland, Calif.
	KGAR 1370 100 Tucson, Ariz.		KGNO 1340 250 Dodge City, Kans.	Denver, Colo.
	KGB 1330 1000		KGO 790 7500	KMA 930 1000
	San Diego, Calif.		San Francisco, Calif.	Shenandoah, Iowa
	KGBU 900 500 Ketchikan, Alaska		KGU 750 2500 Honolulu, T. H.	KMAC 1370 100 San Antonio, Texas
1-	KGBX 1230 500		KGVL 1200 100	KMBC 950 1000
7-	Springfield, Mo.		Greenville, Texas	Kansas City, Mo.
1	KGCA 1270 100 Decorah, Iowa		KGVO 1260 1000 Missoula, Mont.	Medford, Ore.
	KGCI 1200 100		KGW 620 1000	KMJ 580 1000
	Coeur d'Alene, Idaho		Portland, Ore.	Fresno, Calif.
	KGCU 1240 250 Mandan, N. D.		KGY 1210 100 Olympia, Wash.	Monroe, La.
-	KGCX 1450 1000		KHBC 1400 250	KMMJ 740 1000
A	Wolf Point, Mont.		Hilo, T. H.	Clay Center, Neb.
+	KGDE 1200 100 Fergus Falls, Minn.		KHBG 1210 100 Okmulgee, Okla.	KMO 1330 1000
1	KGDM 1100 1000		KHJ 900 1000	Tacoma, Wash.
7	Stockton, Calif.		Los Angeles, Calif.	St. Louis, Mo.
	KGDY 1340 250 Huron, S. D.		KHQ 590 1000	KMPC 710 500 Beverly Hills, Calif.
	KGEK 1200 100		Spokane, Wash. KHSL 1260 250	KMTR 570 1000
	Sterling, Colo.		Chico, Calif.	Los Angeles, Calif.
1	KGER 1360 1000 Long Beach, Calif.		KHUB 1310 250 Watsonville, Calif.	KNEL 1500 250 Brady, Texas
	KGEZ 1310 100		KICA 1370 100	KNET 1420 10
7	Kalispell, Mont.		Clovis, N. M.	Palestine, Texas
	KGFF 1420 100		KID 1320 500 Idaho Falls, Idaho	KNOW 1500 100
	Shawnee, Okla. KGFI 1500 100		KIDO 1350 1000	Austin, Texas KNX 1050 5000
	Brownsville, Tex.		Boise, Idaho	Los Angeles, Calif.
	KGFJ 1200 100		KIDW 1420 100	KOA 830 50000
	Los Angeles, Calif. KGFL 1370 100	-	Lamar, Colo.	Denver, Colo. KOAC 550 100
	Roswell, N. M.		Eureka, Calif.	Corvallis, Ore.
	KGFW 1310 100	7	KIEV 850 250	KOAM 790 1000
L	Kearney, Neb.		Glendale, Calif.	Pittsburg, Kans.

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	KOB 1180 10000		KRKO 1370 50		KTKC 1190 250
	Albuquerque, N. M. KOBH 1370 100		Everett, Wash, KRLC 1390 250		Visalia, Calif.
	Rapid City, S. Dak.		Lewiston, Idaho		KTMS 1220 500 Santa Barbara, Calif.
	KOCA 1210 100		KRLD 1040 10000		KTOK 1370 100
-	Kilgore, Texas		Dallas, Texas		Oklahoma City, Okla.
į.	Reno, Nev.	i,	KRLH 1420 100 Midland, Texas		KTRB 740 250 Modesto, Calif.
	KOIL 1260 1000		KRMC 1370 100		KTRH 1290 1000
	Omaha, Neb. KOIN 940 1000	-	Jamestown, N. Dak. KRMD 1310 100		Houston, Texas
	Portland, Ore.	M.	Shreveport, La.		KTRI 1420 100 Sloux City, Iowa
1	KOKO 1370 100	96	KRNR 1500 100		KTSA 550 1000
_	La Junta, Colo. KOL 1270 1000	_	Roseburg, Ore.		San Antonio, Texas KTSM 1310 100
1	Seattle, Wash.		Des Moines, Iowa		El Paso, Texas
	KOMA 1480 5000		KROC 1310 100		KTUL 1400 500
	Oklahoma City, Okla. KOMO 920 1000	-	Rochester, Minn.		Tuisa, Okla. KTW 1220 '1000
	Seattle, Wash.		El Paso, Texas		KTW 1220 1000 Seattle, Wash.
	San Antonio, Texas		KROW 930 1000		KUJ 1370 100
	KOOS 1200 100		Oakland, Calif. KROY 1210 100		Walla Walla, Wash. KUMA 1420 100
L	Marshfield, Ore.		Sacramento, Calif.		Yuma, Ariz.
× =	KORE 1420 100 Eugene, Ore.		KRQA 1310 100		KUOA 1260 5000
	KOTN 1500 100		Santa Fe, N. Mex. KRRV 1310 250	1	Siloam Springs, Ark. KUSD 890 500
	Pine Bluff, Ark.		Sherman, Texas		Vermillion, S. Dak.
	KOVC 1500 100 Valley City, N. Dak.		KRSC 1120 250		KUTA 1500 100
-	KOY 1390 1000		Seattle, Wash. KSAC 580 500		Salt Lake City, Utah KVCV 1200 100
	Phoenix, Ariz.		Manhattan, Kans.		Redding, Calif.
	Port Arthur, Texas		KSAL 1500 100		KVEC 1200 250
	KPBM 1310 100		Salina, Kans. KSCJ 1330 1000		San Luis Obispo, Cal. KVGB 1370 100
	Poplar Bluff, Mo.		Sioux City, Iowa		Great Bend, Kans.
1	KPDN 1310 100 Pampa, Texas		KSD 550 1000		KVI 570 1000
	KPFA 1210 100		St. Louis, Mo. KSEI 900 250		Tacoma, Wash. KVOA 1260 1000
	Helena, Mont.		Pocatello, Idaho		Tucson, Ariz,
	KPLC 1500 100 Lake Charles, La.	1	KSFO 560 1000		KVOD 920 500 Denver, Colo.
	KPLT 1500 100		San Francisco, Calif. KSL 1130 50000		KVOE 1500 100
	Paris, Texas KPMC 1550 1000		Salt Lake City, Utah		Santa Ana, Calif.
	Bakersfield, Calif.		KSLM 1370 100 Salem, Ore.		KVOL 1310 100 Lafayette, La.
	KPO 680 50000		KSO 1430 500		KVOO 1140 25000
	San Francisco, Calif, KPOF 880 500		Des Moines, Iowa		Tulsa, Okla.
	Denver, Colo.		KSOO 1110 2500 Sioux Falls, S. Dak.		KVOR 1270 1000 Colorado Springs, Colo.
	KPPC 1210 100		KSRO 1310 250		KVOS 1200 100
	Pasadena, Calif. KPQ 1500 100		Santa Rosa, Calif.		Bellingham, Wash.
	Wenatchee, Wash.		KSTP 1460 10000 St. Paul, Minn.		KVOX 1310 100 Moorhead, Minn.
	KPRC 920 1000 Houston, Texas		KSUB 1310 100		KVRS 1370 100
	KQV 1380 500		Cedar City, Utah KSUN 1200 100		Rock Springs, Wyo,
	Pittsburgh, Pa.		KSUN 1200 100 Lowell, Ariz.		KVSO 1210 100 Ardmore, Okla.
	KQW 1010 1000 San Jose, Calif.		KTAR 620 1000		KWBG 1420 100
	KRBA 1310 100		Phoenix, Ariz. KTAT 1240 1000		Hutchinson, Kans: KWG 1200 100
	Lufkin, Texas		Fort Worth, Texas		Stockton, Calif.
	KRBC 1420 100 Abilene, Texas		KTBC 1120 1000		KWJJ > 1040 500
	KRE 1370 100	\vdash	Austin, Texas KTBS 1450 1000	\vdash	Portland, Ore. KWK 1350 1000
	Berkeley, Calif.		Shreveport, La.		St. Louis, Mo.
	KRGV 1260 1000 Weslaco, Texas		KTEM 1370 250		KWKH 1100 10000
	KRIS 1330 500	-	Temple, Texas KTFI 1240 1000		Shreveport, La. KWLC 1270 100
	Corpus Christi, Tex.		Twin Falls, Idaho	1	Decorah, Iowa
1	KRKD 1120 500 Los Angeles, Calif.		KTHS 1060 10000 Hot Springs, Ark,	1.	KWLK 780 250
	Tangolos, Cant.		ATOV OPTILIES, AIK,		Longview, Wash.

	KWNO 1200 250 Winona, Minn.		WAGM 1420 100 Presque Isle, Me.	7	WBNX 1350 100 New York, N. Y.
	KWOS 1310 100		WAIM 1200 100		WBNY 1370 10 Buffalo, N. Y.
	Jefferson City, Mo. KWSC 1220 1000		Anderson, S. C. WAIR 1250 250		WBOQ 860 5000
	Pullman, Wash.		Winston-Salem, N. C.	-	New York, N. Y. WBOW 1310 10
	KWTN 1210 100 Watertown, S. Dak.		WALA 1380 500 Mobile, Ala.		Terre Haute, Ind.
	KWTO 560 5000 Springfield, Mo.		WALR 1210 100 Zanesville, Ohio		WBRB 1210 10 Red Bank, N. J.
	KWYO 1370 108		WAML 1310 100		WBRC 930 100
	Sheridan, Wyo. KXA 760 250		Laurel, Miss. WAPI 1140 5000		Birmingham, Ala. WBRE 1310 10
	Seattle, Wash.		Birmingham, Ala.	-	Wilkes-Barre, Pa.
	KXBY 1530 1000 Kansas City, Mo.		WAPO 1420 100 Chattanooga, Tenn.		WBRK 1310 10 Pittsfield, Mass.
	KXL 1420 100		WARD 1400 500 Brooklyn, N. Y.		WBRY 1530 100 Waterbury, Conn.
7	Portland, Ore. KXO 1500 100	_	WASH 1270 500		WBT 1080 5000
7	El Centro, Calif. KXRO 1310 100		Grand Rapids, Mich.	-	Charlotte, N. C. WBTM 1370 10
- 15	Aberdeen, Wash.	>_	Atlanta, Ga.		Danville, Va.
	KXYZ 1440 1000 Houston, Texas	+	WATR 1190 100 Waterbury, Conn.		Boston, Mass.
	KYA 1230 1000 San Francisco, Calif.		WAVE 940 1000 Louisville, Ky.		WBZA 990 100 Springfield, Mass.
	KYOS 1040 250		WAWZ 1350 500		WCAD 1220 50
	Merced, Calif. KYW 1020 10000		Zarephath, N. J. WAYX 1200 100	-	Canton, N. Y. WCAE 1220 100
	Philadelphia, Pa.		Wayeross, Ga.		Pittsburgh, Pa.
	TGW 1230 10000 Guatemala City, Guat.		WAZL 1420 100 Hazleton, Pa.		Northfield, Minn.
	TIEP 880 1000 San Jose, Costa Rica		WBAA 890 500 West Lafayette, Ind.		WCAM 1280 50 Camden, N. J.
	TIPG 625 2000		WBAL 760 2500		WCAO 600 50
	San Jose, Costa Rica VAS 685 2000		Baltimore, Md. 10000	 	Baltimore, Md. WCAP 1280 50
	Glace Bay, N.S. VOAC 1065 40		Baltimore, Md. WBAP 800 50000	-	Asbury Park, N. J. WCAT 1200 10
-	St. John's, Nild.		Fort Worth, Texas		Rapid City, S. Dak.
	VOAS 940 100 St. John's, Nild.		WBAX 1210 100 Wilkes-Barre, Pa.		WCAU 1170 5000 Philadelphia, Pa.
	VOCM 1006 200		WBBC 1400 500		WCAX 1200 10 Burlington, Vt.
	St. John's, Nfld.		Brooklyn, N. Y. WBBL 1210 100		WCAZ 1070 10
	St. John's, Nfld.		Richmond, Va.		Carthage, Ili.
	St. John's, Nfld.		Chicago, Ill.		Allentown, Pa.
	VOWR 681 500 St. John's, Nild.		WBBR 1300 1000 Brooklyn, N. Y.		WCBD 1080 500 Chicago, Ill.
	WAAB 1410 500 Boston, Mass.		WBBZ 1200 100 Ponca City, Okla.		WCBM 1370 10 Baltimore, Md.
	WAAF 920 1000		WBCM 1410 500		WCBS 1420 10
	Chicago, Ill. WAAT 940 500		Bay City, Mich. WBEN 900 1000		Springfield, Ill. WCCO 810 5006
	Jersey City, N. J. WAAW 660 500		Buffalo, N. Y. WBEO 1310 100		Minneapolis, Minn. WCFL 970 500
	Omaha, Neb.	. –	Marquette, Mich.		Chicago, Ill.
	WABC 860 50000 New York, N. Y.		WBHP 1200 100 Huntsville, Ala.		WCHS 580 56 Charleston, W. Va.
	WABI 1200 100		WBIG 1440 1000		WCHV 1420 16 Charlottesville, Va.
	Bangor, Maine WABY 1370 100		Greensboro, N. C. WBIL 1100 5000		WCKY 1490 100
	Albany, N. Y. WACO 1420 100		New York, N. Y. WBLK 1370 100		Covington, Ky.
	Waco, Texas		Clarksburg, W. Va.		Cleveland, Ohio
	WADC 1320 1000 Akron, Ohio		WBLY 1210 100 Lima, Ohio		Janesville, Wis.
	WAGA 1450 500		WBNO 1200 100		WCLS 1310 1
	Atlanta, Ga. WAGF 1370 250		New Orleans, La. WBNS 1430 500		WCMI 1310 10
	Dothan, Aia.		Columbus, Ohio		Ashland, Ky.

	WCNW 1500 100		WELI 900	500		WGL 1370	100
	Brooklyn, N. Y.		New Haven, Conn		75	Fort Wayne, Ind.	100
\	WCOA 1340 500 Pensacola, Fla.		WELL 1420	100		WGN 720	50000
	WCOC 880 500		Battle Creek, Mic WEMP 1310	n. 100		Chicago, Ill. WGNY 1210	100
	Meridian, Miss. WCOL 1210 100		Milwaukee, Wis.			Newburgh, N. Y.	100
	Columbus, Ohio		WENR 870 Chicago, Ill.	50000		WGPC 1420 Albany, Ga.	100
	WCOP 1120 500		WEOA 1370	100		WGR 550	1000
	Boston, Mass. WCPO 1200 100		Evansville, Ind. WESG 850	1000		Buffalo, N. Y. WGRC 1370	
	Cincinnati, Ohio		Elmira, N. Y.	1000	-	WGRC 1370 New Albany, Ind.	250
	WCRW 1210 100 Chicago, Ill.		WEST 1200 Easton, Pa.	100		WGRM 1210	100
	WCSC 1360 500		WEVD 1300	1000	-	Grenada, Miss. WGST 890	1000
	Charleston, S. C.		New York, N. Y.			Atlanta, Ga.	
	WCSH 940 1000 Portland, Me.		St. Louis, Mo.	1000		WGTM 1310 Wilson, N. C.	100
	WDAE 1220 1000		WEXL 1310	50		WGVA 1050	1000
	Tampa, Fla. WDAF 610 1000	-	Royal Oak, Mich. WFAA 800	50000	-	Indianapolis, Ind.	
	Kansas City, Mo.		Dallas, Texas	30000		WGY 790 Schenectady, N. Y	50000
	WDAH 1310 100		WFAB 1300	1000		WHA 940	5000
	El Paso, Texas WDAS 1370 100	<u> </u>	New York, N. Y. WFAM 1200	100		Madison, Wis.	250
	Philadelphia, Pa.	L	South Bend, Ind.		~	Greenfield, Mass.	250
	WDAY 940 1000 Fargo, N. Dak.		WFAS 1210 White Plains, N. Y.	100		WHAL 950	500
	WDBJ 930 1000	——	WFBC 1300	1000		Saginaw, Mich. WHAM 1150	50000
	Roanoke, Va.		Greenville, S. C.			Rochester, N. Y.	
	WDBO 580 1000 Orlando, Fla.		WFBG 1310 Altoona, Pa.	100		WHAS 820 Louisville, Ky.	50000
	WDEL 1120 250		WFBL 1360	1000		WHAT 1310	100
	Wilmington, Del. WDEV 550 500		Syracuse, N. Y. WFBM 1230	1000		Philadelphia, Pa.	
	Waterbury, Vt.		Indianapolis, Ind.	1000	\ \	WHAZ 1300 Troy, N. Y.	1000
	WDGY 1180 1000		WFBR 1270 Baltimore, Md.	500	•	WHB 860	1000
	Minneapolis, Minn. WDNC 1500 100		WFDF 1310	100		Kansas City, Mo. WHBB 1500	100
	Durham, N. C.		Flint, Mich.		-	Selma, Ala.	100
1	WDOD 1280 1000 Chattanooga, Tenn.		WFEA 1340 Manchester, N. H.	500	-	WHBC 1200 Canton, Ohio	100
	WDRC 1330 1000		WFIL 560	1000		WHBF 1210	100
	Hartford, Conn. WDSM 1200 100		Philadelphia, Pa. WFLA 620	1000		Rock Island, Ill.	
	WDSM 1200 100 Superior, Wis.		Clearwater, Fla.	1000		WHBI 1250 Newark, N. J.	1000
	WDSU 1250 1000		WFMD 900	500		WHBL 1300	250
	New Orleans, La. WDWS 1370 100	·	Frederick, Md. WFOR 1370	100		Sheboygan, Wis. WHBQ 1370	400
	Champaign, Ill.		Hattiesburg, Miss.			WHBQ 1370 Memphis, Tenn.	160
	WDZ 1020 250 Tuscola, Ill.		WFOY 1210 St. Augustine, Fla.	100		WHBU 1210	100
	WEAF 660 50000		WFTC 1200	100		Anderson, Ind. WHBY 1200	100
	New York, N. Y.		Kinston, N. C. WGAL 1500			Green Bay, Wis.	
	WEAN 780 1000 Providence, R. I.		Lancaster, Pa.	100		WHDF 1370 Calumet, Mich.	190
	WEAU 1050 1000		WGAN 640	500		WHDH 830	1000
	Eau Claire, Wis. WEBC 1290 1000		Portland, Me. WGAR 1450	500	·	Boston, Mass. WHDL 1400	250
	Duluth, Minn.		Cleveland, Ohio			Olean, N. Y.	23 u
	WEBQ 1210 100 Harrisburg, Ill.		WGBB 1210 Freeport, N. Y.	100		WHEB 740 Portsmouth, N. H.	250
	WEBR 1310 100		WGBF 630	500		WHEC 1430	500
	Buffalo, N. Y.		Evansville, Ind.			Rochester, N. Y.	
	WEDC 1210 100 Chicago, Ill.		WGB1 880 Scranton, Pa.	500		WHEF 1500 Kosciusko, Miss.	100
	WEED 1420 100		WGCM 1210	160		WHFC 1420	100
	Rocky Mount, N. C. WEEL 590 1000		Gulfport, Miss. WGES 1360	500		Cicero, Ill.	
	Boston, Mass.		Chicago, Ill.	500		WHIO 1260 Dayton, Ohio	1000
	WEEU 830 1000 Reading Po		WGH 1310	100		WHIP 1480	5000
	Reading, Pa.	L	Newport News, Va.			Hammond, Ind.	

WHIS 1410 Bluefield, W. Va, WHJB 620	500	7	WJBW 1200 100 New Orleans, La.	WLBZ 620 S Bangor, Me.
			new Orieans, La.	
1111315 020	250		WJBY 1210 100	WLEU 1420
Greensburg, Pa.		- (Gadsden, Ala.	Erie, Pa.
	1000			Lawrence, Mass.
	500			WLLH 1370
Columbus, Ohlo			Hagerstown, Md.	Lowell, Mass.
WHLB 1370	100			WLMU 1210
	1000			Middlesboro, Ky WLNH 1310
New York, N. Y.				Laconia, N. H.
WHO 1000	50000		WJMS 1420 100	WLS 870 500
	250			Chicago, Ill.
Jersey City, N. J.	200			Brooklyn, N. Y.
WHP 1430	500		WJR 750 50000	WLVA 1200
	1000		Detroit, Mich.	Lynchburg, Va.
	1000			WLW 700 5000 Cincinnati, Ohio
WIBG 970	100		WJSV 1460 10000	WMAL 630
Glenside, Pa.			Washington, D. C.	Washington, D. C.
	100	~.		WMAQ 670 500 Chicago, Ill.
WIBU 1210	100			WMAS 1420
Poynette, Wis.			Akron, Ohio	Springfield, Mass.
	1000		WJZ 760 50000	WMAZ 1180 1
	100			Macon, Ga.
Utica, N. Y.				Detroit, Mich.
WICA 940	250		WKAR 850 1000	WMBD 1440 1
	500			Peoria, Ill.
	300			Miami, Fla.
WIL 1200	100		WKBB 1500 100	WMBG 1350
St. Louis, Mo.	4000		East Dubuque, Ill.	Richmond, Va.
	1000	1		Joplin, Mo.
WILM 1420	100			WMBI 1080 5
Wilmington, Del.	4		Youngstown, Ohio	Chicago, Ill.
	1000			WMBO 1310 Auburn, N. Y.
WINS 1180	1000			WMBQ 1500
New York, N. Y.			Richmond, Ind.	Brooklyn, N. Y.
	1000	ì	WKBW 1480 5000	Jacksonville, Fla.
	1000			WMBS 1420
Philadelphia, Pa.		, , , , , , , , , , , , , , , , , , ,	Muskegon, Mich.	Uniontown, Pa.
WIRE 1400	1000		WKEU 1500 100	WMC 780 1
	1000	<u> </u>	1	Memphis, Tenn. WMCA 570 1
Columbia, S. C.		ļ		New York, N. Y.
WISN 1120	250		WKRC 550 1000	WMEX 1500
	100	<u> </u>		Boston, Mass. WMFD 1370
Johnstown, Pa.			Oklahoma City, Okla.	Wilmington, N. C.
WJAG 1060	1000		WKZO 590 1000	WMFF 1310
	1000	<u></u>		Plattsburg, N. Y. WMFG 1210
Providence, R. I.	1000	+ 4	Nashville, Tenn	Hibbing, Minn.
WJAS 1290	1000		WLAK 1310 100	WMFJ 1420
	1000			Daytona Beach, Fla.
	1009	1 4		Decatur, Ala.
WJBC 1200	100		WLAW 680 1000	WMFR 1200
Bloomington, Ill.		L	Lawrence, Mass.	High Point, N. C.
	100		WLB 1250 1000	WMIN 1370 St. Paul, Minn.
	100			WMMN 890
Decatur, Ill.	100		Muncie, Ind.	Fairmont, W. Va.
				WMPC 1200
	WHK 1390 Cleveland, Ohio WHKC 640 Columbus, Ohio WHLB 1370 WHLB 1370 Virginia, Minn. WHN 1010 New York, N. Y. WHO 1000 Des Molnes, Iowa WHOM 1450 Jersey City, N. J. WHP 1430 Harrisburg, Pa. WIBA 1280 Madison, Wis. WIBG 970 Glenside, Pa. WIBM 1370 Jackson, Mich. WIBU 1210 Poynette, Wis. WIBW 580 Topeka, Kans. WIBX 1200 Utica, N. Y. WICA 940 Ashtabula, Ohio WICC 600 Bridgeport, Conn. WIL 1200 Bridgeport, Conn. WIL 1200 WICA 940 Ashtabula, Ohio WICA 560 Gary, Ind. WILM 1420 Wilmington, Del. WIND 560 Gary, Ind. WINS 1180 New York, N. Y. WIOD 610 Miami, Fla. WIP 610 Philadelphia, Pa. WIRE 1400 Columbia, S. C. WISN 1120 Milwaukee, Wis. WJAC 1310 Johnstown, Pa. WJAG 1060 Norfolk, Neb. WJAR 890 Providence, R. I. WJAS 1290 Pittsburgh, Pa. WJAS 1290 Pittsburgh, Pa. WJAS 1200 Bloomington, Ill. WJBK 1500 Detroit, Mich. WJBK 1500 Detroit, Mich. WJBL 1200 Detroit, Mich. WJBL 1200	WHK 1390 Cleveland, Ohio WHKC 640 Columbus, Ohio WHLB 1370 Virginia, Minn. WHN 1010 New York, N. Y. WHO 1000 Des Molnes, Iowa WHOM 1450 Jersey City, N. J. WHP 1430 Harrisburg, Pa. WIBA 1280 Madison, Wis. WIBG 970 Glenside, Pa. WIBM 1370 Jackson, Mich. WIBM 1370 Jackson, Mich. WIBW 1210 Poynette, Wis. WIBW 580 Topeka, Kans. WIBL 1200 Utica, N. Y. WICO 600 Bridgeport, Conn. WIL 1200 St. Louis, Mo. WILL 580 Urbana, Ill. WILL 580 Urbana, Ill. WILL 1000 WILM 580 Urbana, Ill. WILL 1000 Mimington, Del. WIND 560 Gary, Ind. WINS 1180 New York, N. Y. WIOD 610 Mimington, Del. WIND 560 Gary, Ind. WINS 1180 New York, N. Y. WIOD 610 Mimington, Del. WIND 560 Columbia, S. C. WISN 1120 Milwaukee, Wis. WJAC 1310 Johnstown, Pa. WJAC 1300 Johnstown, Pa. WJAG 1000 Vicksonville, Fla. WJAS 1290 Pittsburgh, Pa. WJAS 1290 P	WHK 1390 1000 Cleveland, Ohio WHKC 640 500 Columbus, Ohio WHLE 1370 100 Virginia, Minn. WHN 1010 1000 New York, N. Y. WHO 1000 50000 Des Molnes, Iowa WHOM 1450 250 Jersey City, N. J. WHP 1430 1000 Madison, Wis. WIBA 1280 1000 Madison, Wis. WIBA 1370 100 Jackson, Mich. WIBU 1210 100 Poynette, Wis. WIBW 580 1000 Topeka, Kans. WIBW 580 1000 Topeka, Kans. WIBX 1200 100 Utica, N. Y. WICA 940 250 Ashtabula, Ohio WICC 600 500 Bridgeport, Conn. WIL 1200 100 St. Louis, Mo. WILL 580 1000 WICA 940 40 250 Ashtabula, Ohio WICL 580 1000 WILL 580 1000 WILL 1200 100 WILL 1200 100 WILL 580 1000 WILL 180 1000 WILL 180 1000 Mimington, Del. WIND 560 1000 Gary, Ind. WINS 1180 1000 New York, N. Y. WIOD 610 1000 Miming, Fla. WIP 610 1000 Miming, Fla. WIP 610 1000 Miming, Fla. WIP 610 1000 Miming Se0 1000 Columbia, S. C. WISN 1220 250 Milwaukee, Wis. WJAC 1310 108 Johnstown, Pa. WJAG 1000 Victoric, Neb. WJAR 890 1000 Providence, R. I. WJAS 1290 Pittsburgh, Pa. WJAS 1200 Diomington, Ill. WJBK 1500 Detroit, Mich. WJBL 1200 100	WHK 1390 1000 1

	_		_		
100	WMPS 1430 500 Memphis, Tenn.	-	WPAR 1420 1 Parkersburg, W. Va.	00	WSAU 1370 100 Wausau, Wis,
	WMSD 1420 100		WPAX 1210 1	00	WSAY 1210 100
-	Sheffield, Ala. WMT 600 1000	<u> </u>	Thomasville, Ga. WPAY 1370 1	00	Rochester, N. Y. WSAZ 1190 1000
	Cedar Rapids, Iowa WNAC 1230 1000		Portsmouth, Ohio WPEN 920 100	<u>,</u>	Huntington, W. Va.
,	WNAC 1230 1000 Boston, Mass.		WPEN 920 100 Philadelphia, Pa.	,,	WSB 740 50000 Atlanta, Ga.
	WNAD 1016 1000 Norman, Okla.		WPG 1100 500 Atlantic City, N. J.	00	WSBC 1210 100 Chicago, Ill.
· ·	WNAX 570 1000		WPRA 1370 1	00	WSBT 1360 500
	Yankton, S. D. WNBC 1380 250		Mayaguez, P. R. WPRO 630 56		South Bend, Ind. WSFA 1410 500
	New Britain, Conn.	L_,_	Providence, R. I.	,"	Montgomery, Ala.
,	WNBF 1500 100 Binghamton, N. Y.		WPRP 1420 10 Ponce, P. R.		WSGN 1310 100 Birmingham, Ala.
-	WNBH 1310 100		WPTF 680 100	00	WSIX 1210 100
-	New Bedford, Mass. WNBX 1260 500		Raleigh, N. C. WQAM 560 101	10	Nashville, Tenn. WSJS 1310 100
` .	Springfield, Vt.		Miami, Fla.		Winston-Salem, N. C.
	WNBZ 1290 100 Saranac Lake, N. Y.		WQAN 880 50 Scranton, Pa.	00	WSM 650 50000 Nashville, Tenn.
	WNEL 1290 1000	.]	WQBC 1360 100	10	WSMB 1320 1000
— —	San Juan, P. R. WNEW 1250 1000	<u> </u>	Vicksburg, Miss. WQDM 1390 100	₃₀	New Orleans, La. WSMK 1380 200
	New York, N. Y. WNLC 1500 100	<u> </u>	St. Albans, Vt.		Dayton, Ohio
	New London, Conn.		WQXR 1550 100 New York, N. Y.	10	WSNJ 1210 100 Bridgeton, N. J.
	WNNY 1420 100 Watertown, N. Y.		WRAK 1370 10	10	WSOC 1210 100
-	WNOX 1010 1000		Williamsport, Pa. WRAW 1310 10	0	Charlotte, N. C. WSPA 920 1000
-	Knoxville, Tenn. WNYC 810 1000		Reading, Pa. WRBL 1200 10		Spartanburg, S. C. WSPD 1340 1000
	New York, N. Y.	- "	Columbus, Ga.	<u> </u>	Toledo, Ohio
	WOAI 1190 50000 San Antonio, Texas	i.	WRC 950 50 Washington, D. C.	10	WSPR 1140 500 Springfield, Mass.
	WOC 1370 100	- (WRDO 1370 10	0	WSUI 880 500
	Davenport, Iowa WOI 640 5000	-	Augusta, Me. WRDW 1500 10		Iowa City, Iowa WSUN 620 1000
ļ	Ames, Iowa		Augusta, Ga.		St. Petersburg, Fla.
(WOKO 1430 500 Albany, N. Y.		WREC 600 100 Memphis, Tenn.		WSVA 550 500 Harrisonburg, Va.
4	WOL 1310 100 Washington, D. C.		WREN 1220 100	0	WSVS 1370 50
	WOLS 1200 100	 	Lawrence, Kans. WRGA 1500 10		Buffalo, N. Y. WSYB 1500 100
<u> </u>	Florence, S. C. WOM! 1500 100		Rome, Ga. WRJN 1370 10	. —	Rutland, Vt. WSYR 570 1000
	Owensboro, Ky.		Racine, Wis.	"	Syracuse, N. Y.
4	WOMT 1210 100 Manitowoo, Wis.		WRNL 880 50 Richmond, Va.	•	WTAD 900 1000 Quincy, Ill.
	WOOD 1270 500		WROK 1410 50	0	WTAG 580 1000
	Grand Rapids, Mich. WOPI 1500 100	<u> </u>	Rockford, Ill. WROL 1310 10	. —	Worcester, Mass. WTAL 1310 100
	Bristol, Tenn.		Knoxville, Tenn.	` L	Tallahassee, Fla.
	WOR 710 50000 Newark, N. J.		WRR 1280 50 Dallas, Texas	0	WTAM 1070 50000 Cleveland, Ohio
	WORC 1280 500 Worcester, Mass.		WRTD 1500 10	0	WTAQ 1330 1000
	WORK 1320 1000		Richmond, Va. WRUF 830 500	. —	Green Bay, Wis. WTAR 780 1000
	York, Pa. WORL 920 500		Gainesville, Fla. WRVA 1110 500	, —	Norfolk, Va. WTAW 1120 500
× .	Boston, Mass.		Richmond, Va.	"	College Station, Tex.
	WOSU 570 750 Columbus, Ohio		WSAI 1330 100 Cincinnati, Ohio	0	WTAX 1210 100 Springfield, Ill.
	WOV 1130 1000		WSAJ 1310 10	0	WTBO 800 250
	New York, N. Y. WOW 590 1000		Grove City, Pa. WSAL 1200 25	,	Cumberland, Md. WTCN 1250 1000
	Omaha, Neb.		Salisbury, Md.	ł.,	Minneapolis, Minn.
	WOWO 1160 10000 Fort Wayne, Ind.		WSAN 1440 50 Alientown, Pa.	0	WTEL 1310 100 Philadelphia, Pa.
	WPAD 1420 100	74	WSAR 1450 100	·	WTHT 1200 100
	Paducah, Ky.	Щ_	Fall River, Mass.		Hartford, Conn.

	2				
- 3	WTIC 1040 50000 Hartford, Conn.		XEBH 930 500 Hermosillo, Sonora		XEKL 1240 500 Leon, Guan.
	WTJS 1310 100		XEBI 1000 25	·	XEL 780 1000
	Jackson, Tenn.		Aguascalientes, Ags.	ļ	Mexico City, D. F.
	WTMJ 620 1000 Milwaukee, Wis.		XEBJ 1160 20 Merida, Yuc.	1	XELA 1240 50 Saltillo, Coah.
7	WTMV 1500 100		XEBK 1000 60		XELO 670 50000
	East St. Louis, Ill.		Neuvo Laredo, Tams.		Tijuana, B. Cfa. XELZ 1370 100
	WTNJ 1280 500 Trenton, N. J.		XEBL 1220 50 Mazatlan, Sin.		Mexico City, D.F.
1	WTOC 1260 1000		XEBO 1310 25		XEMG 1060 100
	Savannah, Ga. WTOL 1200 100	_	Irapuato, Guan. XEBS 1240 200	-	Atzcapotzalco, D. F. XEMO 860 5000
	Toledo, Ohio		Mexico City, D. F.		Tijuana, L. C.
	WTRC 1310 100		XEBX 640 250		XEMU 580 Piedras Negras, Coah.
-	Elkhart, Ind. WVFW 1400 500		Sabinas, Coah. XEBZ 1160 100	-	XEMX 1280 100
4-	Brooklyn, N. Y.		Mexico City, D. F.		Mexico City, D. F.
	WWAE 1200 100 Hammond, Ind.		XEC 1150 100 Tijuana, L. C.		XENC 860 50 Mexico City, D. F.
	WWJ 920 5000	+	XECL 1100 1700		XENT 910 150000
	Detroit, Mich.		Mexicali, B. Cfa.		Nuevo Laredo, Tams. XEOK 760 2500
	WWL 850 10000 New Orleans, La.		Mexico City, D. F.		XEOK 760 2500 Tijuana, L. C.
	WWNC 570 1000		XECZ 1370 100		XEP 1160 500
	Asheville, N. C. WWRL 1500 100		San Luis Potosi, S.L.P. XED 1160 2500	-	Juarez, Chih. XEPN 730 100000
,	WWRL 1500 100 Woodside, N. Y.		Guadalajara, Jal.		Piedras Negras, Coah.
	WWSW 1500 100		XEDA 1220 200		XERA 840 350000
	Pittsburgh, Pa. WWVA 1160 5000		Gra. Anaya, D. F. XEDF 810 75		Villa Acuna, Coah. XERB 730 500
	Wheeling, W. Va.		Nuevo Laredo, Tams.		Rosarito Beach, B. Cfa.
	WXYZ 1240 1000 Detroit, Mich.		XEDP 1080 500 Mexico City, D. F.		XERO 670 Chapultepec, D. F.
	W3XDD 50000		XEDW 1150 20		XES 990 250
	Whippany, N. J.		Minatitian, Ver.	<u> </u>	Tampico, Tams.
	W3XJ 1060 100 College Park, Md.		Durango, Dgo.		Monterrey, N. L.
	W8XO 700 500000		XEF 1450 100		XETB 1310 125 Torreon, Coah.
	Cincinnati, Ohio XEAA 750 200		Juarez, Chih. XEFA 1180 500	-	XETF 1220 30
	Mexicali, B. C.		Tacuba, D. F.		Veracruz, Ver.
	XEAC 980 5000 Tijuana, L. C.		XEFS 870 200 Monterrey, N. L.		XETH 1210 100 Puebla, Pue.
-	XEAD 1060 125		XEFC 550 100		XEU 1010 250
	Guadalajara, Jal.		Merida, Yuc.	-	Veracruz, Ver.
	XEAF 990 750 Nogales, Son.		XEFE 980 150 Laredo, Tams.		Mexico City, D. F
	XEAG 1310 10		XEFI 1440 250		XEX 1310 125
-	Cordoba, Ver. XEAL 660 1000	-	Chihuahua, Chih.		Monterrey, N. L. XEXB 1270 50
	Mexico City, D. F.		Monterrey, N. L.		Jalapa, Ver.
	XEAM 750 25 Matamoros, Tams.		XEFO 930 5000 Mexico City, D. F.		XEXC 810 350 Aguascalientes, Ags.
1	XEAO 660 250		XEFV 1210 100		XEXD 1340 350
	Mexicali, B. C. XEAP 1240 50		Juarez, Chih. XEFW 1310 250		Jalapa, Ver. XEXE 1270 17
	XEAP 1240 50 Obregon, Son.		Tampico, Tams.		Mexico City, D. F.
	XEAS 1160 50		XEG 1220 250		San Luis Potosi, S.L.P.
	Saltillo, Coah. XEAT 1210 250		Monterrey, N. L. XEH 720 250		XEXS 1000 100
	Parral, Chih.		Monterrey, N. L.		Portable in Mexico XEYO 940 500
	XEAW 960 50000 Reynosa, Tams.		XEI 1370 125 Morelia, Mich.		Mexico City, D. F.
	XEAY 1240 100		XEJ 1020 1000		XEZ 630 500
	Mexico City, D. F. XEB 1030 10000		Juarez, Chih. XEJP 1130 100	-	Merida, Yuc. ZNS 540 400
	Mexico City, D. F.		Mexico City, D. F.		Nassau, Bahamas
	XEBA 1080 20 Guzman, Jal.		XEJW 870 Mexico City, D. F.		
	XEBG 820 1000		XEK 990 100		1
	Tijuana, B. Cfa.		Mexico City, D. F.	L]

At DEADLINE . . .

Two special programs have been arranged for this month by Bill Stone, 32 St. Joseph St., Toronto 5, Ont. The programs will be well worth listening to, and the stations are anxious to receive a large number of reports from DXers.

CFGP in Grande Prairie, Alta., 1200 kcs., will broadcast on February 12 from 3 to 4 a.m., EST.

On the following day, February 13, CFLC in Prescott, Ont., will broadcast, from 3 to 4 a.m., EST. CFLC is on 930 kcs.

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Trimm Dependable Headphones, long a favorite with amateur operators. The best in the world for the money. 2000 ohms	\$ 3.25						
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lars a month profit—thanks again to National Radio."— FRANK T. REESE, 39 N Felton St., Philadelphia,



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Address	
City State	