

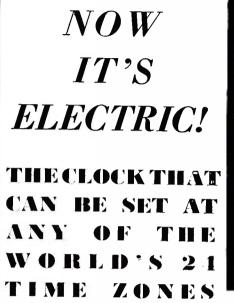






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14717 Detroit Ave.,

Cleveland, Ohio

FEBRUARY 1, 1938







PAGE TAYLOR Editor

Associate Editors B. FRANCIS DASHIELL, Technical CARLETON LORD, Broadcast

FOURTEENTH YEAR

NUMBER 116

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Cover Girl-Annette King, NBC Contralto

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1

North American REALLOCATION Coming

THE 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	
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 com-edy 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 other 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 objectionable interference from 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. The 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 March

Mexico			
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			

TABLE D			
Class I-B Stations			
810	New York State	1090	Arkansas
810	California	1110	North Carolina
940	Quebec	1110	Nebraska
	(5 kw minimum)	1130	British Columbia
940	D. F., Mexico		(5 kw minimum)
1000	Jalisco	1130	New York-
	(20 kw max.)		New Jersey
1000	Washington	1140	Chihuahua
1000	Illinois	1140	Virginia
1010	Havana	1170	Oregon
1060	Mexico City	1170	Oklahoma
1060	Pennsylvania	1170	West Virginia
1070	Maritime	1190	Sinaloa
	Provinces	1190	Indiana
1070	California	1550	Ontario
1080	Connecticut	1550	Vera Cruz, Mex.
1080	Texas		(20 kw max.)
1090	Baja California	1560	Havana
1090	Maryland		

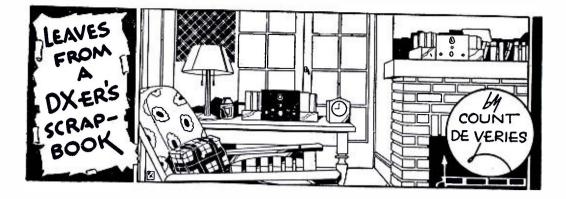
TABLE C

	Class II	Statio	ne
640	Newfoundland	1060	Alberta
690	Kansas or		(10 kw max.)
	Oklahoma	1070	Alabama
740	California	1080	Manitoba
800	Ontario		(15 kw max.)
	(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.)
	(10 kw max.)	1190	Havana
1050	New York		(15 kw max.)
	TABI	E D	

Class II Stations on Regional Channels 620

560	Newfoundland	630	Havana
	(10 kw max.)		(15 kw max.)
570	Sta, Clara, Cuba	1270	Havana
	(15 kw max.)		(10 kw max.)
590	Havana		
	(25 kw max.)		

3



A 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 gen-Not purse proud, I am erations. within the reach of all. I solve mysteries impenetrable to mortal eyes; 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! A LEWIS

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 everyday 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.

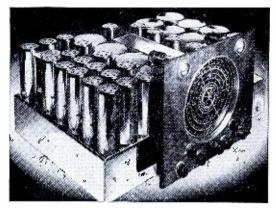
Turning to his favorite radio magazine, he checked the frequency of the unknown station and tried hard to determine which of the listed broadcasters he was hearing. By a secret and mysterious process of deduction, he finally decided that he was tuned to the station which, even then, the engineers were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



×

When TROUBLE Comes

• • • By B. FRANCIS DASHIELL

Job For An Expert

RECENTLY purchased an 18tube 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 realign 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 helpful. 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. Α 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 crystal 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. In a set of this type tuning is naturally broad, and a powerful local station will come in at most points on the tuning adjustment. The more selective 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 anv 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. Can 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?

pre-selector or pre-amplifier A 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 radioamplifier transformer frequency and shield which, together with a microfarad variable con-.00035 denser, 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 90: volt B battery, but with a small r-f choke between the battery and the Then run a short, shielded plate. 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 imbest operated provement. It is 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 this?

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 a 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 many sets. The switch should be 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

10

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 defectubes often remedies the tive 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

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 must 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

• • • By COUNT DE VERIES

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 station concerned. The additional three cents from the DXer is used to defray the cost of the international postal money order by 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. Apparently it depends largely upon the temperament of the personnel, whether or not we get a verie. If Carroll Wevrich 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 normallyreluctant 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

R 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 Carrolf 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 destroved. 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

F OR 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 perennially 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 of 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

T HE 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 Û

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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.

appreciation of this policy, In 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 by 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 complaint 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

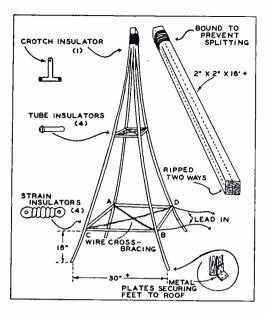


A S THIS month's prize-winning entry in the UDXC Mysterious Contest, "Pooky," with his suitcase all packed, presents a diagram. It was contributed by Mr. W. J. Mc-Grandle of 886 Home St., Winnipeg, Manitoba. The diagram is of a vertical antenna, and Mr. McGrandle's letter explains it.

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 1×1 can be used as well. If 2×2 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 ³/₄ 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

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,

Are SAYING

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 languge. 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 10230kcs, 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 kcs. COCO, on 6010 kcs, employs a Collins transmitter of 2500 watts power. Reports should be addressed to Sr. Luis Casas R., Apartado 98, Havana.

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, Havana. (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 kcs. . . 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 broadcasting wavelengths, w. s. operates in two of the amateur bands, and is also on the broadcast Each transmitter employs band. 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," Guayaouil.
- HC2RL, "Quinta Piedad," 6674 Guayaquil.

HCT, "Radio Telefonica," 5003, Guayaguil.

"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 III, RX30 Ky, RX57 III, 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

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

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

Roberts Heights: 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. The 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 Lafavette. Ind. is working 1634. 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 month. Alterations which have taken place since our January issue are shown below:

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

	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, 817¹/₂ 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.

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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., 727¹/₂ 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 kcs with 100 watts, owned by the Parkes Broadcasting Co., Pty., Ltd., 283 Clarinda St., Parkes, NSW. The other commer-Parkes, NSW. cial 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.

operation of WLLH Joint 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

THE King of Jazz, the worldrenowned 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.

$\bullet \bullet \bullet By$ BETTY

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 thirtyfour 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."

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DOIN'S of the Radexers

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

• • • By CARLETON LORD

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 URDXC. from the 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.

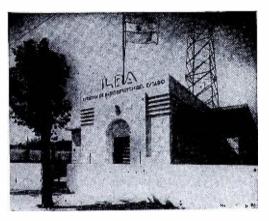
For some unknown reason, the CDXR took exception to this handling and devoted a page and a half of its November 26th bulletin to a vitriolic condemnation of the NNRC. Lacking grounds for complaint on the basis that publicity recognition of and sponsorship not given, the CDXR were bewailed the fact that 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 NNRC headquarters, just as at 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."



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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 kcys there is a Spanish-

speaking station which comes in well at times," reports Carroll H. Wevrich, 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 kcys, 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 kcys. Another station is being heard under WMAL on 630 and may be a new Cuban. On 775 kcys 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 kcys 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 kcys."

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 is 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 kcys 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 100watt station on 930 kcys. 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-Pacifics . . .

"The Siberian station on 540 kcys, 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, JOIG. 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 1060 which is unlisted. Other Orientals heard MTCY were and 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 signal for 30 minutes at a time. 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 kcys is J. W. Hansen, 3028 Fairmont Blvd., Riverside, Calif., who also reports a mystery station on 860 kcys. "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 kcys, expects to have a new 2000watt 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 kcys, 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

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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, 100watters 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

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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. Т 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, 'This is to verify your rewrote: port 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.

The base of the ba							
February 1st 6:00-6:15 WMBS 1420 Uniontown De							
0:00-0:15	WMBS		Uniontown, Pa.				
F 40 0 00		ebruar					
5:40-6:00	WCAT	1200	Rapid City, S. D.				
February 9th							
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					
	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.				
		bruary	11th				
5:00-5:20	KIUN	1420	Pecos, Texas				
		bruary					
4:20-4:40	KSTM	1310	El Paso, Texas				
1.20 1.10	KRLC	1390					
4:40-5:00	KCMC	1420	Lewiston, Idaho				
5:00-5:20	KGFF	1420	Texarkana, Texas				
5:20-5:20	KFRO		Shawnee, Okla.				
5:20-5:40		1370	Longview, Texas				
0.40.4.00		bruary	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.				
		bruary	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

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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.

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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. "Last Easton, Wash. season Ι scored 386 stations for total a 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

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 frequencies. 20 ultra high The megacycle (13 meter) broadcast band is doubtless familiar to the majority of short wave listeners who have good equipment. This 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

• • • By CHRIS DAVIS JAFFÉ,

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 radiotelephones are heard in the territory adjacent to 7½ meters, many cities having recently installed them. 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 theoretically, reception is where, 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 CBC 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.

	NORTH	AMERICAN BROADCAST
- 10		NEW
540	ZNS	Nassau, Bahamas. Superintendent of Telegraphs, Box 48
630	•••••	Havana, Cuba. "La Voz del Aire," S. A.
670	XERO	Chapultepec, D. F.
680	CMBQ	Havana, Cuba. Rufino Pazos
730	CMCL	Havana, Cuba. "Radio City."
	XERB	Rosarito Beach, B. Cfa.
770	CMBF	Havana Cuba Cia Cubana da
		Havana, Cuba. Cia. Cubana de Radio y Television, S. A., Edif. La
	~ ~	Metropolitana 732
1110	CMCH	Havana, Cuba. Leonardo Cano
1210	WHAI	Greenfield, Mass. John W. Haigis
. 1310	КРВМ	Poplar Bluff, Mo. Fields McCarthy Co.
1370	WLLH	Lawrence, Mass. Merrimac Brdcstg. Co., Inc.
1420	•••••	Kenora, Ont. FREQUENCY
600	CMQ	
720	CMK	Havana, Cuba, from 880 Havana, Cuba, from 730
750	CMBL	Havana, Cuba, from 710
\$80	CMW	Havana, Cuba, from 600
1110	CMCJ	Havana, Cuba, from 1100
1140	CMCW	Havana, Cuba, from 750
1250	KIT .	Vakima Wash from 1210
1380	CMCX	Yakima, Wash., from 1310 Havana, Cuba, from 1030
880		POWER
980	CFJC XEAC	Kamloops, B. C., 1000 from 100
1140	CMCW	Tijuana, B. Cfa., 5000 from 1000
1250	KIT	Havana, Cuba, 500 from 100
1250	CFCT	Yakima, wash., 250 from 100
1400	CFCI	Yakima, Wash., 250 from 100 Victoria, B. C., 500 from 50 NETWORK
580	CKUA	Edmonton, Alta., new CBC
910	CBF	Montreal, P. Q., new CBC
930	WBRC	Birmingham, Ala., Red from CBS
1030	CFCN	Calgary, Alta., new CBC
1140	WAPI	Birmingham, Ala., CBS from Red
1370	WHLB	Virginia, Minn., new CBS
590	wow	Omaha, Nebr. Woodmen of the World Life Insurance Society, 4th
	~	and Farnum
720	СМК	Havana, Cuba. Radiodifusion O'Shea, Apartado 770
		DELETE
840	CRCT	Toronto, Ont.
1140	CMBG	Havana, Cuba
	PERMIT	
1190	WATR	Waterbury, Conn., to 1290
1240	KLPM	Minot, N. Dak., to 1360
1250	WCAL	Northfield, Minn., to 760
	WLB	Minneapolis, Minn., to 760
1310	KINY	Juneau, Alaska, to 1430
	WOL	Washington, D. C., to 1230
1420	KABR PERM	Aberdeen, S. Dak., to 1390 IT TO CHANGE POWER
570	CMCY	Havana, Cuba, to 10000
590	WKZO	Kalamazoo, Mich., to 250 (1).
770	CMBS	Havana, Cuba, to 5000
810	CMCF	Havana, Cuba, to 5000
880	CMW	Havana, Cuba, to 5000
	WCOC	Meridian, Miss., to 1000
900	KGBU	Ketchikan, Alaska, to 1000
920	CMX	Havana, Cuba, to 10000

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950	WRC	Washington, D. C., to 1000 (5).			
1000	CMBZ	Havana, Cuba, to 5000			
1110	CMCJ	Havana, Cuba, to 5000			
1170	CMBD	Havana, Cuba, to 5000			
1190	WATR	Waterbury, Conn., to 250			
1240	\mathbf{KLPM}	Minot, N. Dak., to 500 (1),			
1250	WCAL	Northfield, Minn., to 5000			
	WLB	Minneapolis, Minn., to 5000			
1310	KINY	Juneau, Alaska, to 250			
	WOL	Washington, D. C., to 1000			
1340	WCOA	Pensacola, Fla., to 1000			
1350	CMCA	Havana, Cuba, to 5000			
1410	CMCQ	Havana, Cuba, to 5000			
1420	KABR	Aberdeen, S. Dak., to 500 (1).			
1430	WBNS	Columbus, Ohio, to 1000 (5),			
1490	KFBK	Sacramento, Calif., to 10000			
	PERM	IT TO CHANGE LOCATION			
570	KGKO	Wichita Falls, Tex., to Ft. Worth			
FOREIGN BROADCAST					
(Exclu	(Excluding Asia, which is listed complete in this issue)				
	÷ .	NEW			
300		Moscow, U. S. S. R.			
722		Lopikerkapel (Hllversum) Nether-			
		lands			
890	5AN	Adelaide, S. A.			
1370	6GE	Geraldton, W. A.			
1400	2PK	Parkes, N. S. W.			
		FREQUENCY			
1070	2RG	Griffith, N. S. W., from 1470			
		POWER			
1050	2CA	Canberra, F. C. T., 2000 from 500			
1070	2RG	Griffith, N. S. W., 100 from 50			
1131	SBH	Horby, Sweden, 100,000 from 10000			
		100,000 H 00000			

Television on Wheels

The first mobile television station in America rolled into Rockefeller Plaza December 12 and, in historic ceremonies in the shadow of NBC's Radio City studios, was presented to engineers of the National Broadcasting Company by the RCA Manufacturing Company.

The new unit, consisting of two modern motor vans containing television control apparatus and a micro-wave transmitter, will soon be used in experimental television pick-ups of outdoor news events. NBC engineers will operate the unit in connection with the present NBC television transmitter atop the Empire State Tower.

(Please turn to page 47)

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 -vou 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.

The successful philatelist 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. In other words, he masters the hobby -the hobby does not master himto the exclusion of all his other interests. His dividends are untold 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 Roosevelt, 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; 1%c plus 1%c slate; 3 plus 2s green; 4c plus 2c reddish brown; 5c plus 3c blue green; and 12%c plus 3%c 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 vet been announced. But we assure our readers that, in general, follow the schedule it will announced in this column in last Nothing new has month's issue. transpired to change that picture----Our next column should as vet. 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.

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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 your stamp album and a new "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, H13N, 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.

William Kurak of Chisholm. 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 Expedition. in care of station VP3BG or VP3MR, Georgetown, British Guiana.

Jack Siringer reports that VP3BG



Its all in a broadcasts work with K' ert Armiruster maestro of the Chase int Sin' in H ur on the Red Network, to accirpant Charlie McCarthy when Edgat Ecripans tamous dummy decides to j in Nels in Eriv or D rithy Lamour in song. This j palar orchestra is heard Sandays 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 WIONRA 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 H15X. 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 Mi 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, GCDNC. 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. С

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

EA8AE (jk); EA8AK (d); EA9AH (k); EI2L (j); EI3J (j); EI9J (m).

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).

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H HA4AD (j); HA8N (m); HE9BL (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); 6O (j); 7G (fjk); HK-: 1Z (e); 3JA (f); 4AG (k); 5JS (k); HP1A (k); HP5A (l); HR5C (m). K

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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 (fi); 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 (j); 5CZ (i); 7AG (k); 8AB (i); 9PA (e). N-O

NY2AE (ek); **OA4-:** AI (j); AK (j); AL (cf); AT (j); C (ajkm); L (j); N (k); R (j); RE (j); **ON4-:** AZ (j); MD (m); RY (j); XX (j); OX2QY (aefkm).

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).

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

v-w

V-W VK2-: ADE (j); AZ (jkm); DK (j); HF (j); IQ (j); JV (j); LZ (f); OG (k); TC (j); VC (j); VK3-: AG (k); AL (e); BI (j); GG (j); HJ (j); KI (j); KR (k); KX (j); MR (b); MX (j); NR (j); WD (e); XU (j); ZB (k); VK4-: JU (k); VD (j); VK5TR (k); VK6MW (bjkm); VK7C', (m); VO-: 1I (k); 1Y (f); 2N (m); 2Z (km); 5B (m); 6D (jkm); 6J (jm); 6JQ (e); VP-: 2BG (k); 2DA (hkm); 3BG (ej); 3GB (k); 3THE (aefjkm); 3XYZ (m); 4TH (k); 5AA (j); 5AC (j); 5AF (ej); 5AG (k); 5AS (j); 5AW (j); 5CW (j); 5FI (j); 5GN (j); 5PZ (jk); 6YB (k); 7NA (k); 9G (jm); 9R (jk); VS7GJ (djm); W10XAB (g). X-Y

X-Y

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 (f); 4AB (dk); 4AN (j); 5AA (fjkm); 5ABF (fk); 5ABT (k); 5ABY (f); 5ACC (k); 5AE (h); 5AM (k);. (f); 5A(5BC) (j).

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

The Reporters

- (a) Richard Carter, 1064 Everett Ave.,
- (b) A. V. Deterly, 2 Baton_Rouge, La. 211 Convention St.,
- (c) Ben Follrath, 1419 Pearl St., Ala-meda, 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., Tucson, Ariz (Philco 630T).
 (h) Martin Olthoff, 212 N. 16th St., In-dependence Kaps (BME69)

- dependence, Kans. (RME69). Dale Smith, Eugene, Ore. Ore. (Sky (i) Dale
- (i) Date Shifti, Edgene, Orc. (Sky 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.

- Jack Siringer, 1451 Lincoln Ave., (m)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.

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550 NUCY 100100 Hinking, Manchukuo MTBY 1000 N xGOG 10000 Chengtu, China 900 XGKA 15 P xXOG 10000 Chengtu, China 900 XGKA 15 P 570 XHJA 100 Taichu, Formosa XIIM 500 B xQHA 250 Shanghai, China 920 JOQK 500 N 590 JOAKI 150000 Tsingtao, China 940 JOBK2 10000 S00 XGHA 150000 Tsingtao, China 940 JOBK2 10000 S0 XHKB 100 Tsingtao, China 960 JOAK 500 P XGSS 15 Tsunshi, China 960 JONK 500 P XGSS 15 Tsunshi, China 960 JOKK 500 T 620 XHK 100 Shanghai, China 900 JOCK1 10000 635	New Delhi, India
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680 JOVK 500 Hakodate, Japan XGN1 30 T 690 JOBK1 10000 Osaka, Japan 1010 XGV1 300 H 690 JOBK1 10000 Osaka, Japan 1010 XGV 5000 H 700 JOCG 700 Ashigawa, Japan NHHG 1000 Si 700 JOCG 700 Ashigawa, Japan NHHG 1000 Si 700 JOCG 700 Ashigawa, Japan NHHG 1000 Si 700 JOCG 700 Shanghai, China NGOL 1000 Si 710 JODK2 10000 Keijo, Korea 1040 JOJG 500 Y XGML 7500 Kashing, China 1050 JOHG 500 Y XGML 7500 Kashing, Fornosa XHHE 100 W XLHC 500 Kochi, Japan XHKA 200 T XLHC 50	oatung, China
690 JOBK1 1000 Osaka, Japan 1010 XGOV 5000 H XGOY 250 Kuming, China 1020 JOFG 300 F 700 JOCG 700 Ashigawa, Japan NHH 100 S000 F 700 JOCG 700 Ashigawa, Japan NHH 100 S00 F 700 JOCG 700 Ashigawa, Japan XHHG 100 S1 VPG 5000 Colombo, Ceylon 1030 JBAK 150 F XMHC 500 Shanghai, China XGOL 1000 F 710 JODK2 10000 Keashing, China 1050 JOHG 500 Y XGOS 1000 Taiwan, Formosa XHHH 100 S1 XLHC 500 Kochi, Japan XHKA 200 T XLHC 500 Kokura, Japan XHKA 200 T XHGS 500 Wuchow, China	aiyuan, China
XGOY 250 Kunning, China 1000 XOW 3000 Ff 700 JOCG 700 Ashigawa, Japan Yelo 3000 F 700 JOCG 700 Ashigawa, Japan Yelo 3000 F 700 JOCG 700 Ashigawa, Japan XHHG 100 Si 700 JOCK 5000 Colombo, Ceylon 1030 JBAK 150 F 710 JODK2 10000 Keijo, Korea 1040 JOJG 500 Y XGML 7500 Kashing, China 1050 JOHG 500 Y XGOS 1000 Taiwan, Formosa XHHH 100 Si XGOS 10000 Nagoya, Japan XHKA 200 T XLHC 50 Shanghai, China 1060 JOIG 500 T 730 JOCK1 10000 Nagoya, Japan XHKA 200 T XHGS 50 Wuehow, Chin	anton, China
700 JOCG 700 Ashigawa, Japan XHHG 100 Si VPG 5000 Colombo, Ceylon 1030 JBAK 150 F XMHC 500 Keljo, Korea 1040 JDJG 500 F 710 JODK2 10000 Keljo, Korea 1040 JOJG 500 Y XGML 7500 Kashing, China 1050 JOHG 500 Y XGML 7500 Kashing, China 1050 JOHG 500 Y ZGML 7500 Kashing, China 1050 JOHG 500 Y JORK 500 Kochi, Japan XHIE 100 W JORK 500 Kochi, Japan XHKA 200 T 730 JOCK1 10000 Nagoya, Japan XHHI 100 Si XHGS 50 Wuchow, China 1070 JOOK 300 K 740 JOSK 1000 Kokura, Japan	angkow, China
VPG 5000 Colombo, Caylon HIRO 100 BB XMHC 5000 Shanghai, China XGOL 1000 F 710 JODK2 10000 Keijo, Korea 1040 JOIG 500 Y XGML 7500 Kashing, China 1040 JOIG 500 Y XGML 7500 Kashing, China 1050 JOHG 500 Y XGOS 1000 Chunking, China 1050 JOHG 500 K 720 JFBK 1000 Taiwan, Formosa XHIE 100 W JORK 500 Kochi, Japan XHKA 200 T XLHC 50 Shanghai, China 1060 JOIK 500 T 730 JOCK1 10000 Nagoya, Japan XHHI 100 SI XHGS 50 Wuchow, China 1070 JOOK 300 K 740 JOSK 1000 Kokura, Japan XGOQ<	ukul, Japan
XMHC 500 Shanghai, China XGOL 1000 F 710 JODK2 10000 Keijo, Korea 1040 JOJG 500 Y XGML 7500 Kashing, China 1040 JOJG 500 Y XGML 7500 Kashing, China 1050 JOHG 500 Y XGOS 1000 Taiwan, Formosa XHHH 100 81 720 JFBK 1000 Taiwan, Formosa XHIE 100 W JORK 500 Kochi, Japan XHKA 200 T XLHC 50 Shanghai, China 1060 JOIG 500 T 730 JOCK1 10000 Nagoya, Japan XHHI 100 S0 XHGS 50 Wuchow, China 1070 JOOK 300 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG <td>hanghai, China</td>	hanghai, China
710 JODK2 10000 Keljo, Korea 1040 JOJG 500 Y XGML 7500 Kashing, China 1040 JOJG 500 Y XGML 7500 Kashing, China 1050 JOHG 500 Y 720 JFBK 1000 Taiwan, Formosa XHHH 100 Si 720 JFBK 1000 Taiwan, Formosa XHKA 200 T 730 JOCK1 10000 Nagoya, Japan XHKA 200 T 730 JOCK1 10000 Nagoya, Japan XHHI 100 Si XHGS 50 Wuchow, China 1070 JOOK 300 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOK 300 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG 500 O JJFAK 10	usan, Korea
XGML 7500 Kashing, China XHHH 1000 Si XGOS 1000 Chunking, China 1050 JOHG 500 K 720 JFBK 1000 Taiwan, Formosa XHIE 100 W JORK 500 K Kothi, Japan XHKA 200 T XLHC 50 Shanghai, China 1060 JOIG 500 K XLHC 50 Shanghai, China 1060 JOIG 500 T 730 JOCK1 10000 Nagoya, Japan XHHI 100 Si XHGS 50 Wuchow, China 1070 JOCK 300 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG 500 O 740 JOSK 1000 Bangkok, Siam XHHJ 200 St XHHB 50 Shanghai, China 1080 JOOG <td>oochow, China</td>	oochow, China
XGOS 1000 Chunking, China 1050 JOHG 500 K 720 JFBK 1000 Taiwan, Formosa XHIE 100 W JORK 500 Kochi, Japan XHKA 200 T XLHC 50 Shanghai, China 1060 JOIG 500 T 730 JOCK1 10000 Nagoya, Japan XHHI 100 SI 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1070 JOOK 300 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG 500 O 750 HS7PJ 15000 Bangkok, Siam XHHJ 200 SH JFAK 10000 Taihoku, Formosa 1090 JBBK1 500 K LUHO 20 T'ung Hsien, China X	amagata, Japan
720 JFBK 1000 Taiwan, Formosa XHIE 1000 W JORK 500 Kochi, Japan XHIE 100 W XLHC 50 Shanghai, China 1060 JOIG 500 T 730 JOCK1 10000 Nagoya, Japan XHKA 200 T 740 JOSK 1000 Kokura, Japan XGOQ 200 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOGK 300 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG 500 CO 750 HS7PJ 15000 Bangkok, Siam XHHJ 200 SH JFAK 10000 Tainoku, Formosa 1090 JBBK1 500 K LUHO 20 T'ung Hslen, China XL	hanghai, China
JORK 500 Kochi, Japan XHKA 200 T XLHC 50 Shanghai, China 1060 JOIG 500 T 730 JOCK1 10000 Nagoya, Japan XHHI 100 SN XHGS 50 Wuchow, China 1070 JOOK 300 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHB 50 Shanghai, China 1080 JOOG 500 O 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG 500 O 750 HS7PJ 15000 Bangkok, Siam XHHJ 200 SH JFAK 10000 Taihoku, Formosa 1090 JBBK1 500 K LUHO 20 T'ung Hsien, China XLIO 25 SH XGOK 1000 Canton, China 1100 XHHS <td>agoshima, Japan</td>	agoshima, Japan
XLHC 50 Shanghai, China 1060 JOIG 500 T 730 JOCK1 10000 Nagoya, Japan XHHI 1000 S00 T 740 JOSK 1000 Nagoya, Japan XHHI 100 S1 740 JOSK 1000 Kokura, Japan XGOQ 200 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG 500 O 750 HS7PJ 15000 Bangkok, Siam XHHJ 200 S1 JFAK 10000 Taihoku, Formosa 1090 JBBK1 500 K LUHO 20 T'ung Hsien, China XLIO 25 S1 XGOK 1000 Canton, China 1100 XHHS 100 S1	usih, China
730 JOCK1 10000 Nagoya, Japan XHHI 1000 SI XHGS 50 Wuchow, China 1070 JOCK 300 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG 500 O 750 HS7PJ 15000 Bangkok, Siam XHHJ 200 St JFAK 10000 Taihoku, Formosa 1090 JBBK1 500 K LUHO 20 T'ung Hsien, China XLIO 25 St XGOK 1000 Canton, China 1100 XHHS 100 St	ientsin, China
XHGS 50 Wuchow, China 1070 JOOK 300 K 740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG 500 O 750 HS7PJ 15000 Bangkok, Siam XHHJ 200 SI JFAK 10000 Taihoku, Formosa 1090 JBBKI 500 K LUHO 20 T'ung Hsien, China XLIO 25 SI XGOK 1000 Canton, China 1100 XHHS 100 SI	oyama, Japan hanghai, China
740 JOSK 1000 Kokura, Japan XGOQ 200 K XHHB 50 Shanghai, China 1080 JOOG 500 O 750 HS7PJ 15000 Bangkok, Siam XHHJ 200 Si JFAK 10000 Taihoku, Formosa 1090 JBBK1 500 Si LUHO 20 T'ung Hsien, China XLIO 25 Si XGOK 1000 Canton, China 1100 XHHS 100 Si	yoto, Japan
XHHB 50 Shanghai, China 1080 JOOG 500 O 750 HS7PJ 15000 Bangkok, Siam XHHJ 200 Si JFAK 10000 Taihoku, Formosa 1090 JBBK1 500 K LUHO 20 T'ung Hsien, China XLIO 25 Si XGOK 1000 Canton, China 1100 XHHS 100 Si	alfeng, China
750 HS7PJ 15000 Bangkok, Siam XHHJ 200 Si JFAK 10000 Taihoku, Formosa 1090 JBBK1 500 K LUHO 20 T'ung Hsien, China XLIO 25 Si XGOK 1000 Canton, China 1100 XHHS 100 Si	bihiro, Japan
JFAK 10000 Taihoku, Formosa 1090 JBBK1 500 K LUHO 20 T'ung Hsien, China XLIO 25 Si XGOK 1000 Canton, China 1100 XHHS 100 Si	hanghai, China
LUHO20T'ung Hsien, ChinaXLIO25SIXGOK1000Canton, China1100XHHS100SI	eljo, Korea
XGOK 1000 Canton, China 1100 XHHS 100 SI	haohing, China
	hanghal, China
XQKB 150 Tientsin, China 1110 XLIG 15 K	aoyu, China
780 $IOAK$ 1000 Deizon Manabukus 1100 $\pi\pi\pi\pi\pi$	hanghai, China
VIUI 71/ Obenghel Oblas	anghai, China
XLHJ 25 Shanghai, China 1130 XGOC 300 N	anchang, China
770 JOHK 10000 Sendai, Japan 1140 XHHL 100 Sh	anghai, China
VUM 200 Madras, India 1150 XGOZ 1000 Si	ninkiang, China
XHID 75 Ningpo, China 1160 XHHU 100 St	anghai, China
780 JOPK 500 Shizueka, Japan 1180 XHHZ 150 Sh	anghai, China
XLHA 50 Shanghai, China 1200 VUL 100 La	ahore, India
790 JOGK 10000 Kumamoto, Japan XHHN 100 SH	anghai, China
XGOV 10000 Changsha, China 1210 XHKC 100 Ta	singtao, China
XLIJ 50 Wush, China XLPH 15 Pi	nghu, China
	usih, China
	anghai, China
	angchow, China
	anghai, China
	ngshien, China
	usih, China
820 JBBK2 500 Keljo, Korea 1260 XHHP 100 SH	anghai, China
	uhu, China
	anghai, China
	sinan, China
	anghai, China
	chow, China
845 ZBW 2000 Hong Kong 1330 XLIK 75 CI	hangchow, China
850 XLIQ 50 Hangchow, China 1332 ZHL Sin	agapore, Straits Settle-
855 HSP1 2500 Bangkok, Siam	ments
	anghai, China
	anning, China
	entsin, China
	anghai, China
880 XHHV 100 Shanghai, China 1370 XLID 50 Ha	angchow, China

1380	XLHE	50	Shanghai, China
1990	XLHF	50	Shanghai, China
1390	XLIN	50	Wusih, China
1400	FFZ	250	Shanghai, China
	XLH0	100	Shanghai, China
1440	XLHQ	30	Shanghai, China
1450	хGOM	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
	хннт	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 be 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 televised events will be broadcast 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

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. WXYZ

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

CKAC KLRA KMOX WABC 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 Radlo, Sat. and Sunday CKAC KLRA KMOX WABC WADC WAIM WALA WCHS WCOC WDAE WDBJ WDBO WEEI WESG WFBL WFBM WHEC WHIO WIBX WJNO WJR WJSV WLBZ WMAS WMBR WMMN WNBF WOKO WORC WPAR WQAM WRBC 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 C. Hill, Monday through Friday

KFAB KFH KGKO KLRA KMBC KMOX KNOW KOMA KRLD 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 WEEI WFBL WGR WGST WHAS WHEC WHIO WHP WIBX WISN WJR WJSV WKBB WKBN WKRC WLAC WLBZ WMAS WMAZ WMBD WMBR WMMN WNAX WNBF WNOX WOC 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 WET WFBL WFBM WGST WHAS WHEC WHIO WISN WJAS WJR WJSV WKBB WKBW WKRC WLAC WLBZ WMBR WNBF WOKO WORC WPRO WQAM WREC WRVA WWL

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

E-3:15 p.m., C-2:15, M-1:15, P-12:15 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., Fri. KFH KLRA KNOW KOMA KSCJ KSL KTRH KWKH WABC WACO WADC WAIM WALA WBIG WBRC WCCO WCOC WDAE WDBJ WDBO WDOD WHEC WISN WJAS WJNO WJR WKBB 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, 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

• • • Network News Flashes

E-7:45 p.m., C-6:45, M-5:45, P-4:45 CBS—Boake Carter, Mon., Wed., Frl. 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 WWL

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 J

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

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 K8FO 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 Netw	orks		Hartford, Conn.	WTIC	1040
Albuquerque, N. Mex.	ков	1180	Houston, Texas	KPRC	920
Allentown, Pa.	WSAN	1440	Indianapolis, Ind.	WIRE	1400
Asheville, N. C.	WWNC	• 570	Jackson, Miss.	WJDX	1270
Amarillo, Texas	KGNC	1410	Kansas City, Mo.	WDAF	610
Bakersfield, Calif.	KERN	1370	Los Angeles, Calif.	KFI	640
Beaumont, Texas	KFDM	560	Memphis, Tenn. Montreal, P. Q.	WMC	780
Billings, Mont.	KGHL	780	New Orleans, La.	CBM WSMB	1050
Bismarck, N. Dak.	KFYR	550	New York, N. Y.	WEAF	$1320 \\ 660$
Boise, Idaho	KIDO	1350	Omaha, Nebr.	wow	590
Butte, Mont.	KGIR	1340	Philadelphia, Pa.	KYW	1020
Charleston, S. C.	WCSC	1360	Pittsburgh, Pa.	WCAE	1220
Charlotte, N. C.	WSOC	1210	Portland, Maine	WCSH	940
Chicago, Ill. Cincinnati, Ohio	WCFL	970	Portland, Ore.	KGW	620
Cincinnati, Onio	WLW WSAI	700	Providence, R. I.	WJAR	890
Clearwater, Fla.	WFLA	1330 620	Richmond, Va.	WMBG	1350
Columbia, S. C.	WIS	560	St. Louis, Mo.	KSD	550
Columbus, Ohio	WCOL	1210	St. Paul, Minn.	KSTP	1460
Corpus Christi, Tex.	KRIS	1330	Salt Lake City, Utah San Francisco, Calif.	KDYL	1290
Covington, Ky.	WCKY	1490	Schenectady, N. Y.	KPO WGY	680 700
Dallas, Texas	WFAA	800	Seattle, Wash.	KOMO	790 920
Duluth, Minn.	WEBC	1290	Spokane, Wash.	KHQ	520 590
Evansville, Ind.	WGBF	630	Washington, D. C.	WRC	950
Fargo, N. Dak.	WDAY	940	Wilmington, Del.	WDEL	1120
Ft. Wayne, Ind.	WGL	1370	Worcester, Mass.	WTAG	580
Ft. Worth, Texas	WBAP	800			
Fresno, Calif. Grand Rapids, Mich.	KMJ	580	Blass Matuur		
Greenville, S. C.	WOOD WFBC	1270	Blue Network		
Honolulu, Hawaii	KGU	1300	Albany, N. Y.	WABY	1370
Hot Springs, Ark.	KTHS	750 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.	WAVE	940	Boston, Mass.	WBZ	990
Madison, Wis.	WIBA	1280	Bridgeport, Conn.	WICC	600
Manchester, N. H.	WFEA	1340	Buffalo, N. Y.	WEBR	1310
Medford, Ore.	KMED	1410	Cedar Rapids, Iowa	WMT	600
Miami, Fla.	WIOD	610	Chicago, Ill.	WENR	870
Milwaukee, Wis. Montreal, P. Q.	WTMJ	620	Cleveland, Ohio	WLS WHK	870
	CBF WSM	910 650	Denver, Colo.	KVOD	1390 920
INVISIONE L'END					
Nashville, Tenn. Norfolk, Va.					
Norfolk, Va.	WTAR	780	Des Moines, Iowa Detroit, Mich.	KSO	1430
	WTAR WKY	780 900	Des Moines, Iowa		
Norfolk, Va. Oklahoma City, Okla.	WTAR	780 900 620	Des Moines, Iowa Detroit, Mich.	KSO WXYZ	1430 1240
Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz.	WTAR WKY KTAR	780 900	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas	KSO WXYZ WLEU	1430 1240 1420
Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif.	WTAR WKY KTAR KOAM WPTF KFBK	780 900 620 790	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y.	KSO WXYZ WLEU WOWO KXYZ WJTN	1430 1240 1420 1160 1440 1210
Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla.	WTAR WKY KTAR KOAM WPTF KFBK WSUN	780 900 620 790 680 1490 620	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN	1430 1240 1420 1160 1440 1210 1220
Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI	780 900 620 790 680 1490 620 1190	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA	1430 1240 1420 1160 1440 1210 1220 1430
Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS	780 900 620 790 680 1490 620 1190 1450	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. Memphis, Tenn.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS	1430 1240 1420 1160 1440 1210 1220 1430 1430
Norfolk, Va. Oklahoma City, Okla. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO	780 900 620 790 680 1490 620 1190 1450 1200	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. Memphis, Tenn. Minneapolis, Minn.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN	1430 1240 1420 1160 1440 1210 1220 1430 1430 1250
Norfolk, Va. Okiahoma City, Okia. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO	780 900 620 790 680 1490 620 1190 1450 1200 1110	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF	1430 1240 1420 1160 1440 1210 1220 1430 1430 1250 600
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.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX	780 900 620 790 680 1490 620 1190 1450 1200 1110 1230	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. Memphis, Tenn. Minneapolis, Minn.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU	1430 1240 1420 1160 1210 1220 1430 1430 1250 600 1250
Norfolk, Va. Okiahoma City, Okia. 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.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG	780 900 620 790 680 1490 620 1190 1450 1200 1110 1230 1200	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF	1430 1240 1420 1160 1440 1210 1220 1430 1430 1250 600
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.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX	780 900 620 790 680 1490 620 1190 1450 1200 1110 1230 1200 1310	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL	1430 1240 1420 1460 1210 1220 1430 1430 1430 1250 600 1250 760
Norfolk, Va. Okiahoma City, Okia. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fia. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW	780 900 620 790 680 1490 620 1190 1450 1200 1110 1230 1200	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMREN KECA WTCN CFCF WDSU WJZ KLO KOIL WFIL	1430 1240 1420 1160 1210 1220 1430 1430 1250 600 1250 760 1400
Norfolk, Va. Okiahoma 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.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT	780 900 620 790 680 1490 620 1490 1450 1200 1110 1230 1200 1310 840	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA	1430 1240 1420 1160 1210 1220 1430 1430 1250 600 1250 760 1400 1260 560 980
Norfolk, Va. Okiahoma City, Okia. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fia. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okia. Weslaco, Texas Wichita, Kans.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS	780 900 620 790 680 1490 1200 1110 1230 1200 1310 840 1310 840 1260 1210	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. Memphis, Tenn. Minneapolis, Minn. Montreal, P. Q. New Orleans, La. New York, N. Y. Ogden, Utah Omaha, Nebr. Philadelphia, Pa. Pittsburgh, Pa. Portland, Ore.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEX	1430 1240 1420 1160 1220 1430 1250 600 1250 760 1250 760 1260 1260 1400 1260 1400 1260 1400 1260 1400
Norfolk, Va. Okiahoma 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.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV	780 900 620 790 680 1490 620 1190 1450 1200 1110 1200 1310 840 1140 1260	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. 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.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMREN KECA WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN	1430 1240 1420 1160 1220 1430 1250 760 1250 760 1260 560 980 1180 780
Norfolk, Va. Okiahoma 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.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS	780 900 620 790 680 1490 1200 1110 1230 1200 1310 840 1310 840 1260 1210	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. Pittsburgh, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WJZ KLO KOIL WFIL KDKA KEAN KGHF	1430 1240 1420 1460 1220 1430 1220 1430 1250 600 1250 600 1250 760 1400 1260 780 1180 780 1320
Norfolk, Va. Okiahoma City, Okia. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fia. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okia. Weslaco, Texas Wichita, Kans.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS	780 900 620 790 680 1490 1200 1110 1230 1200 1310 840 1310 840 1260 1210	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. 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.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGIF WRTD	$\begin{array}{c} 1430\\ 1240\\ 1420\\ 1160\\ 1440\\ 1210\\ 1220\\ 1430\\ 1250\\ 600\\ 1250\\ 600\\ 1250\\ 760\\ 1260\\ 1260\\ 1400\\ 1260\\ 1400\\ 1400\\ 1400\\ 1400\\ 130\\ 130\\ 1500\\ \end{array}$
Norfolk, Va. Okiahoma City, Okia. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fia. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okia. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS	780 900 620 790 680 1490 1200 1110 1230 1200 1310 840 1310 840 1260 1210	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. Pittsburgh, Pa. Portland, Ore. Providence, R. I. Pueblo, Colo.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WJZ KLO KOIL WFIL KDKA KEAN KGHF	1430 1240 1420 1160 1220 1430 1250 760 1250 760 1250 760 1260 580 980 1180 780 1320 1500
Norfolk, Va. Okiahoma City, Okia. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fla. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak. Springtield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okia. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK	780 900 620 790 680 1490 1200 1110 1200 1310 840 1260 1210 1320	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. 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.	KSO WXYZ WLEU WOWO KXYZ WJZ WREN KECA WMREN KCFCF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGHF WRTD WHAM	$\begin{array}{c} 1430\\ 1240\\ 1420\\ 1160\\ 1440\\ 1210\\ 1220\\ 1430\\ 1250\\ 600\\ 1250\\ 600\\ 1250\\ 760\\ 1260\\ 1260\\ 1400\\ 1260\\ 1400\\ 1400\\ 1400\\ 1400\\ 130\\ 130\\ 1500\\ \end{array}$
Norfolk, Va. Okiahoma City, Okia. 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, Okia. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC	780 900 620 790 680 1490 1200 1110 1200 1310 840 1260 1210 1320 740 1270 930	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. 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.	KSO WXYZ WLEU WOWO KXYZ WJZ WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEAN KGHF WRTD WHAM KWK KFSD KGO	1430 1240 1420 1460 1210 1220 1430 1250 600 1250 600 1250 760 1400 1260 760 1400 1260 780 1320 1320 150 1350
Norfolk, Va. Okiahoma City, Okia. 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, Okia. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC WNAC	780 900 620 790 680 1490 1200 1110 1200 1310 840 1210 1320 140 1260 1210 1320 740 1270 930 1230	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. 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. San Francisco, Calif.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEAN KGHF WRTD WHAM KWK KFSD KGO KTMS	$\begin{array}{c} 1430\\ 1240\\ 1420\\ 1460\\ 1440\\ 1210\\ 1220\\ 1430\\ 1250\\ 600\\ 760\\ 1250\\ 760\\ 1400\\ 1260\\ 780\\ 1320\\ 1320\\ 1350\\ 1350\\ 600\\ 1150\\ 1350\\ 600\\ 790\\ 1220\\ \end{array}$
Norfolk, Va. Okiahoma City, Okia. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fia. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okia. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass. Butfalo, N. Y.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC WNAC WBEN	780 900 620 790 680 1490 1200 1110 1230 1200 1310 840 1140 1260 1210 1320 740 1270 930 1230 990	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, 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. St. Louis, Mo. San Diego, Calif. Santa Barbara, Calif.	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	$\begin{array}{c} 1430\\ 1240\\ 1420\\ 1460\\ 1440\\ 1210\\ 1430\\ 1220\\ 1430\\ 1250\\ 600\\ 1250\\ 600\\ 1250\\ 760\\ 1400\\ 1260\\ 560\\ 1400\\ 1260\\ 560\\ 1320\\ 1350\\ 600\\ 790\\ 1220\\ 970 \end{array}$
Norfolk, Va. Okiahoma City, Okia. 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, Okia. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atianta, Ga. Baitimore, Md. Birmingham, Ala. Boston, Mass. Buffalo, N. Y. Chicago, III.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC WBEN WMAQ	780 900 620 790 620 1490 1490 1200 1110 1200 1310 840 1260 1210 1320 740 1220 930 1230 900 670	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, 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. St. Louis, Mo. San Diego, Calif. Sant Barbara, Calif. Seattle, Wash.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WFIL KDKA KEX WEAN KGA	1430 1240 1420 1160 1220 1430 1250 600 1250 760 1250 760 1260 1260 1260 1260 1400 1260 1400 1260 1400 1260 1400 1500 1500 1500 1500 1500 1500 1470 1470 1470
Norfolk, Va. Okiahoma City, Okia. 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, Okia. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass. Buffalo, N. Y. Chicago, III, Cieveland, Ohio	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KEUO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC WBEN WMAQ WTAM	780 900 620 790 680 1490 1200 1110 1200 1310 840 1210 1320 140 1260 1210 1320 740 1230 930 1230 900 670 1070	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. 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.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMREN KCA WTCN CFCF WDSU WJZ KLO KOIL WJZ KLO KOIL WFIL KDKA KEAN KGHF WRTD WHAM KWK KFSD KGO KTMS KJR KGA WBZA	1430 1240 1420 1160 1210 1220 1430 1250 600 760 1250 760 1400 1250 760 1400 1260 980 1320 1350 1350 1350 600 980 1150 1350 1350 1470 1220 970 1220 990
Norfolk, Va. Okiahoma City, Okia. Phoenix, Ariz. Pittsburg, Kans. Raleigh, N. C. Sacramento, Calif. St. Petersburg, Fia. San Antonio, Texas Shreveport, La. Sioux Falls, S. Dak. Springfield, Mo. Stockton, Calif. Terre Haute, Ind. Toronto, Ont. Tulsa, Okia. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass. Buffalo, N. Y. Chicago, III. Cleveland, Ohio Denver, Colo.	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC WBEN WMAQ WTAM KOA	780 900 620 790 680 1490 1200 1200 1200 1210 1230 1210 1220 1210 1220 122	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, 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. St. Louis, Mo. San Diego, Calif. Sant Barbara, Calif. Seattle, Wash. Springfield, Mass. Syracuse, N. Y.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMPS WTCN CFCF WDSU WJZ KLO KOIL WJZ KLO KOIL WFIL KDKA KEX WEAN KGHF WRTD WHAM KKFSD KGO KTMS KJR KGA WBZA WSZA	$\begin{array}{c} 1430\\ 1240\\ 1420\\ 1460\\ 1440\\ 1210\\ 1430\\ 1430\\ 1250\\ 600\\ 1250\\ 600\\ 1250\\ 760\\ 1400\\ 1260\\ 780\\ 1180\\ 780\\ 1320\\ 1500\\ 1320\\ 1500\\ 1350$
Norfolk, Va. Okiahoma City, Okia. 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, Okia. Weslaco, Texas Wichita, Kans. York, Pa. Red Network Atlanta, Ga. Baltimore, Md. Birmingham, Ala. Boston, Mass. Buffalo, N. Y. Chicago, III, Cieveland, Ohio	WTAR WKY KTAR KOAM WPTF KFBK WSUN WOAI KTBS KELO KSOO KGBX KEUO KSOO KGBX KWG WBOW CRCT KVOO KRGV KANS WORK WSB WFBR WBRC WBEN WMAQ WTAM	780 900 620 790 680 1490 1200 1110 1200 1310 840 1210 1320 140 1260 1210 1320 740 1230 930 1230 900 670 1070	Des Moines, Iowa Detroit, Mich. Erie, Pa. Fort Wayne, Ind. Houston, Texas Jamestown, N. Y. Lawrence, Kans. Los Angeles, Calif. 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.	KSO WXYZ WLEU WOWO KXYZ WJTN WREN KECA WMREN KCA WTCN CFCF WDSU WJZ KLO KOIL WJZ KLO KOIL WFIL KDKA KEAN KGHF WRTD WHAM KWK KFSD KGO KTMS KJR KGA WBZA	1430 1240 1420 1160 1210 1220 1430 1250 600 760 1250 760 1400 1250 760 1400 1260 980 1320 1350 1350 1350 600 980 1150 1350 1350 1470 1220 970 1220 990

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 - Lowell Thomas B -

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

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

– 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 - Uncie 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

B — Lum and Abner WBZA WENR WJZ WLW WRZ WMC WSM WSYR

- The Lone Ranger м.

WFIL WNBF WSYR WOR WXYZ

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

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

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 WHP WICC WJAS WJR WJSV WKRC WLBZ WMAS WNAC WOKO WORC WSPD

- Volce of Firestone R -

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

B — Campana's Grand Hotel

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

E-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 KNX KOH KOIN KOL KOMA KRLD KRNT KSFO KSL KTRH KTSA KTUL KVI WABC WADC WBBM WBNS WBRC WBT WCAO WCCO WDAE WDBJ WDRC WEEI 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

- Fibber McGee and Molly R -KDKA KOIL KSO KWK WBAL KFYR KPRC KSD KSTP KTBS

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

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

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

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

Warden Lewis E. Lawes

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

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

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

R - Burns and Allen-

KARK KDYL KFBK KFI KFYR KFBX KGHL KGIR KGNC KGO KGW KHQ KMJ KOA KOMO KPO

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MONDAY (Continued)

KPRC KSD KSTP KTAR KTBS KVOO KWG WAVE WDAF WDAY WEBC WFAA WIBA WJDX WKY WMC WOAI WOW WSB WSMB WMC 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. McCail, Hollywood Talk KFAB KFH KLRA KMOX KNOW KOMA KRLD KRNT KTRH KTSA KWKH WABC WADC WBBM WBNS WBT WCAO WCAU WCCO WCHS WDAE WDBO WDOD WDRC WEEI WFBL WGAR WGBI WGST WHAS WHEC WHIO WIBW WISN WJAS WJR WJSV WKRC WLAC WMAS WMBR WOC WOKO WORC WPRO WQAM WREC WRVA WWL

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

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

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

R — Johnny with Kuss morgan KFYR 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 WWNC

C ---- Edward Robinson; Claire Trevor CEM 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 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

E-8:30 p.m., C-7:30, M-6:30, P-5:30 Ai Joison; Parkyakarkus

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

R -Wayne King and Orchestra

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

– Edgar Guest, It Can Be Done

KDKA KOIL KSO KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLS WLW WMAL WMT 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 KIRA 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 WKRC WKBH WKBN WKBW WLAC WLBZ WMAS WMBD WMBG WMMN WNAC WMBR WNAX 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 WW.I

B — Horace Heidt Orchestra

KANS KDKA KFI KFSD KGA KGO KGW KJR KLO KOIL KPRC KSO

KTHS KVOD KWK WAVE WBAL WBAP WBZ WBZA WEAN WEBR WFIL WFLA WHAM WHK WICC WIOD WIS WJAX WJZ WKY WLS WLW WMAL WMC WMT WOAI WPTF WREN WSB WSM WSMB WSOC WSPD WSUN WSYR WTAR WTCN 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 WEAF WEBC WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WHO WIRA WIOD WIRE WIS WJAR WJAX WKY WMAQ WMBG WMC WNAC WOAI WOOD WOW WRC WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ ww.r

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

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

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 — Eddic Duchin Orchestra

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

E-10:30 p.m., C-9:30, M-8:30, P-7:30 R - Jimmy Fidler Hollywood Gossip KDYL KFI KGW KHQ KOA KOMO KPO KSD KTAR KYW 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 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 Amos 'n' Andy, See Monday R R ___ Easy Aces, See Tuesday

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

KMBC WABC WADC WBIG WBNS WBT WCAO WCAU WCHS WDAE WBT WCAU WCAU WCAU WOLL WDBJ WDBO WDRC WEEI WFBL WCAP WGRI 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 n.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 WJAS WJR WJSV WHK WKRC WLAC WMBG WNAC WOKO WTOC WWL.

R — One Man's Family

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

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Eddle Cantor; Deanna Durbin

CFRB CKAC KFAB KFH KLRA KMBC KMOX KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WADC WBBM WBNS WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDBO WDRC WEEI WFBL WFBM WGR WGST WHAS WHEC WHIO WHK WHP WIBW WIBX WJAS WJR WJSV WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WNAX WNOX WOKO WORC WOWO WPG WPRO WOAM WREC WWL

R — Wayne King, See Tuesday

B - Skolsky from Hollywood

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

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C -– Chesterfield: Andre Kostelanetz KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KGMB KHJ KLKA KLZ KMBC KMJ KMOX

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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 — Eddle Cantor; Deanna Durbin KTUL KVI KVOR KWG KWKH KFBB KFPY KGVO KLZ KNX WABC WACO WADC WALA WBBM KOH KOIN KOL KOY KSFO KSL WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBG WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGST WHAS WHEC WHE WHP WIBW WIBX WICC WISN WJAS WJR WJSV WKEH WKEW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WNAC WNAX WNBF WNOX WOC WOKO WORC WOWO WPG WQAM WREC WSFA WSJS WSPD WTOC WWL

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 WJAX WJDX WKY WLW WMAQ WMC WOAI WOW WPTF WRC WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

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

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

R-Your Hollywood Parade

KDYL KERN KFBK KFI KFYR KGBX KGHL KGIR KGNC KGU KGW KHQ KIDO KMJ KOA KOB KOMO KPO KPRC KSD KSTP KTAR KTBS KTHS KWG KYW WAPI WAVE WBEN WCAE WCSC WCSH WDAF WDEL WEAF WEBC WFAA WFBC WFBR WFEA WFLA WGL WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WLW WMAQ WMBG WMC WNAC WOAI WOOD WORK WOW WPTF 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 KDAL KFAB KFH KFPY KGKO KIRO KLZ KMOX KNOW KNX KOH KOIN KOMA KRLD KOY KRNT KSFO KSL KTRH KTSA KTUL KVI KWKH WALA WBBM WBRC WCCO WCOC WFBM WGST WHAS WIBW WISN WLAC WMBD WNBF WNOX WOC WREC WSBT WSFA WWL

M — Lone Ranger, see Mon.

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

R — Amos 'n' Andy, See Monday

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

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 B — Easy Aces, See Tuesday

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

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

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E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Kate Smith; Henny Youngman

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

R - Rudy Vallee's Variety Hour

CFCF CRCT KDYL KFI KFYR KGW KHQ KOA KOMO KPO KSD KGW KHQ KOA KOMO KFO ASL KSTP KTAR KYW WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WGY WHO WJAR WLW WMAQ WOW WRC WTAM WTIC WTMJ WWJ

B - Gen. Hugh Johnson, See Mon.

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

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

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

CFRB CKAC KDB KERN KFAB KFBK KFH KFPY KFRC KGB KGKO KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KSCJ KSL KTRH KTSA KRNT 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

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THURSDAY (Continued)

WICC WISN WJAS WJR WJSV WKBN WKBW WKRC WLAC WLBZ WMBD WMBG WMBR WMAS WMMN WNAC WNAX WOC WOKO WORC WOWO WPG WQAM 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 KVOO KYW WAVE WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ WWNC

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C — "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 C --- 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

WNAC WOKO WWL

R — Cities Service Concert

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

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

C - Paul Whiteman: Deems Taylor KFAB KFH KGKO KLRA KMBC KMOX KOMA KRLD KRNT KSCJ KTRH KTSA KTUL KWKH WABC WACO WADC WALA WBM 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 WMMN WMBD WMBG WMBR WNBD WMBG WMBR WMMR WNAX WNBF WNOX WOC WOKO WORC WOWO WPG WPRO WQAM WREC WSFA W3JS WSPD WTOC WWI.

B — Death Valley Days

KDKA KDYL KFI KGW KHQ KOIL KOMO KPO KSO KWK WBAL WBZ WBZA WFIL WGAR WHAM WJZ WLW WMAL WMT WREN WLS 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 WMBD WMBG WMBR WMAS WNAC WNAX WNOX WOKO WORC WPG WQAM WREC WSPD WWL

R --- 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

– Tommy Dorsey's Orchestra B --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 JWFLA WHAM WHK WIBA WICC WIOD WIS WJAX WJZ WKY WMAL WMPS WMT WOOD WOWO WPTF WREN WRTD WSGN WSM WSPD WSOC WSUN

WJR WJSV WKRC WMAS WMBG WSYR WTAR WTCN WTMJ WWNC WXV7

> E-10:00 p.m., C-9:00, M-8:00, P-7:00 C — Frank Crumit; Kitty Carlisle KDAL KFAB KFBB KFH KFPY KGKO KGLO KGVO KRLA KLZ KMOX KNOW KNX KOH KOIN KOL KOMA KOY KRED KRNT KSCJ KSFO KSL KTRH KTSA KTUL KVI KVOR KWKH WABC WACO WADC WALA WBM 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.

- Jimmy Fidler R --

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

E-10:45 p.m., C-9:45, M-8:45, P-7:45 R — Dorothy Thompson—News KDYI, 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 C — 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

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

E-8:00 p.m., C-7:00, M-6:00, P-5:09 R — "Believe-it-or-not." Ripley

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

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

C — Johnny Presents Russ Morgan KFAB KFH KMBC KMOX KRNT WABC WADC WBBM WBIG WBNS WBT WCAO WCAU WCCO WCOA WDRC WEEI WFBL WFBM WGR WGST WHAS WHEC WHIO WHK WHP WISN WJAS WJR WJSV WKRC WMBD WMBG WNBF WOC WOKO WPRO WSBT WWVA

R — Jack Haley; Virginia Verrili 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 WOAI WOW WPTF WRC WSB WSMB WSOC WSPD WTAG WTAM WTAR WTIC WTMJ WWJ

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

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 WIS WMAL WMC WMT WOAI WOOD WPTF WREN WRVA WSB WSMB WSOC WSUN WSYR WTAR WWNC WXYZ

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

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

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 WJSY WKBW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WNAC WNAX WNOX WOC WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WSPD WTOC WWL WWVA

R — NBC Symphony Orchestra Avaliable to entire Red and Blue Network

E-11:00 p.m., C-10:00, M-9:00, P-8:00 B — Nationai 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 KFFH KFPY KFRC KGB KGVO KMBC KOH KOL KRLD KSL KTRH KTSA KVI KVOR KWG KWKH WABC WACO WADC WALA WBNS WBRC WCAO WCCO WDAE WDBJ WDBO WDNC WESG WFBL WFEA WHAS WHK WIBX WJAS WJR WKRC WLBZ WMBD WMBR WMMN WOC WOKO WORC WPG WQAM WSBT WSJS WSPD WTOC

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

C --- Salt Lake Tabernacle Choir

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

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

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C — 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 WBT WCAO WCCO WDAE WDBJ WDBO WDRC WESG WFBL WFBM WGR WHAS WHP WIBX WJAS WJSV WKBN WKRC WLAC WLBZ WMBR WNBF WOC WOKO WORC WPG WQAM WREC WSBT WSJS WSPD WTOC WWVA

E-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 WBM 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 WACC WALA WBNS WBT WCAO WCCO WCHS WDAE WDBJ WDBO WDRC WEEI WESG WFBL WFBM WHAS WHK WHP WIBW WIBX WJAS WJR WJSV WKBB WKBN WKBW WKRC WLAC WLBZ WMAS WMBD WMBG WMBR WMMN WNBF WOC WOKO WORC WPAR WPRO WQAM WSBT WSJS WTAQ WTOC WWL

Aise on Canadian Network

R — The Radio News Reel KSD KSTP KYW WBEN WCAE WCSH WDAF WDEL WEAF WFBR

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

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

SUNDAY (Continued)

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

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

R --- Marion Talley

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

- Metropolitan Opera Auditions R -CECE CRCT KARK KDKA KECA KEX KFEL KFI KFSD KFYR KGA KGIR KGNC KGO KGU KJR KLO KOIL KPRC KSO KTBS KVOO KWK WABY WAPI WAVE WBAL WBAP WBZ WBZA WCKY WCSC WDAY WEAN WEBR WENR WFIL WFLA WHAM WHK WICC WIOD WIS WJAX WJDX WJZ WKY WMAL 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

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C — Guy Lombardo and Orchestra

KFH KMBC KMOX KOMA KTUL WAAB WABC WBNS WCAO WCAU WDRC WEAN WFBL WFBM WGR WHAS WHEC WHK WIBX WICC WJR WJSV WMAS WOKO WORC WSPD WWVA

B — Smiling Ed McConneil

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

- Mickey Mouse Theater R -Station list unavailable

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

CFRB CKAC KDAL KFAB KFH

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

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

R — Jack Benny; Mary Livingstone

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

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 WHP WIBX WICC WJAS WJR WJSV WKBN WICC WJAS WJR WISY WHEN WKRC WLAC WLBZ WMAS WMBR WNAC WNOX WOKO WORC WQAM WREC WSBT WSFA WSJS WSMK WSPD WTOC WWL WWVA

B — Ozzie Neison; Harriet Hilijard

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 KV00 KYW WAVE WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WIOD WIRE WJDX WKY WLW WMAQ WMC WNAC WOAI WOW WPTF WRC WRVA WSB WSM WSMB WSOC

WSUN WTAG WTAM WTAR WTIC WTMJ WWJ 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 KMOX KOH KOIN KOL KOMA KRLD KRNT KSCJ KSL KTRH KTSA KTUL KVI KVOR KWG KWKH WABC WACO WADC WALA WBBM WBIG WBNS WBRC WBT WCAO WCAU WCCO WCOA WDAE WDBJ WDBO WDNC WDOD WDRC WEAN WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBW WIBX WICC WISN WJAS WJR WJSV WKBN WKRC WLAC WLBZ WMAS WMBD WMBR WNAC WNAX WOC WOKO WORC WQAM WREC WSBT WSFA WSJS WSPD WTOC WWL WWVA

B — Tyrone Power; Drama

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

- Manhattan Merry-Go-Round P.

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

R -– Waiter Winchell

KDKA KECA KEX KFSD KGA KGHL KGIR KGO KJR KLO KOIL KTAR KWK WBAL WBZ KSO 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 KRED KRNT **LSFU** KSL KTRH KTSA KTUL KVI WABC WBBM WBNS WBRC WBT WCAU WOUG W DAE W DBO W DRC WEEL WEBL WEBM WGAR WGST WHAS WHEC WJAS WJR WJSY WKRW WKRC WNOX WMBR WOKO WORC WPRO WQAM WWL

Rising Musical Stars

KDYL KEI KGBN KGW KHQ KOA KPO KFRC KSD KSI P KTAR KTBS KTHS KYW WAVE WBAP WBEN WCAE WOSH WDAF WEAF WFBR WELA WGY WHO WIBA WIOD B - Walter Winchell WBAP WJDA WI WIRE WIS WJAR WJAA WJDX KDYL KEI KESD KGHL KGIR WSB WSM WSMB

WEY WMAQ WMC WNAC WOAL EGW EHQ KOA KOMO EPO EPBC WOOD WOW WPTF WRC WRVA ETAR ETBS ETHS WAPI WAVE WSB WSM WSMB WSOC WTAG WBAP WJDY WEY WMC WOAL WTAM WTAR WTIC WTMJ WWJ WWNC

E-11:00 p.m., C-10:00, M-5:00, P-5:00 E-11:30 p.m., C-10:30, M-0:30, P-6:30 8 --- Irone Rich, Drama

EWG WAPI WAVE WJDN WMC WSB WSM WSMB

E-11:15 p.m., C-10:15, M-9:15, P-8:15

WSB WSV WSMB

R - Jack Bonny-Mary Livingstone KECA KERN KEX KFBK KFSD KDYL KERN KFBK KF1 KFSD KGA KGO KJR KLO KMJ KVOD KGHL KGIR KGU KGW KHQ KIDO KMJ KOA KOMO KPO KTAR NWG.

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8 - Tyrone Power; Drama

KARK KPRC KTBS WAPI WAVE WBAP WIDN WEY WMC WOAL

CLASSIFIED INDEX TO CHAIN PROGRAMS

Line in Eatern Standard

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

COMEDY

- Fred Alien, 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 Rod Bob Burns, 10.00 pm Thurs, Red Burns and Allen 8 and 10.30 p in Mon Red Charles Butterworth 9:30 p.m. Lues 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. 1ues (CBS Walter O Keefe 9/30 p.m. Lues Red. Park) akarkus, 8.30 and 11:30 p m Tues CBS Al Pearce, 9 and 12 p.m. I ues-CBS Jue 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 pm Sun , Blue NBC Symphony Orchestra, 10:00 p m Sat . Red and Blue N Y Philharmonic 3:00 pm Sun , CBS Philadelphia Symphony, 9:00 p.m. Sun , Blue

DANCE BANDS

Robert Armbruster, 8:00 p.m. Sun., Red Oscar Bradiey, 7:30 p m Sun , CBS Tommy Dorsey, 10:00 p th Fri, Blue Eddie Duchin, 10 p.m. Tues, MBS Ted Fio 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. Sup., Red. 10:00 p.m. Fri , CBS

Phil Harris, 7 and 11:30 p.m. Sun., Red

Horace Heidt, 9:00 p.m. Tues. Blue Carl Hoff, 9 and 12 p.m. Tues., CBS Wayne King 8:30 p.m. Fues, 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. Fratikie Masters 8 30 p.m. Fues, Blue Jack Miller's and 11 15 p.m. Thurs, CHS 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 5 and 10 30 p in Mon , Red Raymond Pauge 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, \$:00 and 12:00 p m Sat Rod Harry Salter, 7:15 and 10:30 p in Wed CBS Seymour Simons, 6:30 p.m. Sun . CBS Phil Spitalny, 9:30 p.m. Mon., Red. Johnny Trotter, 10:00 pm Thurs Red Tommy Tucker, 6:00 p.m. Sun , MBS Rudy Vallee, 8:00 p m Thurs , Red Peter Van Steeden, 9:00 p.m. Mon., Red Don Voorhees, 8:00 p.m. Wed, CBS Mark Warnow, 7:30 and 10:30 p.m. Thurs, CBS Ted Weems, 9:00 p m Mon , Red Paul Whiteman, 8:30 and 11:30 Fri., CBS Meredith Willson, 9:00 p.m. Thurs., Red Victor Young, 8:30 and 11:30 p.m. Tues, CBS

DIALOG

Amos 'n' Andy, 7:00 and 11:00 p.m. Mon. through Fri., Red Easy Aces, 7:00 p m. Tues., Wed., Thurs., Blue Fibber McGee and Molly, 9:00 p.m. Mon., Red Lum and Abner, 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, 5:00 p.m. Sun., Red

DRAMA

Campana's First Nighter, 10:00 p.m. Fri., Red Campana's Grand Hotel, 8:80 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

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We, The People, 7:30 and 10:30 p.m. Thurs., CBS

POPULAR PROGRAMS

American Album of Familiar Music, 9:30 p.m. Sun., Red 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 Jack Haley's Variety Show, 8:30 p.m. Sat., Red Hammerstein Music Hall, 8:00 p.m. Fri., CBS Hobby Lobby, 7:15 and 10:30 p.m. Wed., CBS 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., Biue 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 Tabernacie, 12:30 p.m. Sun., CBS Saturday Night Serenade, 9:30 p.m. Sat., CBS Saturday Night Swing Club, 7:00 p.m. Sat., CBS Kate Smith Hour, 8:00 and 11:15 p.m. Thurs., CBS Songshop, 10:00 p.m. Fri., CBS Station E-Z-R-A, 7:15 p.m. Mon., Wed., Fri., Red Swing School, 10:00 p.m. Tues., CBS Texaco Town, 8:30 and 11:30 p.m. Wed., CBS 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 Waitz Time, 9:00 p.m. Fri., Red Watch the Fun go By, 9:00 and 12:00 p.m. Tues., CBS We, The People, 7:30 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

Gene Austin, 6:00 p.m. Sun., CBS Kenny Baker, 7:00 and 11:30 p.m. Sun., Red Henry Burr, 9:00 and 11:00 p.m. Sat., Blue Rachel Carlay, 9:00 p.m. Sun., Red Kitty Carlisle, 10:00 p.m. Fri., CBS Jerry Cooper, 9:00 p.m. Fri., CBS Alice Cornett, 10:00 p.m. Fri., CBS Richard Crooks, 8:30 p.m. Mon., Red Bing Crosby, 10:00 p.m. Thurs., Red Frank Crumit, 10:00 p.m. Fri., CBS Jean Dickenson, 9:30 p.m. Sun., Red Deanna Durbin, 8:30 and 11:30 p.m. Wed., CBS Mary Eastman, 9:30 p.m. Sat., CBS Nelson Eddy, 8:00 p.m. Sun., Red Wilbur Evans, 7:00 p.m. Sun., CBS 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. Fri., 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

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.

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,	c 070		
2.500		Monterrey, N. L. (.03).	5.975		Huancayo, Peru. (.25).
	to 4.800	Amateur Stations.	5.980 5.990		Medellin, Colombia. 2000-2230.
3.040		Tandjong Priok, Java, N.E.I. (10.).	3.330	NJ2ADI	D Bucaramanga, Colombia. (.67). 1900-2300.
4.107		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.
4.600	HC2ET	Guayaquil, Ecuador. Wed., Sat., 2100-2230.	0.005	HP5K VE9DN	Montreal, P. Q. (.075). 0700-2400. Colon, Panama. 1800-2300. Montreal, P. Q. (6.).
4.780	HJ1AB	B Barranquilla, Colombia (.3). Apart- ado 715.		XZ1GY	Rangoon, Burma.
4.787	HJ2AB	C Cucuta, Colombia. (.25). "La Voz de Cucuta."	6.010	COCO CJCX	Sydney, N. S. (1.). 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.).
4.840	HJ3ABI) Bogota, Colombia. 1930-2400. Aptdo. 509.			Mon., Wed., Fri., 1600-1630. Saigon, French Indo-China.
5.003	нст	Guayaquil, Ecuador. "Radio Tele- fonica."	6.012	HJ3ABH	Bogota, Colombia. (1.2). 1800–2300.
5.415	PMY	Bandoeng, Java, N.E.I. (.45). 0530- 1000.	6.015	HI3U	Santiago de los Caballeros, D. R. (.025). Mon. 2000-2100. Daily 0730- 0930; 1200-1430; 1700-1930.
5.500	тібнн	San Ramon, Costa Rica. (.2). 2000- 2330.	6.020	DIC	Berlin, Germany. (50.). 1040-1630; 1650-2245
5.710	TGS	Guatomala City, Guat. (.2). Wed.,		XEUW	Veracruz, Ver. (.02). 1800-2400.
5.735	HC1PM	Thurs., Sat., 1800-2100. Quite, 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- 2130. Weekdays 0700-2200.		VE9BJ XEBQ	St. John, N. B. (.05). Mazatian, Sin. (.05).
5.813	TIGPH2	San Jose, Costa Rica.	6.033	НЈ4АВР	Medellin, Colombia. (2.5). 1800-
5.825	TIGPH	(aiso TIXGP3), San Jose, Costa Rica. 1100-1300; 1800-2200.	6.038		2300. Barranquilia, Colombia. (.15). 1100-
5.850	YV1RB	Maracaibo, Venez. Sun., 1145-1245. Weekdays 0845-0945; 1115-1215; 1645-2145.	6.040	PRAS	2300. Pernambuco, Brazil. (3.). 1500-
5.855	ныт	San Pedro de Macoris, D. R. (.04). 1200-1400; 1830-2100.		W1XAL	2000. Boston, Mass. (20.). Daily exc. Sat. and Sun., 1900-2100.
5.875	HRN	Tegucigaipa, Honduras. (.4). Sun.,		W4XB	Miami, Fla. (5.).
		2030-2130. Weekdays 2030-2200.		YDA	Tandjong Priok, Java, N.E.I. (10.).
5.885	H19 B	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 O	Nairobi, Kenya. 1100-2430.
5.925	HH2S	Port-au-Prince, Haiti. 1900-2200.		W3XAU	Philadelphia, Pa. (10_). 2000-2300.
5.935	YV1RL	Maracalbo, Venez. (.3). 1700-2230.			Cincinnati, Ohio. (10.). Daily 2300- 0200. Sun. 0800-2000. Weekdays
5.945	т G2X \	Guatemala City, Guat. (.2). Sun., 1300-1400; Mon., Thurs., Sat., 1600- 1800; 2200-2400.	6.062		0600-2000. Motala, Sweden. (.5). 1330-1700.
5.947	PJC1		6.064	VP3MR	Georgetown, British Gulana. (.15)
G.341		Willemstad, Curacao, N.W.I. (.15) 1835-2035.			(assigned 6010). 0745-1015; 1645- 2045.

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6.065	HPSF	Colon, Panama. Toronto, Ont. (1.). 1000-2300.
6.070		Bogota, Colombia. (.05). 1900-2230.
	YV1RD	Maracaibo, Venez. 1900-2400.
6.075	XEBW	Guadalajara, Jal. (.045).
	XECU	Guadalajara, Jal.
6.077	OAX4Z	Lima, Peru. (10.) (6082 assigned).
	D 114	1900-2330. Berlin, Germany. (50.).
6.080	DJM VE9CS	Vancouver, B. C. (.01). 1400-2400.
	W9XAA	
		Weekdays 0600-0730.
6.085		Call, Colombia. 1900-2200.
6.090	CRCX	Toronto, Ont. (1.). 0745-1700.
6.095	ZGE	Ibague, Colombia. 2000-2200. Kuala Lampur, F.M.S.
6.097		Johannesburg, U. of S. Africa.
		Mon. to Fri. 1145-1600; Sat. 1145-
		1645.
6.100	W3XAL	Bound Brook, N. J. (35.). 2100-0100.
	W9XF	Chicago, III. (10.). 1700-2005. Belgrade, Jugosiavia. (1.). 1200-
	••••	1700.
6.108	HJ4ABB	Manizales, Colombia, 1800-2400.
6.110	GSL	London, Gt. Britain. (20.). 1800-
		2030; 2115-2300.
	VUC OLR2C	Calcutta, India. Prague, Czecho. (35.).
6.115 6.118	XEUZ	Mexico Gity, D. F. (5.), 2300-0300.
6.120	W2XE	New York, N. Y. (10.).
	XEFT	New York, N. Y. (10.). Veracruz, Ver. (.012).
	YDA5	Bandoeng, Java, N.E.I. (1.5). Bogota, Colombia. 1730–2230.
6.122	OAX6A	
6.125	CXA4	Montevideo, Uruguay. (1.). 1600-
		- 2145.
	H P5H	Panama City, Panama
	XEPW	Mexico City, D. F. 2100-2400.
6.128	OAX7A	Cuzco, Peru. (.1).
6.130	COCD	Havana, Cuba. (.35). 1700-0108
	VE9HX	Halifax, N. S. (.5). 1700-2300. Georgetown, British Guiana.
6.132	VP3BG	
6.137	CR7AA	Lourenco Marques, Port. East Africa. Sun. 0600-0900. Weekdays
		9500-0700.
6.138	HJ4ABD	Medellin, Colombia.
6.140	WRYK	Pitteburgh, Pa. (40.), 2200-sign ott.
6.145	HJ4ABE	Medeilin, Colombia (1.). "La Voz de Antioquia." 1800-2230.
6.150	CJRO	Winnipeg, Man. (2.). 1800-2400.
0.130	CSL	Lisbon, Portugal. 0700-0830; 1400-
		1900.
	VPB	Colombo, Ceylon. (.3). Sun. 0700-
		1130; Weekdays 0630-1230. Cludad Moca, D. R. (.1). 1900-2000.
6.153 6.156	HI5N YV5RD	Caracas, Venez. 1030-1330; 1530-
0.730		2200.
6.174	XEXA	Mexico City, D. F. 1700-2100.
6.180	TG2	Guatemaia City, Guatemaia.
6.190	HIIA	Santiago de los Cabaileros, D. R.
4.130		(.05). Weekdays 2000-2200.
6.198	HISQ	Trujilio, D. R. 1700-1900.
6.200	COKG	Santiago, Cuba. (.05). Daily exc.
4.200	1	Sat. 0900-2300.
	XEXS	Mexico City, D. F.
6.205	YV1RI	Coro, Venez. (.15). 1700-2200.
6.225	YV1RG	Valera, Venez. 1730-1930.
6.235	HRD	La Celba, Honduras. (.25). 2900-
		2300.
6.243	HIN	Trujilio, D. R. (.75).
6.250		Caracas, Venez.
6.270		-
6.280	_	Trujilio, D. R. (.05).
		Sancti-Spiritus, Cuba. (.15). 2100-
6.282	COUR	2300.
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6 296	OAXIG	Lima Peru, (.4), 1900-2130,
6.300	OAX4G YV4RD	Lima, Peru. (.4). 1900-2130. Maracay, Venez. 1700-2300.
6.310	HIZ	Trujillo, D. R. (.1).
6.312		Villarrica, Paraguay (1.). 1100-1700.
6.330	COCW	Havana, Cuba. 0700-2400.
6.335	OAX1A	Chiclayo, Peru. (.2). Dally 2000-
		2300; Sat. 2000-2400.
6.340	HIIX	Trujillo, D. R. (.5). Tues., Fri.,
6 35 7	HRP1	2000-2200. San Pedro Sula, Honduras.
6.357 6.365	YV1RH	Maracaibo, Venez. 1900-2400.
6.380	YV5RF	Caracas, Venezuela.
6.383	VP2LO	St. Kitts. Brt. West Indies. (.5).
6.400	YV5RH	Caracas, Venezuela.
6.410	TIPG	San Jose, Costa Rica. (1.). 1800-
		2230.
6.416	YV6RC HI1S	Bolivar, Venez. Santiago, D. R. (.02). 1800-2300.
6.420 6.425	OAX4K	Lima, Peru. (.2).
0,420		Bound Brook, N. J. (100.). Irrreg.
	W3XL W10XD	A Effie M. Morrissey (.1).
6.450	HI4V	San Francisco de Macoris, D. R.
0.430		(.025).
6.479	HI8A	Trujillo, D. R.
6.485	HIL	Santiago de los Caballeros, D. R.
		"Emisora Nacional." 0630-0800;
	14000	1730-1900; 2000-2100.
6.479 6.500	HI8A	Trujillo, D. R. Trujillo, D. R. (.05).
6.500	HIL YV1RM	
6.508	Radio G	uardia Civil, Tetuan, Sp. Morocco.
	-	1900-2000.
6.520	YV4RB	Valencia, Venezuela. 1700-2200.
6.534	EDR4	Paima, Majorca, Balearic Isi.
6.540	YN1GG	
6.545	YV6RB Tircc	Bolivar, Venez. 2100-2300. San Jose, Costa Rica. (.5). Tues.,
6.550	TIRCC	Thurs., Sat. 1700-1800.
6.555	HI4D	Trujillo, D. R. (.025). 1700-2000.
6.575	HC1VT	Ambato, Ecuador.
6.590	COCU	Havana, Cuba. Sun, 1900-2400; Weekdays 1900-0100.
e coo	Decide	Rio Bamba, Ecuador. Thur. 2200-
6.622	Prado	2300.
	шт	Trujillo, D. R. (.2). Weekdays,
6.630	ніт	1800-2100.
	Hean	
6.635	HC2RL	1945. Tues. 2115-2315.
	TIFE	San Jose, Costa Rica. 1600-2300.
6.690	TIEP	
6.700	TIVL	San Jose, Costa Rica.
6.720	PMH	Bandoeng, Java, N.E.I. (1.5).
6.730	HI3C	La Romana, D. R. 1745-2000.
6.780	нін	San Pedro de Macoris, D. R. (.15).
		1900-2000.
6.800	HI7P	Trujillo, D. R. 1930-2100.
	PZH	Paramaribo, Surinam.
6.850	TIOW	Puerto Limon, Costa Rica. (.4).
0.000		Sun., 1600-1700. Dally 1200-1300.
6,990	VK8XI	
	to 7.300	
7.100	FO8AA	2300-2400.
		Guadalalara, Jai. "Voice of the
		Revolutionary Party."
7.200	YNAM	
7.380	ALUR	1800-2000.
		1900-2000
7 644		Moscow, U. S. S.R. (Assigned 7520).
7.540		Geneva, Switz. (20.). Sat., 1730-
7.797	нвр	1830.
7	VCD	San Salvador, E. S. 2100-2230.
7.894		
8.400	HCZCW	/ Guayaquil, Ecuador.

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SUNDAY (Continued)

KOMA KRLD KRNT KSFO KSL KTRH 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 Star

KDYL KFI KGBX KGW KHQ KOA KPO KPRC KSD KSTP KTAR KTBS KTHS KYW WAVE WBAP WBEN WCAE WCSH WDAF WEAF WFBR WFLA WGY WHO WIBA WIOD WIRE WIS WJAR WJAX WJDX WKY WMAQ WMC WNAC WOAI WOOD WOW WPTF WRC WRVA WSB WSM WSMB WSOC WTAG WTAM WTAR WTIC WTMJ WWJ 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

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 KDYL KFI KFSD KGHL KGIR 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 Alien, 8 and 10:30 p.m., Mon., Red
- Charles Butterworth, 9:30 p.m. Tues., Red
- Eddle 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 Joison, 8:30 and 11:30 p.m. Tues., CBS
- Walter O'Keefe, 9:30 p.m. Tues., Red
- Parkyakarkus, 8:30 and 11:30 p.m. Tues., CBS
- Al Pearce, 9 and 12 p.m. Tues., CBS
- Joe Penner, 6:00 p.m. Sun, CBS
- Joe Rines, 5:30 p.m. Sun., Red Pinky Tomlin, 8:30 and 11:30 p.m. Wed., CBS
- Henny Youngman, 8 and 11:15 p.m. Thurs., CBS

CONCERTS

Frank Black, 2:00 p.m. Sun., Blue Ford Sunday Evening Hour, 9:00 p.m. Sun., CBS 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 Eddie Duchin, 10 p.m. Tues., MBS Ted Fio 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 Heidt, 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. Frl., 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 Phil Spitalny, 9:30 p.m. Mon., Red Johnny Trotter, 10:00 p.m. Thurs., Red Tommy Tucker, 6:00 p.m. Sun., MBS Rudy Vallee, 8:00 p.m. Thurs., Red Peter Van Steeden, 9:00 p.m. Mon., Red Don Voorhees, 8:00 p.m. Wed., CBS Mark Warnow, 7:30 and 10:30 p.m. Thurs., CBS Ted Weems, 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. Tues., CBS

DIALOG

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

We, The People, 7:30 and 10:30 p.m. Thurs., CBS

POPULAR PROGRAMS

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

- 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 Jack Haley's Variety Show, 8:30 p.m. Sat., Red
- Hammerstein Music Hall, 8:00 p.m. Fri., CBS
- Hobby Lobby, 7:15 and 10:30 p.m. Wed., CBS 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., CHS
- 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 D.m. Fri., CBS Station E-Z-R-A, 7:15 p.m. Mon., Wed., Fri., Red
- Swing School, 10:00 D.m. Tues., CBS Texaco Town, 8:30 and 11:30 D.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 Waitz Time, 9:00 p.m. Fri., Red
- Watch the Fun go By, 9:00 and 12:00 p.m. Tues., CBS We, The People, 7:30 and 10:30 p.m. Thurs., CBS Your Hit Parade, 10:00 D.m. Sat., CBS Your Hollywood Parade, 10:00 p.m. Wed., Red Zenith Foundation, 10:00 p.m. Sun., CBS

SINGER5

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

Gene Austin, 6:00 p.m. Sun., CBS Kenny Baker, 7:00 and 11:30 p.m. Sun., Red Henry Burr, 9:00 and 11:00 p.m. Sat., Blue Rachel Carlay, 9:00 p.m. Sun., Red Kitty Carlisle, 10:00 p.m. Fri., CBS Jerry Cooper, 9:00 p.m. Fri., CBS Alice Cornett, 10:00 p.m. Fri., CBS Richard Crooks, 8:30 p.m. Mon., Red Bing Crosby, 10:00 p.m. Thurs., Red Frank Crumit, 10:00 p.m. Fri., CBS Jean Dickenson, 9:30 p.m. Sun., Red Deanna Durbin, 8:30 and 11:30 p.m. Wed., CBS Mary Eastman, 9:30 p.m. Sat., CBS Nelson Eddy, 8:00 p.m. Sun., Red Wilbur Evans, 7:00 p.m. Sun., CBS Jack Fulton, 7:00 and 11:00 p.m. Mon. through Frl., CBS Freddie 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. Fri., 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 Virginia³Verrill, 8:30 p.m. Sat., Red

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.

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8.58	• YNPR	Managua, Nicaragua, (.5 - "Radio Pilot", 1330-1430; 2000-2200,	
8.60	HC1EC	Quite, Ecuader.	
8.65	5 W10X	DA Effic M. Merrissey. (.1).	
8.66	5 COJK	Citie M. Mertissey, (.1),	
8.83	нсјв	Quito. Ecuador 1.1. "La Voz de los Andes." 0700-0615; 1130-1430;	
9.03(COBZ	1645-2215.	
9,125		Havana, Cuba. Budapost, Hungary, (20,), Sun.,	
		Wod., 1900-2000. Sat., 1800-1900.	
9.29		Havana, Cuba. P. O. Bex 3488.	
9.210		Contraction of the state of the	
9.346		Lima, Роги. (.2). 1200-1500; 1700- 0100.	
9.345		Geneva, Switz. (28.). Frl. 1438- 1445; 1938-1945; 2008-2015.	
9.356		Havana, Cuba. Aptde, 132.	
	H\$8PJ	Bangkok, Siam. Mon., Thurs., 9730-1000.	
9.415	PJC2	Willemstad, Curacao, N.W.I.	
	PLV	Bandoeng, Java, N.E.I. (80.), 1998- 1199.	
9.428	COCH	Havana, Cuba. (.15). 8788-8188.	
9.445		Guayaquii, Ecuador, Sun. 1600- 2200. Daily 2100-2200	
9.450	HC20D	A Guayaquil, Ecuador. 2100-2200.	
9.460	XGOX	Nanking, China, (.5),	
9 478		Willemstad, Curacao, N.W.I. (.15). Sun. 1035-1235.	\$
5.480	EAR	Madrid, Spain. (20.). Mon. at 2000; Tues., Fri. at 2100.	5
	XEDQ	Guadalajara, Jal. 1908-0100.	
9.500		Madrid, Spain,	8
		E Cartagena, Colombia. 1788-1880; 2800-2230.	9
	XEWW	Mexico City, D. F. (10.). 0800-2406.	
9.501	PRF5	Rio de Janeiro, Brazil. (68.). 1645- 1745.	9
9.504	OLR3B	Prague, Czecho. (35.).	9
9.510	GSB	Daventry, Gt. Britain. (20.). 0315-	
		0530; 1220-1600; 1615-2030; 2115- 2300.	9
	ULH	Buenaventura, Colombia, Mon.,	9
	H58PJ	Wed., Fri. 2000-2300. Bangkok, Siam. Mon., Thurs.,	9
	VK3ME	0800-1000.	9
9.520		days 0400-0700.	
3.320	OZF	Armenia, Colombia. (1.). 8800-1106; 1800-2200.	9
		Copenhagen, Denmark, (6.), 1488- 1840.	
	YSH	San Salvador, E. S. Radio Liberto. 1900-2000.	9.
9.523		Pretoria, U. of S. Africa. (5.). Addi Box 4559, Johannesburg.	9.
9.525	ZBW3	Hong Kong. (2.5). Sat. 2100-2400, Sun. 0008-0100; 0300-0930. Other days 0400-1000; 2330-0100.	
9.530	LKJ1 W2XAF	Joloy, Norway, (1.). 0500-0800, Schenectady, N. Y. (40.), Sat. 1200-	9
	WEXBE	2409. Other days 1680-2409. Belment, Calif. (20.), General	
9.535	JZ1	Elec. Co. (Under construction). Nazaki, Japan. (50.). 1500-1600;	9.
		1630-1730.	
9.536	VPD2	Suva, Fiji. (2.). 0530-0700.	9
9.548	DJN	Berlin, Germany. (58.). 8005-1806; 1658-2245.	9. 9.
9.550	OLR3A	Prague, Czeche. (35.). Daily 1255-	10.) 10.)
	XEFT	Veracruz, Ver. (.82). 1938-2408.	10.
9.560	DJA		10.3
	HJIABB	1658-2245.	18.

9.56	2 OAX4	T Lima, Parss. (38.). 1139-1338.
9.565		Bombay, India. (6.5),
3.570	YV3RE NZRM	and the second sec
3.3/4		Mamila. P. I. Mon. through Fri. 0500-0500; 1630-1800. Sol. 0500- 1000; 1630-1800. Sun. 0500-1000.
	WIXK	Boston, Mass. (10.), Sum. 0800- 0100. Wookdays 0600-0100.
3.580	WOXK	Pittsburgh, Pa. (48.). (Not used).
	GSC Vikilir	Daventry, Gt. Britain. (20.), 1809- 2030; 2115-2308. Molbourne, Australia. (.5), 0100- 8945.
9.556	PCJ	Huizon, Notherlands. (20.), Sun. 1400-1500; 1900-2115; Mon. 2100- 2230; Tuos., 1400-1530; 1900-2130;
	VK2ME	Wed., 1900-2130; Thurs., 1900-2130.
	VKGME	Porth, Australia. (5.). Weekdays 9688-8888.
	W2XE W3XAU	New Yark, N. Y. Philadelphia, Pa. (18.), 1200-2000;
	WEXAL	Thurs., 2200-2308,
9.595	HBL	construction),
3.333		Geneva, Switzerland. (18.), Sat. 1738–1839.
3.600	RAN CB968	Moscow, USSR. 1900-2115.
9.605	HP5J	Santiago, Chilo. 1888-1938.
	nr sj	Panama City, Panama. (1.). 1838- 2300.
9.606		Johannesburg, U. of S. Atrica, 2345- 8845. Add: P. O. Box 4559.
9.618		Cartagona, Colombia. (.75). 1890- 2200.
9.630	HJ7ABC) Bucaramanga, Celombia. "Redie Bucaramanga." Taihoku, Taiwan. 8430-1838.
9.635	12R0	Rome, Italy. (25.). 1230-2100.
9.640	CXAS	Montevideo, Uruguay. 0700-2400.
9.645	HH3W	Port-au-Prince, Haiti. (.03). 1300- 1400; 1908-2008.
9.659	CS2WA	Lisbon, Portugal. (2.). Tuos., Thurs., Sat., 1600-1900.
9.660	CREAA	Lobito, Angola, Port. West Africa. (.5). Wed., Sat., 1445-1645.
	LRX	Buenos Aires, Argentina. (8.). 1030-2436.
9.670	THNRH	Heredia, Costa Rica. 2100-2208; 2330-2400.
9.685	TGWA	Guatemala City, Guat. (10.). "Radio Nacional." Sun. 2000-2200, Mon., Thur., 2100-2300. Wod., Sat. 2200-2400.
9.706	COCQ	Navana, Cuba. (assigned 9758). 8700-8108.
	* * * * *	Fort de France, Martinique. "Radio Martinique." (.2). Box 136. 1845- 1945.
9.790	COCM	Havana, Cuba. (assigned 3833).
9.868	EAQ	Madrid, Spain. (28.).
8.925	JDY	Darien, Manchukue. 8715-8888.
3.348	CSW	Lisbon, Portugal. (5.). 1300-2008.
10.000	COBC	Havana, Cuba.
10.065		Macau, Pertuguese China.
10.070		Communistic Station,
10.220	PSH	Rie de Janeiro, Brazil. (12,), 1900- 2100.
10.260	PMN	Bandoong, Java, N.E.I. (1.5). 8538- 1199.

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10.330	ORK	Brusseis, Belgium. (11.). 1330-1500.	11.855	DJP	Berlin, Germany. (50.).
10.370	EAJ43	Santa Cruz de Tenerife, Canary Isi.	11.860	GSE	Daventry, Gt. Britain. (20.).
		2000-2100. "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	11.875	OLR4C	Prague, Czecho. (35.).
LO.530	ЛВ	Milan." Taihoku, Taiwan. (6.). 0900-1030.	11.885	TPA3	Pontoise, France. 0200-0500; 121: 1800.
	ZIK2	Beilze, British Honduras. Tues.,	11.895	HP5I	Aguaduice, Panama. 1930-2130.
10.660	JVN	Thurs., Sat., 1930-1945.	11.900	CD1190	Valdivia, Chile. 1000-1300; 190 2200.
10.670	CEC	Nazaki, Japan. (50.).		OLR4D	Prague, Czecho. (35.).
10.740	JVM	Santiago, Chile. (4.). Nazakl, Japan. (50.).		XEWI	Mexico City, D. F. (.25). 1930-240
10.823		Nacional," Salamanca, Spain, 1630-	11.955	IUC	Addis Ababa, Ethiopia.
	PLP	1800.	11.960	HI2X	Trujillo, D. R. (.5). Tues., Fri 2000-2200. Sun. 0740-1040.
11.000		Bandoeng, Java, N.E.I. (1.5).	12.000	RNE	Moscow, USSR. (20.). Sun. 100
11.040 11.402	CSW HBO	Lisbon, Portugal. (5.). 1800-2000. Geneva, Switz., Fri. 1400-1415;			1100. Sun., Wed., 0600-0700. Sun Mon., Wed., Fri., 1600-1700.
44 495	000V	Sat. 1845-2030.	12.120		Algiers, Algeria.
11.435	COCX	Havana, Cuba. Sun. 1800-2100. Other days 0800-2400.	12.235	TFJ	Reykjavik, Iceland. (7.5). Sun 1345-1430.
11.535	SPD	Warsaw, Poland. (2.). Dally 1800-	12.290	GBU	Rugby, Gt. Britain.
44 609	SBG	1900. Sun. until 2000.	12.295	CB615	Santiago, Chile.
11.698		Motala, Sweden. (.5). 0100-0130.	12.500	HIN	Trujilio, D. R. (.75).
L1.700	CB1170 HP5A	Santiago, Chile. 1000-1400; 1530- 2300. Panama City, Pan. (.5). 2000-2330.	12.675		Guayaquil, Ecuador. "Rad Paris."
	• • • • • •	Saigon, Fr. Indo-China. 0500-1100.	12.765	VP2LO	St. Kitts, Brt. West Indies. (.!
11.710	XEWB YSM	Guadalajara, Jai. San Salvador, E. S.	13.635	SPW	Warsaw, Poland. (10.). Mor Wed., Fri., 1230-1330. Daily 180
11.713	TPA4	Pontolse, France. 0615-1300.			1900.
1.718	CR7BH	Lourenco Marques, Port. East Africa. (.2). Sun. 0530-0700. Other	13.740	VP3THE	Terry-Holden Expedition, Brt. Gu ana. (.2).
11.720	CJRX	days 0430-0630. Wimmingg Man (2) 1800-2400	13.986	DJS	Berlin, Germany. (20.).
11.730	PHI	Winnipeg, Man. (2.). 1800-2400.	14.000	to 14.400	Amateur Stations.
	XETM	Hilversum, Netherlands. (23.6). Villahermosa, Tab.	14.050	ЕА9АН	Tetuan, Sp. Morocco. (.5). Apto 124. At 1645 and 1900.
11.740	HP5L	David, Panama. (.35).	14.400	UPOL	North Pole. 1400-1605.
11 750	GSD	Daventry, Gt. Britain. (20.). 0315- 0530; 0855-1200; 1220-1600; 1615-	14.420	HC1JB	Quito, Ecuador. "Radio Rodante
		1800; 2115-2300.	14.535	HBJ	Geneva, Switz. Sat. 1845-2100.
L1.760	OLR4B	Prague, Czecho. (35.).	14.900	LZA	Sofia, Buigaria.
	TĢWA	Guatemala City, Guat. (10.).	15.040	RKI	Moscow, USSR. 1900-2115.
11.770	DID	Mon., Thurs., 2000-2200. Berlin, Germany. (50.). 1040-1630;	15.110	DJL	Berlin, Germany. (50.). 0000-020 0800-0900; 1040-1630.
		1650-2245.	15.116	OL R5C	Prague, Czecho. (35.).
11.790	W1XAL	Boston, Mass. (20.). Sat. 1345-1830.	15.120	нуј	Vatican City. (10.). 1000-1030.
		Sun. 1500-1800. Other days 1645- 1830.	15.140	GSF	Daventry, Gt. Britain. (15.). 031 0530; 0545-1200.
11.795	DIO	Berlin, Germany. (8.).	15.150	YDC	Bandoeng, Java, N.E.I. (3.).
11.796 11.800	OAX5A Cogf	Ica, Peru. (.1). 1200–1600; 1900–2330. Matanzas, Cuba. (1.). 1300–1600;	1 5.160	JZK	Nazaki, Japan. (50.).
1.000	CUGF	Matanzas, Cuba. (1.). 1300-1600; 1800-2200.		XEWW	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	Guatemala City, Guat. (10.). 120 1400.
L1.805		Copenhagen, Denmark. 1830-2100.	15.175	RV96	"Radio Nacional," Lima, Peru. Moscow, USSR.
1.810	I2RO	Rome, Italy. (25.). 0500-1220.	15.175	GSO	Daventry, Gt. Britain. 0315-053
L1.820	GSN	Daventry, Gt. Britain.			0545-0855; 1600-1800.
11.830	KZRM	Manila, P. I.	15.200	DJB	Berlin, Germany. (8.). Sun. 111
	W2XE	New York, N. Y. (10.). Daily 1830- 1900. Sun. 1900-2400.	15.210	W8XK	1225. Daily 0005-1100; 1650-2245. Pittsburgh, Pa. (40.). 0900-190
		Chicago, III. (20.).	15.220	PCJ	Huizen, Netherlands. (20.). Su
11.840	CSW	Lisbon, Portugal. (5.). 1300-2000.	_		0330-0500. Wed. 0800-1030.
	KZRM	Manila, P. I. Mon. through Fri. 0500-0900; 1630-1800. Sat. 0500-	15.230	OLR5A TPA2	Prague, Czecho. (35.). Sun. 060 0730. Weekdays 0620-0730. Pontolse, France. 0600-1100.
		1000; 1630-1800. Sun. 0500-1000.	15.243		
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		2200; Sun. 1015-1200; Daily exc. Sat. and Sun. 1415-1600.		W8XK W9XAA	Pittsburgh, Pa. (40.). Chicago, III. (5.).
15.260	GSI	Daventry, Gt. Britain. 1220-1600.		W9XF	Chicago, III. (10.).
15.270	HI3X W2XE	Trujillo, D. R. (.5). Sun., 0800-1100. New York, N. Y. (10.). Sat., Sun.	17.790	GSG	Daventry, Gt. Britain. (15.). 0315- 0530; 0545-1200; 1220-1600.
		1430-1800; 2000-2400. Mon. through	17.800	TGWA	Guatemaia 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;			1000.
		0815-1100; 1650-2245.	21.450	OLR6A	
15.290	LRU	Buenos Aires, Arg. (5.). 0800-1000.	21.460	W1XAL	Boston, Mass. (10.). Tests ir- 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	W2XAD	Schenectady, N. Y. (25.). 1100-2100.	21.520	W2XE	New York, N. Y. (10.). Sat., Sun.,
	W6XBE	Belmont, Calif. (20.). (Under construction).		W3XAU	0800-1300; Other days 0730-1000. 🔹 Philadelphia, Pa.
15.340	DJR	Berlin, Germany. (50.). 0800-0900; 1650-2245.	21.530	GSJ	Daventry, Gt. Britain. 0545-0855; 0915-1030.
15.370	HAS3	Budapest, Hungary. (20.). Sun.	21.540	W8XK	Pittsburgh, Pa. (40.). 0700-0900.
101010	IIAOU	0900-1000.	21.550	GST ,	Daventry, Gt. Britain.
15.440	XEBM	Mazatlan, Sin. (.05). 1000-2300.	25.950	W4XH	Spartanburg, S. C. (.05) (WSPA).
15.555	CO9WX	Tuinicu, Cuba. (2.).		W6XKG	Los Angeles, Calif. (.1) (KGFJ). 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	Mitwaukee, Wis. (.5) (WTMJ).
	W2XE	New York, N. Y. (10.). 1830-2000.			1300-2400.
17.770	PHI	Hilversum, Netherlands. (23.6). Sun., 0725-1025. Mon., Tues	26.550	W2XQO	Flushing, N. Y. (.1) (WMCA).
		Sun., 0725-1025. Mon., Tues., Thurs., Fri., 0825-1000. Sat.,	27.100	W10XD	A Effie M. Morrissey (.1).
		0825-1040.	28.000	to 30.000	Amateurs.
17.780	W3XAL	XAL Bound Brook, N. J. (35.). 0900-1740;		to 60.000	Amateurs.
		1800-2100.	110.000 to infinity. Amateurs.		

Time Conversion Table

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

EST 24-hr.					
Clock	EST	CST	MST	PST	GMT
0000	Midn't	11 pm	10 pm	9 pm	0500
0100	1 am	Midn't	11 pm	10 pm	0600
0200	2 am	1 am	Midn't	11 pm	0700
0300	3 am	2 am	1 am	Midn't	0800
0400	4 am	3 am	2 am	1 am	0900
0500	5 am	4 am	3 am	2 am	1000
0600	6 am	5 am	4 am	· 3 am	1100
0700	7 am	6 am	5 am	4 am	1200
0800	8 am	7 am	6 am	5 am	1300
0900	9 am	8 am	7 am	6 am	1400
1000	10 am	9 am	8 am	7 am	1500
1100	11 am	10 am	9 am	8 am	1600
1200	Noon	11 am	10 am	9 am	1700
1300	1 pm	Noon	11 am	10 am	1800
1400	2 pm	1 pm	Noon	11 am	1900
1500	3 pm	2 pm	1 pm	Noon	2000
1600	4 pm	3 pm	2 pm	1 pm	2100
1700	5 pm	4 pm	3 pm	2 pm	2200
1800	6 pm	5 pm	4 pm	3 pm	2300
1900	7 pm	6 pm	5 pm	4 pm	2400
2000	8 pm	7 pm	6 pm	5 pm	0100
2100	9 pm	8 pm	7 pm	<u>6</u> pm	0200
2200	10 pm	9 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	s throughout	the entire	world	consult the	RADEX

For times throughout the entire world consult the RADEX Time Converter.

As shown in the Index by

Frequencies and Dial Numbers

KEY TO SYMBOLS

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.

National "Red" network. R Second Column Symbols n Weather or time only. No information available. S Sunday only. Verifies reception for return 7. a Fourth Column Symbols National "Blue" networ Šу Х Synchronized. postage. Has permit network. increase B to ь Verifies only occasionally. power. Columbia network. C Does not verify. с Y Has permit to change loā Verification 10c; letter 25c. D Day time only. Day time with occasional Sends own station stamp Dn cation. h evening hours. Canadian Brdcstg. Corp. 7 Has permit to change frefor 10c. Sends own station stamp for 5c. F quency. a-b-c. Small letters show stations i Mutual Brdcstg. Sys. National "Red" and "Blue" networks. м using same transmitter. N i Sends own station stamp 1-2-3. Figures denote stations for postage. sharing time. Ρ construction k Has no stamps. Has permit only. No information. Verifies for 5c. m The sign-on and sign-off time of stations is shown in Eastern Standard Time. "ss" means "sunset." 540 kcys. (555.2) -9:30 am-1:30 am Regina, Sask. ak 1000 F CJRM -1:30 pm—9:30 pm 400 Nassau, Bahamas ZNS яk 550 kcys. (545.1) F (1) 2 (1) Fredericton, N. B. 500 CFNB ak St. Louis, Mo. Bismarck, N. Dak. Corvallis, Ore. St. Louis, Mo. San Antonio, Tex. Waterbury, Vt. Buffalo, N. Y. Cincinpati Obio **KFUO** 500 ak KF YR KOAC Ñ (5) 1000 ak Noon-Midnight 1000 ak 2R (5) 1000 KSD ak KTSA ak 1000 C (5) WDEV ak 500 D -7:00 am-midnight Č (5) C (5) WGR WKRC 1000 ak Cincinnati, Ohio 1000 ak ŴSVA 500 Ď Harrisonburg ,Va. ak Merida, Yuc. 100 XEFC ak 560 kcys. (535.4) (1) N C (5) C (5) Beaumont, Texas **KFDM** ak 500 -8:30 am-2:00 am 1000 Denver, Colo. KLZ ak KSFO San Francisco, Cal. -10:00 am-4:00 am 1000 ak Springfield, Mo. Philadelphia, Pa. 5000 KWTO ak D —7:00 am—midnight —6:00 am—4:00 am —7:00 am—midnight 1000 ΒM WFIL WIND ak ak 1000 (5) Gary, Ind. Columbia, S. C. Ň (5) WIS ak 1000 -7:00 am-midnight 1000 WOAM ak Miami, Fla. 570 kcys. (526.0) X Havana, Cuba CY (1) Wichita Falls, Tex. Los Angeles, Calif. C (5) Tacoma, Wash. CMCY KGKO ak 5000 250 ak KMTR 1000 ak --9:00 am-3:00 am KVI WKBN ak 1900 Youngstown, Ohio New York, N. Y. Yankton, S. Dak. 500 Ĉ1 ak 1000 WMCA ak C (5) 1 (1) 1000 WNAX ak 1 (1) Columbus, Ohio B (WSYU) Syracuse, N. Y. N Asheville, N. C. —9:00 am—11:00 pm —7:00 am—1:00 am —7:30 am—1:00 am 750 WOSU ak 1000 WSYR WWNC ak ak 1000 580 kcys. (516.9) Prince Rupert, B. C. Quebec, P. Q. Toronto, Ont. --8:00 am-midnight --8:00 am-midnight 50 CFPR ak F CHRC ak 100 -8:00 am-midnight 100 CKCL ak Edmonton, Alta. F **ČKŪĀ** ak 500 Ň -10:00 am-3:00 am 1000 Fresno, Calif. KMJ ak

REQU
KSAC ak 500 2 (1) Manhattan, Kans. —10:30 am—6:30 pm WCHS ak 500 C (1) Charleston, W. Va.
WDBO ak 1000 C Orlando, Fla7:00 am-midnight WIBW ak 1000 2C (5) Topeka, Kans.
WILL ak 1000 D Urbana, III9:00 amss
XEMU z Piedras Negras, Coah.
590 kcys. (508.2)
KHO ak 1000 R (5) Spokane, Wash. WEEI ak 1000 C (5) Boston, Mass.
WKZO ak 1000 BDX Kalamazoo, Mich.
WOW ak 1000 R (5) Omaha, Nebr7:00 am3:30 am
600 kcys. (499.7)
CBW ak 500 F (1) Windsor, Ont4:30 pm-11:30 pm CFCF ak 500 BF Montreal, P. Q.
CJOR ak 500 Vancouver, B. C7:45 am-1:00 am
KFSD ak 1000 B San Diego, Calif.
WCAO ak 500 C (1) Baltimore, Md. WICC ak 500 BM (1) Bridgeport, Conn5:00 am-1:00 am WMT ak 1000 BM (5) Coder Dearder Luca -5:00 am-1:00 am
WM1 ak 1000 BM (5) Cedar Rapids, Iowa -6:30 am-1:00 am
WREC ak 1000 C (5) Memphis, Tenn7:30 am-1:00 am
610 kcys. (491.5)
KFRC c 1000 M (5) San Francisco, Cal. WCLE ak 500 DM Cleveland, Ohio. —7:00 am—ss
WDAF ak 1000 R (5) Kansas City, Mo. —7:30 am—1:00 am WIOD ak 1000 N(WMBF) Miami, Fla.
WIP ak 1000 Philadelphia, Pa -7:00 am-1:00 am
620 kcys. (483.6)
KGW ak 1000 R (5) Portland, Ore9:00 am-2:00 am KTAR ak 1000 N Phoenix, Ariz9:00 am-1:15 am
TIPG z 2000 625 San Jose, Costa Rica
WHJB ak 250 CD Greensburg, Pa8:00 am-5:00 pm
WLBZ ak 500 CM (1) Bangor, Maine WSUN ak 1000 Na (5) St. Petersburg Ela -7:00 am-1:00 am
WTMJ ak 1000 N (5) Milwaukee, Wis7:15 am-1:00 am
630 kcys. (475.9)
CFCO ak 100 F Chatham, Ont8:00 am-10:30 pm CFCY ak 1000 F Chatlottetown PF I -9:00 am-11:00 pm
CJRC ak 500 F (1) Winnipeg, Man8:30 am-12:30 am
CKOV ak 100 F Kelowna, B. C. —11:00 am—1:30 am CMBC z 10000 Havana, Cuba —6:55 am—midnight
$\frac{1}{1}$ $\frac{1}$
WGBF ak 500 N1 (1) Evansville, Ind.
WMAL ak 250 B (.5) Washington, D. C7:00 am-2:00 am WPRO ak 500 C (1) Providence, R. I7:00 am-1:00 am
XEZ z 500 Merida, Yuc. z 10000 P Havana, Cuba
640 kcys. (468.5)
CMCB ak 150 Havana, Cuba
KFI ak 50000 R Los Angeles, Calif9:45 am-3:00 am WGAN z 500 DP Portland, Maine
WHKC ak 500 Columbus, Ohio -6:30 am-8:15 pm
WOI ak 5000 D Ames, Iowa XEBX z 250 Sabinas, Coah.
650 kcys. (461.3)
WSM ak 50000 MN Nashville, Tenn. —7:30 am—1:00 am
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660 kcys. (454.)	3)	
WAAW ak 500 D WEAF ak 50000 R XEAL z 1000 XEAO ak 250	Omaha, Nebr. New York, N. Y. Mexico City, D. F. Mexicali, B. Cfa.	—7:00 am—ss —7:30 am—1:00 am
670 kcys. (447.	5)	
WMAQ ak 50000 R XELO ak 50000 XERO z	Chicago, Ill. Tijuana, B. Cfa. Chapultepec, D. F.	—7:00 am—1:00 am —2:00 am—2:30 am
680 kcys. (440.	9)	•
CMBQ z 5000 P CMCG ak 1000 KFEQ ak 2500 D KPO ak 50000 R VAS akn.2000 685 VOWR ck 500 681	Havana, Cuba Havana, Cuba St. Joseph, Mo. San Francisco, Cal. Glace Bay, N. S. St. John's, Nfid. Lawrence, Mass.	—7:00 am—midnight —7:00 am—ss —11:00 am—3:00 am
WLAW z 1000 D WPTF ak 1000 N(5)	Raleigh, N. C.	-7:00 am-11:00 pm
690 kcys. (434.	5)	
CFRB ak 10000 C CJCJ ak 100 F XET ak 5000	Toronto, Ont. Calgary, Alta. Monterrey, N. L.	—8:00 am—midnight —9:30 am—1:00 am —8:30 am—10:00 pm
700 kcys. (428.	3)	
WLW ak 500000 MN (V	8XO) Cincinnati, O.	6:30 am1:30 am
710 kcys. (422.	3)	
KIRO ak 1000 C KMPC ak 500 WOR ak 50000 M	Seattle, Wash. Beverly Hills, Calif. Newark, N. J.	—9:00 am—5:00 am —9:00 am—4:00 am
720 kcys. (416.	4)	
CMK ak 3000 WGN ak 50000 M XEH ak 250	Havana, Cuba Chicago, Ill. Monterrey, N. L.	—10:00 am—9:00 pm
730 kcys. (410.	7)	
CFPL ak 100 F CJCA ak 1000 F CKAC ak 5000 C CKPR ak 100 F CMCL z 10000 P XEPN ak 100000 XERB z 100000	London, Ont. Edmonton, Alta. Montreal, P. Q. Fort William, Ont. Havana, Cuba Piedras Negras, Coah Rosarito Bch., B. Cfa	-9:00 am-3:00 am -9:00 am-2:00 am -7:30 am-1:00 am -9:00 am-11:00 pm
740 kcys. (405.		
KMMJ ak 1000 D KTRB ak 250 D WHEB ak 250 D WSB ak 50000 R	Clay Center, Nebr. Modesto, Calif. Portsmouth, N. H. Atlanta, Ga.	—9:00 am—8:30 pm —6:55 am—1:00 am
750 kcys. (399.		
CMBL z KGU aj 2500 N WJR ak 50000 C XEAA ak 200 XEAM z 25	Havana, Cuba Honolulu, Hawaii Detroit, Mich. Mexicali, B. Cfa. Matamoros, Tams.	8:00 am12:15 am 11:30 am4:30 am 5:30 am2:00 am
760 kcys. (394.	5)	
CKY ak 15000 F CMHX ak 200	Winnipeg, Man. Cienfuegos, Cuba	8:00 am1:00 am
		65

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			121010111 2. 0	. OTHIONO DI TRE
KXA WBAL WEW WJZ XEOK	ak 250 ak 2500 ak 1000 ak 50000 ak 2500	(.5) BMSy D BSy 	Seattle, Wash. Baltimore, Md. St. Louis, Mo. New York, N. Y. Tijuana, B. Cfa.	—9:00 pm—1:00 am —8:00 am—ss —7:30 am—1:00 am
CMBF	kcys. (z 10000		4) Havana, Cuba	
CMBS KFAB WBBM		X CSy CSy	Havana, Cuba Lincoln, Nebr. Chicago, Ill.	—8:00 am—10:30 pm —7:00 am—1:00 am
780 1	kcys. ((384.	4)	
CHWK CKSO CMJK KEHE	dk 100 ak 1 0 00 ak 250 ak 1 0 00	F F (5)	Chilliwack. B. C. Sudbury, Ont. Camaguey, Cuba Los Angeles, Cali	-9:00 am-midnight -11:00 am-10:00 pm
KFD Y KFQD	ak 1000 ck 250	Ď	Los Angeles, Cali Brookings, S. Da Anchorage, Alasi	k. —1:30 pm—3 pm
KGĤL KWLK	ak 1000 z 250	N (5) DP	Billings, Mont. Longview, Wash.	—10:00 am—1:00 am
WEAN WMC	ak 1000 ak 1000	BM R (5)	Providence, R. I.	•
WTAR XEL	ak 1000 z 1000	N (S)	Memphis, Tenn. Norfolk, Va. Mexico City, D. 1	—7:45 am—1:00 am F.
790 1	kcys. (379.		- 1 .
CMGH	ak 500		Matanzas, Cuba] —10:00 am—3:00 am
KGO Koam	ak 7500 z 1000	B DN	San Francisco, C Pittsburg, Kans.	
WGY	ak 50000	R	Schenectady, N.	Y. —7:00 am—1:00 am
	ccys. (374.8		
HIX WBAP	ak 700 ak 50000	Na	Trujillo, D. R. Fort Worth, Texa	s7:00 ammidnight
WFAA WTBO	ak 50000 ak 250	Na D	Dallas, Texas Cumberland, Md	—9:00 am—12:30 am
810 1	ccys. (370.2	2)	
CMCF	ak 600 ak 50000	X C	Havana, Cuba	
WNYC	ak 1000	Ď	New York, N. Y.	nn. —7:30 am—1:00 am —7:00 am—7:00 pm
XEDF XEXC	z 75 z 350	••••	Aguascalientes, A	ams. —11:00 am—8:15 pm Ags.
820 1	ccys. (365.6	5)	
CMHW WHAS XEBG	ak 100 ak 50000 z 1000	Ċ	Cienfuegos, Cuba Louisville, Ky. Tijuana, B. Cfa.	1
	ccys. (361.3		7
СМЈХ	ak 500	<u>.</u>	Camaguey, Cuba	
KOA WEEU	ak 50000 ak 1000	R I D	Denver, Colo. Reading, Pa.	—9:00 am—2:00 am —8:00 am—5:00 pm
WHDH WRUF	ak 1000 ak 5000	Dn Dn	Boston, Mass. Gainsville, Fla.	—7:00 am—6:30 pm
840 1	ccys. (356.9)	
CBL CFQC	z 50000 ak 1000	P F	Toronto, Ont. Saskatoon, Sask.	
ČRČŤ VOG Y	ak 5000 ak 400	FN	Toronto, Ont. St. John's, Nfld.	
XERA	ck 350000	••••	Villa Acuna, Coal	1.
850 1	ccys. (352.2	7)]
CMCM KIEV	z ak 250	D	Havana, Cuba Glendale, Calif.	—8:00 am—midnight
WESG	ak 1000	ČD	Elmira, N. Y.	—7:30 am—6:00 pm
				66

	NORT	TH AM	IERICAN B. C. S	TATIONS BY FREE
WKAR WWL	ak 1000 ak 10009	D C	E. Lansing, Mich. New Orleans, La.	—7:00 am—5:00 pm —7:30 am—1:00 am
860	kcys. ((348.6	5)	
WABC WHB XEMO XENC	ak 50000 ak 1000 ak 5000 z 50	C (WB DM 	OQ) New York, N. Y. Kansas City, Mo. Tijuana, B. Cfa. Mexico City, D. F.	—7:30 am—1:00 am —9:45 am—3:00 am
870	kcys.	(344.6	5)	
WENR WLS XEFB XEJW	-	Ba Ba 	Chicago, Ill. Chicago, Ill. Monterrey, N. L. Mexico City, D. F.	—Noon—midnight —8:00 am—3:00 pm
880	kcys.	(340.2	7)	
CBO CFJC CMW KFKA KLX .KPOF TIEP	ak 1000 ak 1000 ak 1400 ak 500 ak 1000 ak 500 ak 1000	F F 2M (1) 2	Ottawa, Ont. Kamloops, B. C. Havana, Cuba Greeley, Colo. Oakland, Calif. Denver, Colo. San Jose, Costa Rica	—10:30 am—midnight —12:30 pm—1:15 am —7:00 am—midnight —7:30 am—1:00 am —10:30 am—2:30 am
WCOC WGBI WQAN WRNL WSUI	ak 500 ak 500 ak 500	CX (1) C1 (1) 1 (1) D (1)	Meridian, Miss. Scranton, Pa. Scranton, Pa. Richmond, Va. Iowa City, Iowa	
890	kcys.	(336.)	9)	
KARK KFNY KUSD WBAA WGST WJAR WMM XEW	ak 500 ak 1000 ak 500 ak 500 ak 1000 ak 1000	N (1) 2(1) C (5) 2 (1) C (5) R (5) C (1) 	Little Rock, Ark. Shenandoah, Iowa Spokane, Wash. Vermillion, S. Dak. W. Lafayette, Ind. Atlanta, Ga. Providence, R. I. Fairmont, W. Va. Mexico Citv. D. F.	7:00 am1:00 am 7:00 am1:00 am 9:50 am3:00 am Noon6:00 pm 7:30 am1:00 am 7:00 am1:00 am
900	kcys.	(333.	1)	
KGBU KHJ KSEI WBEN WELI WFM WJAX WKY WLBI WTAI	ak 1000 ak 250 N ak 1000 D ak 500 C ak 1000 ak 1000 L ak 5000	M (5) (1) R (5) D N (5) N (5) D	Ketchikan, Alaska Los Angeles, Calif. Pocatello, Idaho Buffalo, N. Y. New Haven, Conn. Frederick, Md. Jacksonville, Fla. Oklahoma City, Ok. Stevens Point, Wis. Quincy, Ill.	9:30 am1:00 am 7:00 am1:00 am 6:00 amss 6:30 amss 6:45 am1:00 am 7:45 am1:00 am 9:00 am2:00 pm 8:00 am5:45 pm
910	kcys.	(329.	6)	
CBF CJAT XENT	z 5000 ak 1000) FN) F	Montreal, P. Q. Trail, B. C. Nuevo Laredo, Tame	—10:00 am—2:00 am 3.
920	kcys.	(325	.9)	
CMX KFEI KOM KPR	ak 100 ak 50 O ak 100 C ak 100	0 X 0 Ma 0 R (5) 0 R (5)	Havana, Cuba Denver, Colo. Seattle, Wash. Houston, Texas	—8:00 am—1:00 am —8:00 am—2:30 am
KVO WAA WOR WPE	F ak 100 L ak 50	0 D 0 D	Denver, Colo. Chicago, Ill. Boston, Mass. Philadelphia, Pa.	6:00 am85
				67

NORTH AMERICAN B. C.	STATIONS BY FREQUENCIES
WSPA ak 1000 D Spartanburg, S. C. WWJ ak 5000 R Detroit, Mich.	
930 kcys. (322.4)	
CFAC ak 1000 F Calgary, Alta. CFCH ak 100 F North Bay, Ont. CFLC ak 100 Prescott, Ont. CHNS ak 1000 F Halifax, N. S. CKPC ak 100 F Brantford, Ont.	—9:00 am—2:00 am —7:00 am—10:00 pm —7:30 am—11:00 pm
KMAak1000(5)Shenandoah, IowaKROWak1000Oakland, Calif.WBRCak1000RBirmingham, Ala.WDBJak1000C (5)Roanoke, Va.XEBHak500Hermosillo, Son.XEFOak5000Mexico City, D. F.	9:00 am5:00 am 8:00 am12:30 am 7:00 ammidnight 1:00 pmmidnight
940 kcys. (319.0)	
KOIN ak 1000 C (5) Portland, Ore. VOAS ak 100 St. John's, Nfld. • WAAT ak 500 D Jersey City, N. J. WAVE ak 1000 N Louisville, Ky. WCSH ak 1000 R (2.5) Portland, Maine WDAY ak 1000 N (5) Fargo, N. Dak. WHA ak 5000 D Madison, Wis. WICA ak 250 D Ashtabula, Ohio XEYO z 500 Mexico City, D. F.	6:30 am6:00 pm 8:001:00 am 8:00 ammidnight 7:00 am1:00 am 9:00 am5:30 pm
950 kcys. (315.6)	
CJOC ak 100 F Lethbridge, Alta. CMCD ak 250 Havana, Cuba CRCK ak 1000 F Quebec, P. Q. KFWB ak 1000 (5) Hollywood, Calif.	9:00 am1:00 am Noon1:00 am
KFWB ak 1000 (5) Hollywood, Calif. KMBC ak 1000 C (5) Kansas City, Mo. WHAL z 500 DP Saginaw, Mich. WRC ak 500 RX (1) Washington, D. C.	6:55 am—1:00 am
960 kcys. (312.3)	
CFRN ak 100 F Edmonton, Alta. CHNC ak 1000 F New Carlisle, P. Q. CRCY ck 100 F Toronto, Ont. XEAW c 50000 Reynosa, Tams.	—9:30 am—2:00 am —7:30 am—11:00 pm
970 kcys. (309.1)	
CMBY z 150 Havana, Cuba KJR ak 5000 B Seattle, Wash. WCFL ak 5000 N Chicago, III. WIBG ak 100 D Glenside, Pa.	-8:55 am-11:00 pm
980 kcys. (306.0)	
KDKA bk 50000 B Pittsburgh, Pa. XEAC ak 5000 Tijuana, B. Cfa. XEFE z 150 Nuevo Laredo, Tams	
990 kcys. (302.8)	
WBZak 50000BSyBoston, Mass.WBZAak 1000BSySpringfield, Mass.XEAFak 750Nogales, Son.XEKak 100Mexico City, D. F.XESak 250Tampico, Tams.	6:30 am-1:00 am 6:30 am1:00 am
1000 kcys. (299.8)	
	7:45 ammidnight 9:00 am8:15 pm

	NOR		IERICAN B. C. S	TATIONS BI FREQ
WHO XEBI XEBK XEXS	ak 50000 ak 25 ak 60 z 100	R 	Des Moines, Iowa Aguascalientes, Ags. Nuevo Laredo, Tams Portable in Mexico	—7:00 am—1:00 am . —10:00 am—8:30 pm
1010	kcys.	(296		
CHML CKCD CKCK CKCO CKIC CKWX CMJA KGGF KQW WHN WNAD WNAD WNOX XEU	ak 100 ak 100 ak 1000 ak 500 ak 300 ak 1000 ak 1000 ak 1000 ak 1000 ak 250	F F F 2M M (5) 2 C (5)	Hamilton, Ont. Vancouver, B. C. Regina, Sask. Ottawa, Ont. Wolfville, N. S. Vancouver, B. C. Camaguey, Cuba Coffeyville, Kans. San Jose, Calif. New York, N. Y. Norman, Okla. Knoxville, Tenn. Veracruz, Ver.	
	kcys.	(293		
K YW WDZ XEJ	ak 10000 ak 250 ak 1000	R D	Philadelphia, Pa. Tuscola, Ill. Juarez, Chih.	7:05 am10:00 pm 7:00 am6:00 pm
1030	kcys.	(291	.1)	
CFCN CJBR CKLW CMCK XEB	ak 10000 z 1000 ak 5000 z ak 10000	F F M 	Calgary, Alta. Rimouski, P. Q. Windsor, Ont. Havana, Cuba Mexico City, D. F.	—6:45 am—1:30 am —6:45 am—1:30 am —10:00 am—12:15 am
1040	kcys.	(288	.3)	
KRLD KWJJ KYOS WTIC	ak 10000 ak 500 bk 250 ah 50000	C D R	Dallas, Texas Portland, Ore. Merced, Calif. Hartford, Conn.	—7:00 am—1:00 am
1050	kcys.	(285	.5)	
CBM CMKD KFBI KNX WEAU WGVA	ak 5000 ak 250 ak 5000 ak 50000 z 1000 z 1000	F Dn C D DP	Montreal, P. Q. Santiago, Cuba Abilene, Kans. Los Angeles, Calif. Eau Claire, Wis. Indianapolis, Ind.	—7:00 am—7:45 pm —9:30 am—3:15 am
1060	kcys.	(282	.8)	
KTHS VOAC WBAL WJAG W3XJ XEAD XEMG	ak 10000 z 40 ak 10000 ak 1000 z 100 ak 125 z 100	N 10(5 BM D P	Hot Springs, Ark. St. John's, Nfld. Baltimore, Md. Norfolk, Nebr. College Park, Md. Guadalajara, Jal. Atzcapotzalco, D. F.	—9:00 am—ss —7:00 am—9:00 pm —7:30 am—ss —Midnight to 6:00 am
1070	kcys.	(280	.2)	
CMBX CMHA KJBS WCAZ WTAM	ak 500 z 50 ak 500 ak 100 ak 50000	 D R	Havana, Cuba Sagua la Grande, Cul San Francisco, Calif Carthage, III. Cleveland, Ohio	ba . —1:00 am—8:30 pm —6:00 am—midnight
1080	kcys.	(277	.6)	
WBT WCBD WMBI XEBA XEDP	ak 50000 ak 5000 ak 5000 z 20 ak 500	C Dnl Dni 	Charlotte, N. C. Chicago, Ill. Chicago, Ill. Guzman, Jal. Mexico City, D. F.	—6:45 am—midnight 69

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			Enternit D. C.	STATIONS DI FRE
1090	kcys.	(275	5.1)	
кмох	ak 50000	С	St. Louis, Mo.	
1100	kcys.	(272	.6)	
CBR KGDM KWKH WBIL WPG XECL		F DM C 1 C1	Vancouver, B. C. Stockton, Calif. Shreveport, La. New York, N. Y. Atlantic City, N. J. Mexicali, B. Cfa.	— 9:00 am— ss —7:30 am—1:00 am
1110	kcys.	(270	0.1)	
CMCH CMCJ KSOO WRVA	z 5000 ak 500 ak 2500 ak 5000	P X DnN CM	Havana, Cuba Havana, Cuba Sioux Falls, S. Dak. Richmond, Va.	—7:00 am—6:45 pm —7:00 am—midnight
1120	kcys.	(267	7.7)	
CHLP CHSJ CKOC CKX	ak 100 ak 500 ak 500 ak 1000	F F (1) F (1) F	Montreal, P. Q. St. John, N. B. Hamilton, Ont. Brandon, Man.	—9:00 am—11:00 pm —5:00 am—midnight
CMGF CMKM CRCS	ak 250 ak 200 ak 100	 F	Matanzas, Cuba. Manzanillo, Cuba Chicoutimi, P. Q.	
KFIO KFSG KRKD KRSC KTBC	ak 100 ak 500 ak 500 ak 250 z 1000	D a (2.5) a (2.5) DP	Spokane, Wash. Los Angeles, Calif. Los Angeles, Calif. Seattle, Wash. Austin, Texas	—9:00 am—3:00 am
WCOP WDEL WISN WJBO WTAW	ak 500 ak 250 ak 250 ak 500	D R (.5) C (1) B	Boston, Mass.	—8:00 am—4:00 pm —9:00 am—11:00 pm —8:00 am—1:00 am
	kcys.			
CMJI KSL WJJD WOV XEJP	ak 150 ak 50000 ak 20000 ak 1000 z 100	C Dn D	Ciego de Avila, Cuba Salt Lake City, Ut. Chicago, Ill. New York, N. Y. Mexico City, D. F.	—Noon—10:00 pm —8:30 am—3:00 am —6:00 am—6:45 pm
1140	kcys.	(263		
CMCW KVOO WAPI WSPR	dk 500 ak 25000 ak 5000 ak 500	NI CI DM	Havana, Cuba Tulsa, Okla. Birmingham, Ala. Springfield, Mass.	—7:00 am—5:45 pm
1150	kcys.	(260	.7)	
CMJF WHAM XEC XEDW	z 200 ak 50000 ak 100 z 20	B	Camaguey, Cuba Rochester, N. Y. Tijuana, B. Cfa. Minatitlan, Ver.	—7:00 am—midnight
1160	kcys.	(258	.5)	
CMHJ CMKG WOWO WWVA XEAS XEBJ XEBJ XEBZ XED	ak 175 z ak 10000 ak 5000 ak 50 z 20 ad 100 ak 2500	B1 C1	Cienfuegos, Cuba Santiago, Cuba Fort Wayne, Ind. Wheeling, W. Va. Saltillo, Coah. Merida, Yuc. Mexico City, D. F. Guadalajara, Jal.	-Noon-midnight
XEP	ak 500		Juarez, Chih.	9:00 am-2:00 am
				70

1170	kcys.	(256	3)	
CMBD WCAU	ak 500 ak 50000	C X	Havana, Cuba Philadelphia, Pa.	—7:00 pm—midnight —7:30 am—1:00 am
WUNU	ak 30000	u	i maucipina, i a.	7.30 am 1.00 am
1180	kcys.	(2.54	1)	
CMJO KEX	ak 50 ak 5000		Ciego de Avila, Cuba Portland, Ore.	
KOB	ak 10000		Albuquerque, N. M.	—1:00 pm—11:00 pm
WDGY	ak 1000	CDn(5) Minneapolis, Minn.	
WINS WMAZ	ak 1000 ak 1000		New York, N. Y. Macon, Ga.	—7:00 pm—7:00 pm
XEFA	ak 1000 z 500		Tacuba, D. F.	7.00 pm 7.00 pm
	-		·	
1190	kcys.	(252	.0)	
CMKX		(
KTKC	z ak 250	D	Santiago, Cuba Visalia, Calif.	
VONF	ak 500	1195	St. John's, Nfld.	
WATR	ak 100		Waterbury, Conn.	7.20 0 - 12:20 0 -
WOAI WSAZ	ak 50000 ak 1000		San Antonio, Tex. Huntington, W. Va.	—7:30 am—12:30 am —7:00 am—7:00 pm
VV 0/123	AK 1000	••••	inumening cont, or our	,
1200	kcys.	(249	9)	
1200	Reys			
CFGP	z 100		Grande Prairie, Alta	—9:00 am—12:30 am
CHAB CKNX	ak 100 dk 100		Moose Jaw, Sask. Wingham, Ont.	-11:00 am-1:00 am
CKTB	ak 100		St. Catharines, Ont.	-9:30 am-11:30 pm
CMCO	ad 250		Havana, Cuba	
KADA	ak 100 ak 100		Ada, Okla. Jonesboro, Ark.	
KBTM KDNC	ak 100 z 100	(.25) P	Lewistown, Mont.	
KELO	z 100) [·] N	Sioux Falls, S. Dak.	5 00 10 00
KFJB	ak 100	(.25)	Marshalltown, Ia.	—7:00 am—10:00 pm —8:00 am—10:00 pm
KFXD KFXJ	ak 100 ak 100		Nampa, Idaho Grand Junc., Colo.	oto uni Toto più
KGCI	z 10) DP	Coeur d'Alene, Idaho	0.00 . 10.00
KGDE	c 10		Fergus Falls, Minn.	—8:00 am—10:00 pm
KGEK KGFJ	ak 100 ak 100		Sterling, Colo. Los Angeles, Calif.	—24 hours daily
ĸĞĤĬ	ak 10		Little Rock, Ark. Greenville, Texas	—8:30 am—11:00 pm
KGVL	z 10	DP	Greenville, Texas	
KMLB KOOS	ak 10 ak 10		Monroe, La. Marshfield, Ore.	-10:00 am-7:45 pm
KSUN	ak 10		Lowell, Ariz.	—11:00 am—midnight
KVCV	ak 10		Redding, Calif.	lif
KVEC KVOS	z 25 dk 10		San Luis Obispo, Ca Bellingham, Wash.	
KWG	ak 10		Stockton, Calif.	—10:00 am—3:00 am
KWNO	z 25		Winona, Minn. Bangor, Maine	
WABI WAIM	ak 10 ak 10		Anderson, S. C.	6:00 am10:00 pm
WAYX	ak 10	0 (.25)	Waveross, Ga.	
WBBZ	ak 10) Ponca City, Okla.	
WBHP WBNO	ak 10 ak 10		Huntsville, Ala. New Orleans, La.	—1:00 pm to midnight
WCAT	ak 10	0 D	Rapid City, S. Dak.	<u>—Noon</u> —2:00 pm
WCAX	ak 10		Burlington, Vt.	
WCLO WCPO	ak 10 ak 10		Janesville, Wis. Cincinnati, Ohio	
WDSM	z 10	0 P	Superior, Wis.	
WEST	ak 10		Easton, Pa. South Bend, Ind.	
WFAM WFTC	ak 10 ak 10		Kinston, N. C.	
WHBC	ak 10		Canton, Ohio Green Bay, Wis.	
WHBY	ak 10	0 (.25)	Green Bay, Wis.	—5:30 am—1:00 am
WIBX WIL	ak 10 ak 10) Utica, N. Y. St. Louis, Mo.	
WJBC	ak 10	0 5 (.25)) Bloomington, Ill.	—4:00 pm—8:30 pm
WJBL	ak 10	0 5	Decatur, Ill.	—2:00 am—9:00 pm
WJBW WJNO	ak 10 ak 10	02 0C(.25	New Orleans, La. W. Palm Beach, Fla.	-7:00 am-11:00 pm
WJRD	ak 25	0 D	Tuscaloosa, Ala.	
WKBO	ak 10	0 3 (.25) Harrisburg, Pa.	—8:00 am—11:00 pm —7:00 am—11:00 pm
WLVA WMFR	ak 10 ak 10		Lynchburg, Va. High Point, N. C.	- / .vv and 11 .vv pat
WMPC			Lapeer, Mich.	

				MERICAN B. C. C	STATIONS BY FREQUENCIES
WOLS WRBL	z	100	D	Florence, S. C.	
WSAL	Z	100 250		Columbus, Ga. Salisbury, Md.	
WTH1 WTOL		100 100		Hartford, Conn.	—7:00 am—4:15 pm
WWAF		100		Toledo, Ohio Hammond, Ind.	
1210	1 10	we	(242	7 8)	
1210		-ys.	(27		
				1	
CHLT CJCS	z ak	100 50		Sherbrooke, P. Q. Stratford, Ont.	8-00 0.00
CJCU	z	50	F	Aklavik, N.W.T.	8:00 am9:00 pm
CKBI CKCH	ak ak	100 100		Prince Albert, Sask. Hull, P. Q.	9:45 am-1:00 am
CKMC	ak	50		Cobalt, Ont.	-8:00 am-11:00 pm
CMHI Kalb	ak ak	150 100	••••	Santa Clara, Cuba	
KANS	ak	100	N	Alexandria, La. Wichita, Kans.	-7:30 am-midnight
KASA KDLR	c ak	100	Μ	Elk City, Okla.	-7:00 am-8:00 pm
KDON	Z	100 100	м. М	Devils Lake, N. D. Monterey, Calif.	-7:30 am-9:30 pm
KFJI KFOR	ak	100		Klamath Falls, Ore.	
KFPW	ak ak	100 100	CM(25) Lincoln, Nebr. Fort Smith, Ark.	—8:00 am—11:15 pm
KFVS	ak	100	5 (.25)	Cape Girardeau, Mo.	
KFXM KGLO	ak z	100 100	M2 C (25	San Bernardino, Cal Mason City, Iowa	. —9:00 am—3:00 am
KGY	ak	100	M	Olympia, Wash.	
KHBG KIUL	z ak	100 100	D	Okmulgee, Okla. Carden City, Kons	8 00 10 00
KLAH	ak	100	• • • • • • • •	Garden City, Kans. Carlsbad, N. Mex.	—8:00 am—10:00 pm
KOCA KPFA	Z	100	(.25)	Kilgore, Texas	
KPPC	z ak	100 100	(.25) 2	Helena, Mont. Pasadena, Calif.	
KROY KVSO	ak	100	D	Sacramento, Calif.	
KWTN	ak ak	100 100	M	Ardmore, Okla. Watertown, S. Dak.	—8:00 am—11:00 pm
WALR WBAX	ak	100		Zanesville, Ohio	—7:00 am—9:00 pm
WBBL	ak ak	100 100	ŝ	Wilkes-Barre, Pa. Richmond, Va.	
WBLY	ak	100	D	Lima, Ohio	6:00 am5:15 pm
WBRB WCOL	ak ak	100 100	3 N	Red Bank, N. J. Columbus, Ohio	7:00 am11:00 pm
WCRW	ak	100	4	Chicago, Ill.	
WEBO WEDC	ak ak	100 100	5 (.25) 4	Harrisburg, Ill. Chicago, Ill.	
WFAS	ak	100	3	White Plains, N. Y.	
WFOY WGBB	ak ak	100 100	(.25) 3	St. Augustine, Fla. Freeport, N. Y.	
WGCM	ak	190	(.25)	Gulfport, Miss.	
WGN Y WGRM	ak ak	100 100	3	Newburgh, N. Y. Grenada, Miss.	—7:30 am—midnight
WHAI	Z	250	DP	Greenfield, Mass.	
WHBF WHBU	ak ak	100 100	(.25) (.25)	Rock Island, Ill. Anderson, Ind.	7:00 am-1:05 am
WIBU	ak	100	(.25)	Poynette, Wis.	
WJBY WJEJ	ak ak	100	(.25)	Gadsden, Ala.	8:00 am10:30 pm
WJIM	Z	50 100	(.25)	Hagerstown, Md. Lansing, Mich.	7:15 am12:30 am
WJTN WJW	ak ak	100 100	B (.25) (.25)	Jamestown, N. Y.	
WKOK	ak	100		Akron, Ohio Sunbury, Pa.	-8:00 am-10:30 pm -6:00 am-midnight
WLMU WMFG	z ak	100		Middlesboro, Ky.	
WOMT	ak	100 100	(.25)	Hibbing, Minn. Manitowoc, Wis.	—7:30 am—10:00 pm
WPAX	ak	100	D	Thomasville, Ga.	—8:00 am—6:00 pm
WSA Y WSBC	z ak	100 100	D 4 (.25)	Rochester, N. Y. Chicago, Ill.	—6:00 am—midnight
WSIX	ak	100	(.25)	Nashville, Tenn.	7:00 am1:00 am
WSNJ WSOC	z ak	100 100	D N (.25)	Bridgeton, N. J. Charlotte, N. C.	-7:00 am-midnight
WTAX	ak	100		Springfield, Ill.	am—munigit
XEAT XEE	ak ak	250 50	• • • •	Parral, Chih. Durango, Dgo.	-11:00 am-9:00 pm
XEFV	ak	100	••••	Juarez, Chih.	
хетн	ak	100	••••	Puebla, Pue.	

1220	love	(245	8)	
CMJE	kcys. $z 50$	(210)	Camaguey, Cuba	
KFKU	ak 1000	a (5)	Lawrence, Kans.	—3:30 pm—7:30 pm
KTMS KTW	z 500 ak 1000	B S2	Santa Barbara, Cal. Seattle, Wash.	
KWSC	ak 1000	2 (5)	Pullman, Wash. 🕡	-9:45 am-12:30 am
WCAD WCAE	ak 500 ak 1000	D MR (5)		—12:30 pm—4:00 pm —7:00 am—2:30 am
WDAE	ak 1000	C (5)	Tampa, Fla.	-7:30 am-?
WREN XEBL	ak 1000 z 50	Ba(5)	Lawrence, Kans. Mazatlan, Sin.	—8:00 am—7:00 pm
XEDA XEG	z 200	• • • •	Gra. Anaya, D. F.	
XETF	z 250 ak 30	• • • • • • • •	Monterrey, N. L. Veracruz, Ver.	—11:00 am—1:00 am
1230	kcys.	(243.	8)	
KGBX	ak 500	N	Springfield, Mo.	
KGGM	ak 1000		Albuquerque, N. M.	—9:30 am—11:30 pm
K YA TGW	ak 1000 ak 10000	(5)	San Francisco, Cal. Guatemala City, Gt.	
WFBM	ak 1000		Indianapolis, Ind.	7:30 am1:00 am
WNAC XEFJ	ak 1000 ak 100	R (5)		—5:00 am—1:00 am —11:00 am—8:00 pm
1240	kcys.	(241.		
CJCB CMHB	ak 1000		Syndey, N. S.	—7:00 am—11:00 pm
KGCU	z 50 ak 250	1	Sancti Spiritus, Cuba Mandan, N. Dak.	
KLPM KTAT	ak 250 ak 1000	1XZ M	Minot, N. Dak.	
KTAT KTFI	ak 1000 ak 1000		Fort Worth, Texas Twin Falls, Idaho	
WKAQ	ak 1000		San Juan, P. R.	6:00 am9:30 pm
WX YZ XEAP	ak 1000 z 50	B 	Detroit, Mich. Obregon, Son.	
XEAY	z 100	• • • •	Mexico City, D. F.	
XEBS XEKL	z 200 z 500	• • • • • • • •	Mexico City, D. F. Leon, Guan.	
XELA	z 50	• • • •	Saltillo, Coah.	
			Saltillo, Coah.	
1250	kcys.	(239	Saltillo, Coah. .9)	
1250 смск кгох	kcys. ^{ak 150} ^{ak 1000}	(239.	Saltillo, Coah. .9) Santiago, Cuba Long Beach, Calif.	
1250 Смск кгох кіт	kcys. ak 150 ak 1000 ak 250	(239) <u>M</u> (.5)	Saltillo, Coah. .9) Santiago, Cuba Long Beach, Calif. Yakima, Wash.	—6·00 am—ss
1250 CMCK KFOX KIT WAIR WCAL	kcys. ak 150 ak 1000 ak 250 ak 250 ah 1000	(239) M (.5) D 2 XZ	Saltillo, Coah. 9) Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N.C. Northfield, Minn.	
1250 CMCK KFOX KIT WAIR WCAL WDSU	kcys. ak 150 ak 1000 ak 250 ak 250 ah 1000 ak 1000	(239) M (.5) D 2 XZ B	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La.	—6:00 am—ss —7:00 am—midnight
1250 CMCK KFOX KIT WAIR WCAL WDSU WHBI WLB	kcys. ak 150 ak 1000 ak 250 ah 1000 ak 1000 ak 1000	(239, D 2 XZ B a (2.5) 2XZ	Saltillo, Coah. 9) Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn.	
1250 CMCK KFOX KIT WAIR WCAL WDSU WHBI WLB WNEW	kcys. ak 150 ak 1000 ak 250 ah 1000 ak 1000 ak 1000 ak 1000	(239 M (.5) D 2 XZ B a (2.5) 2XZ a (2.5)	Saltillo, Coah. 9) Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N.C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y.	—7:00 am—midnight
1250 CMCK KFOX KIT WAIR WCAL WDSU WHBI WLB	kcys. ak 150 ak 1000 ak 250 ah 1000 ak 1000 ak 1000	(239, D 2 XZ B a (2.5) 2XZ	Saltillo, Coah. 9) Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn.	
1250 CMCK KFOX KIT WAIR WCAL WDSU WHBI WLB WNEW WNEW WTCN XEXH	kcys. ak 150 ak 1000 ak 250 ak 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 250	(239) M (.5) D 2 XZ B a (2.5) 2XZ a (2.5) B (5) 	Saltillo, Coah. 9) Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P.	—7:00 am—midnight
1250 CMCK KFOX KIT WAIR WCAL WDSU WHBI WB WHBI WHBI WNEW WTCN XEXH 1260	kcys. ak 150 ak 1000 ak 250 ak 250 ah 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 250 ak 1000 ak 1	(239 M (.5) D 2 XZ B a (2.5) 2XZ a (2.5) B (5)	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0)	—7:00 am—midnight —7:00 am—midnight
1250 CMCK KFOX KIT WAIR WCAL WDSU WHBI WLB WNEW WTCN XEXH 1260 CMC KGVO	kcys. ak 150 ak 1000 ak 250 ak 250 ak 200 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 250 kcys. z 150 ak 1000	(239) M (.5) D 2 XZ B a (2.5) 2XZ a (2.5) B (5) 	Saltillo, Coah. 9) Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. 10) Havana, Cuba Missoula, Mont.	—7:00 am—midnight
1250 CMCK KFOX KIT WDSU WHBI WNEW WTCN XEXH 1260 CMC KGVO KHSL	kcys. ak 150 ak 1000 ak 250 ak 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 250 kcys. z 150 ak 1000 ak 250	(239, M (.5) D 2 XZ a (2.5) 2XZ a (2.5) B (5) (238) C	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif.	—7:00 am—midnight —7:00 am—midnight —8:00 am—midnight
1250 CMCK KFOX KIT WAIR WCAL WDSU WHBI WLB WNEW WTCN XEXH 1260 CMC KGVO KHSL KOIL KPAC	kcys. ak 150 ak 1000 ak 250 ak 250 ak 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 250 kcys. z 150 ak 1000 ak 250 ak 1000 ak 500 ak 1000 ak 500 ak 500	(239, M (.5) D 2 XZ B (2.5) 2XZ a (2.5) B (5) (238 C BM(5) D	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas	
1250 CMCK KFOX KIT WAIR WCAL WDSU WHBI WLB WNEW WTCN XEXH 1260 CMC KGVO KHSL KOIL KPAC KRGV	kcys. ak 150 ak 1000 ak 250 ak 250 ak 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 250 kcys. z 150 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 1000 ak 1000	(239) M (.5) D 2 XZ B (2.5) 2XZ a (2.5) B (5) (238) C BM(5) D N	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas	—7:00 am—midnight —7:00 am—midnight —8:00 am—midnight —9:00 am—1:00 am
1250 CMCK KFOX KIT WAIR WDSU WHBI WNEW WNEW WTCN XEXH 1260 CMC KGVO KHSL KOIL KPAC KRGV KUOA	kcys. ak 150 ak 1000 ak 250 ak 250 ah 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 250 kcys. z 150 ak 1000 ak 250 ak 1000 ak 0000 ak 1000 ak 0000 ak 1000 ak 1000	(239) M (.5) D 2 XZ a (2.5) 2XZ a (2.5) B (5) (238) C BM(5) D D	Saltillo, Coah. 9) Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. 0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas Siloam Spgs., Ark. Tucson, Ariz.	7:00 ammidnight 7:00 ammidnight 8:00 ammidnight 9:00 am
1250 CMCK KFOX KIT WAIR WCAL WDSU WHBI WLB WNEW WTCN XEXH 1260 CMC KGVO KHSL KOIL KPAC KRGV KUOA WHIO	kcys. ak 150 ak 1000 ak 250 ak 250 ak 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 1000	(239) M (.5) D 2 XZ a (2.5) 2XZ a (2.5) B (5) (238 C BM(5) D C C C (5)	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas Siloam Spgs., Ark. Tucson, Ariz. Dayton, Ohio	
1250 CMCK KFOX KIT WAIR WDSU WHBI WNEW WNEW WTCN XEXH 1260 CMC KGVO KHSL KOIL KPAC KRGV KUOA	kcys. ak 150 ak 1000 ak 250 ak 250 ah 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 250 kcys. z 150 ak 1000 ak 250 ak 1000 ak 0000 ak 1000 ak 0000 ak 1000 ak 1000	(239) M (.5) D 2 XZ a (2.5) 2XZ a (2.5) B (5) (238 C BM(5) D C C C (5)	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas Siloam Spgs., Ark. Tucson, Ariz. Dayton, Ohio Springfield, Vt.	7:00 ammidnight 7:00 ammidnight 8:00 ammidnight 9:00 am
1250 CMCK KFOX WAIR WCAL WDSU WHBI WLB WNEW WTCN XEXH 1260 CMC KGVO KHSL KOIL KPAC KRGV KUOA KVOA WHIO WNBX	kcys. ak 150 ak 1000 ak 250 ah 1000 ak 5000 ak 1000 ak 5000 ak 5000	(239, M (.5) D 2 XZ a (2.5) B (5) (238 C BM(5) D C C C M (1)	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas Siloam Spgs., Ark. Tucson, Ariz. Dayton, Ohio Springfield, Vt. Savannah, Ga.	
1250 CMCK KFOX WAIR WCAL WDSU WHBI WLB WNEW WTCN XEXH 1260 CMC KGVO KHSL KOIL KPAC KKOIL KPAC KKOA KUOA KUOA KUOA KUOA	kcys. ak 150 ak 1000 ak 250 ak 250 ak 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 250 ak 1000 ak 10	(239, M (.5) D 2 XZ B (2.5) 2XZ a (2.5) B (5) (238 C BM(5) N D C C C (236 	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas Siloam Spgs., Ark. Tucson, Ariz. Dayton, Ohio Springfield, Vt. Savannah, Ga.	
1250 CMCK KFOX WAIR WCAL WDSU WHBI WLB WNEW WTCN XEXH 1260 CMC KGVO KHSL KOIL KPAC KRGV KUOA KVOA WNBX WTOC 1270 CMHD KGCA	kcys. ak 150 ak 1000 ak 250 ah 1000 ak 250 ah 1000 ak 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 250 ak 1000 ak 1000 a	(239, M (.5) D 2 XZ B (2.5) B (2.5) C (238) C C BM(5) N D C C C (236) C (237) C (236) (236) (236) (236) (25	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas Siloam Spgs., Ark. Tucson, Ariz. Dayton, Ohio Springfield, Vt. Savannah, Ga. .1) Caibarien, Cuba Decorah, Iowa	
1250 CMCK KFOX KIT WAIR WDSU WHBI WNEW WNEW WTCN XEXH 1260 CMC KGVO KHSL KOZ KNOA WHIO WNBX WTOC 1270 CMHD KGCA KOVOR	kcys. ak 150 ak 150 ak 250 ak 250 ak 250 ak 200 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 250 ak 1000 ak 1000 ak 250 kcys. dk 250	(239, M (.5) D 2XZ B (2.5) 2XZ a (2.5) B (5) (238 C BM(5) D C C C C C (236 C M (5) C M (5) C	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas Siloam Spgs., Ark. Tucson, Ariz. Dayton, Ohio Springfield, Vt. Savannah, Ga. .1) Caibarien, Cuba	7:00 ammidnight 7:00 ammidnight 8:00 ammidnight 9:00 am
1250 CMCK KFOX WJ WDSU WDSU WHBI WLB WNEW WTCN XEXH 1260 CMC KGVO KHSL KOIL KPAC KKOIL KPAC KVOA KUOA KVOA CMHD KGCA KOL KVOR KWIC	kcys. ak 150 ak 1000 ak 250 ah 1000 ak 250 ah 1000 ak 250 ak 1000 ak 1000 ak 5000 ak 1000 ak 1000	(239, M (.5) D 2 XZ a (2.5) B (2,5) C (238) C (238) C (238) C (5) C (5) C (1) C (236) C (2) M (5) C (2) C	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas Siloam Spgs., Ark. Tucson, Ariz. Dayton, Ohio Springfield, Vt. Savannah, Ga. .1) Caibarien, Cuba Decorah, Iowa Seattle, Wash. Colo. Springs, Colo. Decorah, Iowa	7:00 ammidnight 7:00 ammidnight 8:00 ammidnight 9:00 am
1250 CMCK KFOX KIT WAIR WDSU WHBI WNEW WNEW WTCN XEXH 1260 CMC KGVO KHSL KOZ KNOA WHIO WNBX WTOC 1270 CMHD KGCA KOVOR	kcys. ak 150 ak 150 ak 250 ak 250 ak 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 250 ak 1000 ak 5000 ak 5000 ak 5000 ak 1000 ak 1000 ak 1000 ak 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 250 ak 1000 ak 1000 ak 1000 ak 250 ak 1000 ak 10	(239, M (.5) D 2XZ B (2.5) 2XZ a (2.5) B (5) (238 C BM(5) D C C C C C (236 C M (5) C M (5) C	Saltillo, Coah. Santiago, Cuba Long Beach, Calif. Yakima, Wash. WinstSalem, N. C. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. New York, N. Y. Minneapolis, Minn. San Luis Pot., S.L.P. .0) Havana, Cuba Missoula, Mont. Chico, Calif. Omaha, Nebr. Port Arthur, Texas Weslaco, Texas Siloam Spgs., Ark. Tucson, Ariz. Dayton, Ohio Springfield, Vt. Savannah, Ga. .1) Caibarien, Cuba Decorah, Iowa Seattle, Wash. Colo. Springs, Colo.	7:00 ammidnight 7:00 ammidnight 8:00 ammidnight 9:00 am

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		NOR		VIERICAN B. C.	STATIONS BY FREQU
WJDX	ak	1000	R (5)	Jackson, Miss.	
WOOD	ak	500	Na	Gd. Rapids, Mich.	—7:00 am—midnight
XEXB	ak	50		Jalapa, Ver.	the and monght
XEXE	z	17	••••	Mexico City, D. F.	
1280	100	we	(234	1 2)	
1200	1//	-y 3.	(20-	I.2)	
CMCU	ak	500		Havana, Cuba	6:55 am-1:00 am
СМКО	z	· · · ·		Holguin, Cuba	0.55 am 1.00 am
KFBB	ak	1000	C (5)	Great Falls, Mont.	
KLS	ak	250		Oakland, Calif.	
WCAM WCAP	ak ak	500 500	1 1	Camden, N. J. Asbury Park, N. J.	
WDOD	ak	1000	Č (5)	Chattanooga, Tenn	. —7:30 am—12:30 am
WIBA	ak	1000	C (5) N (5)	Madison, Wis.	. —7.50 am—12:50 am
WORC	ak	500	С	Worcester, Mass.	—8:00 am—midnight
WRR	ak	500	М	Dallas, Texas	-8:00 am-midnight
WTNJ XEMX	ak	500		Trenton, N. J.	
AEMA	Z	100	••••	Mexico City, D. F.	
1290	kc	evs.	(232	2.4)	
		500	(
KDYL	ak	1000	RX	Salt Lake City, Ut.	—8:00 am—3:00 am
KLCN	ak	100	D	Blytheville, Ark.	· · · · · · · · · · · · · · · · · · ·
KTRH WEBC	ak ak	1000	C (5) N (5)	Houston, Texas	0.00
WJAS	ak	1000 1000	C(5)	Duluth, Minn. Pittsburgh, Pa.	-8:00 am-1:00 am
WNBZ	ak	100	$\mathbf{\tilde{D}}$	Saranac Lake, N. Y.	—7:30 am—12:30 am —9:30 am—ss
WNEL	ak	1000	(2.5)	San Juan, P. R.	-6:30 am-11:30 pm
			•	• • • •	the pin
1200	1		1000		
1300	KC	ys.	(230	.0)	
KALE	alı	500	СМ	Pentland One	
KFAC	ak ak	500 1000		Portland, Ore. Los Angeles, Calif.	
KFH	ak	1000	C (5)	Wichita, Kans.	
WBBR	ak	1000	ĩ	Brooklyn, N. Y.	
WEVD	ak	1000	1	Brooklyn, N. Y. New York, N. Y.	
WFAB	ak	1000	1	New York, N. Y.	
WFBC WHAZ	ak ak	1000 1000	N (5) 1	Greenville, S. C.	
WHBL	ak	250	•	Troy, N. Y. Sheboygan, Wis.	—6:00 pm—midnight
				Shebbygan, mis.	
1310	kc	vs.	(228)	9)	
1010		50.	(220		
CHCK	ak	50	<u>.</u>	Charlottetown, P.E.	I.
CJKL	ak	100	F	North Bay, Ont.	
CJLS	ak	100	<u>.</u>	Yarmouth, N. S.	
CKCV KAND	ak	100	F	Quebec, P. Q.	7:55 am11:30 pm
KARM	Z Z	10 0 100	D P	Corsicana, Tex. Fresno, Calif.	
KCKN	ak	100		Kansas City, Kans.	
KCRJ	ak	100	(.25)	Jerome, Ariz. Dublin, Texas	
KFPL	dk	100	(.25)	Dublin, Texas	-7:00 am-10:45 pm
KFXR KFYO	ak ak	100	(.25) (.25)	Okla. City, Okla. Lubbock, Texas Kallspell, Mont	-8:00 am-midnight
KGEZ	ak	100 100	(.23)	Kalispell, Mont.	—8:00 am—10:15 pm —9:00 am—11:00 pm
KĞFW	ak	100		Kearney, Nebr.	-7:00 am-10:00 pm
KHUB	ak	250	D	Watsonville, Calif.	· · · · · · · · · · · · · · · · · · ·
KINY	ak	100	XZ	Juneau, Alaska	
KPBM	Z	100	DP	Poplar Bluff, Mo.	
KPDN KRBA	ak z	100	D DP	Pampa, Texas Lufkin, Texas	1
KRMD	ak	100 100	(.25)	Shreveport, La.	
KROC	ak	100	(.25)	Rochester, Minn.	
KRQA	ak	100		Santa Fe, N. Mex.	
KRRV	Z	250	D	Sherman, Texas	11.00
KSRO	ak	250	D	Santa Rosa, Calif.	—11:00 am—9:00 pm
KSUB KTSM	ak ak	100 100	(.25)	Cedar City, Utah El Paso, Texas	
KVOL	ak	100		Lafavette, La.	
KVŎX	z	100	(.25)	Moorhead, Minn.	Porto Prin
KWOS	z	100	D	Jefferson City, Mo.	
KXRO	ak	100	M(.25)	Aberdeen, Wash.	-10:00 am-2:00 am
WAML WBEO	ak ak	100 100	(.25) D	Laurel, Miss. Marquette Mich	
11 DEO	ак	100	D	Marquette, Mich.	—10:30 am—5:30 pm

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				STITIONS BI TREQUENCIE
WBOW WBRE	ak 100 ak 100	N (.25)	Terre Haute, Ind. Wilkes-Barre, Pa.	—7:00 am—midnight
WBRK	z 100	P (.25)	Pittsfield, Mass.	
WCLS	ak 100		Joliet, Ill.	—8:00 am—9:30 pm
WCMI	ak 100	(.25)	Ashland, Ky.	6:00 am11:30 pm
WDAH	ak 100	S (.25)	El Paso, Texas Buffalo, N. Y.	-11:30 am-10:30 pm (Sun. only)
WEBR	ak 100	B (.25)		7:00 am-midnight
WEMP	ak 100	D	Milwaukee, Wis.	-7:30 am-ss
WEXL	ak 50 ak 100	3	Royal Oak, Mich.	
WFBG WFDF	ak 100 ak 100	3	Altoona, Pa. Flint, Mich.	—7:00 am—10:30 pm —7:00 am—midnight
WGH	ak 100	(.25)	Newport News, Va.	-7:00 am-midnight
WGTM	z 100	D	Wilson, N. C.	1.00 am manghe
WHAT	ak 100	4	Philadelphia, Pa.	
WJAC	ak 100		Johnstown, Pa.	
WLAK	z 100		Lakeland, Fla.	
WLBC	ak 100	(.25)	Muncie, Ind.	—7:00 am—midnight
WLNH	ak 100	M	Laconia, N. H.	
WMBO	ak 100		Auburn, N. Y.	
WMFF	ak 100	(.25)	Plattsburg, N. Y.	
WNBH	ak 100) New Bedford, Mass.	—7:30 am—11:15 pm
WOL	ak 100	MXZ	Washington, D. C.	R 00 11 00
WRAW		Stears.	Reading, Pa.	—7:00 am—11:00 pm
WROL	ak 100	N(.25)	Knoxville, Tenn.	
WSAJ	ak 100	D (35)	Grove City, Pa.	8.00 am maide is ht
WSGN WSJS	ak 100 ak 100	- B (123) - C	Birmingham, Ala. Winston-Salem N (—8:00 am—midnight C.—8:00 am—10:00 pm
WTAL	ak 100		Tallahassee, Fla.	-8:00 am-midnight
WTEL	ak 100	4	Philadelphia, Pa.	-8:00 am-midnight
WTJS	ak 100	(.25)	Jackson, Tenn.	otov ann manight
WTRC	ak 100	(.25)	Elkhart, Ind.	
XEAG	z 10		Cordoba, Ver.	
XEBO	z 25		Irapuato, Guan.	
XECW	ak 10		Irapuato, Guan. Mexico City, D. F.	
XEFW	ak 250		Tampico, Tams.	—11:00 am—10:00 pm
XETB	ak 125		Torreon, Coah.	
XEX	ak 125		Monterrey, N. L.	
1000		(0 0 -		
1320	kcys.	(227	.1)	
СМОХ	ak 200		Havana, Cuba	
KGHF	ak 500	В		—9:30 am—11:45 pm
KGHF KGMB			Pueblo, Colo. Honolulu, Hawaii	—9:30 am—11:45 pm —1:30 am—6:00 pm
	ak 500	B C M (1)	Pueblo, Colo.	
KGMB	ak 500 ak 1000	B C M (1) C (5)	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa	—1:30 am—6:00 pm —6:30 am—1:00 am
KGMB KID KRNT WADC	ak 500 ak 1000 ak 500 ak 1000 ak 1000	B C M (1) C (5) C	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio	
KGMB KID KRNT WADC WORK	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000	B C M (1) C (5) C N	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron, Ohio York, Pa.	—1:30 am—6:00 pm —6:30 am—1:00 am
KGMB KID KRNT WADC	ak 500 ak 1000 ak 500 ak 1000 ak 1000	B C M (1) C (5) C	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio	
KGMB KID KRNT WADC WORK WSMB	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000	B C M (1) C (5) C N R	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La.	
KGMB KID KRNT WADC WORK WSMB 1330	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000	B C M (1) C (5) C N R (225	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4)	
KGMB KID KRNT WADC WORK WSMB 1330 CMHK	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 2000 ak 2000	B C M (1) C (5) C N R (225	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4)	1:30 am6:00 pm 6:30 am1:00 am 7:00 am1:00 am 8:00 am10:00 pm
KGMB KID KRNT WADC WORK WSMB 1330 CMHK KGB	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 zk 250 ak 1000	B C M (1) C (5) C N R (225	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4) Cruces, Cuba San Diego, Calif.	
KGMB KID KRNT WADC WORK WSMB 1330 CMHK KGB KMO	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 250 ak 1000 ak 1000	B C M (1) C (5) C N R (225	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4) Cruces, Cuba San Diego, Calif. Tacoma, Wash.	1:30 am6:00 pm 6:30 am1:00 am 7:00 am1:00 am 8:00 am10:00 pm 10:00 am4:00 am 9:00 am3:00 am
KGMB KID KRNT WADC WORK WSMB 1330 CMHK KGB KMO KRIS	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 500	B C M (1) C (5) C N R (225 M N	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4) Cruces, Cuba San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex.	1:30 am6:00 pm 6:30 am1:00 am 7:00 am1:00 am 8:00 am10:00 pm 10:00 am4:00 am 9:00 am3:00 am
KGMB KID KRNT WADC WORK WSMB 1330 CMHK KGB KMO KRIS KSCJ	ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 500 ak 1000	B C M (1) C (5) C N R (225 M M M N C (5)	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4) Cruces, Cuba San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Slour City, Iowa	1:30 am6:00 pm 6:30 am1:00 am 7:00 am1:00 am 8:00 am10:00 pm 10:00 am4:00 am 9:00 am3:00 am 7:00 am1:00 am
KGMB KRNT WADC WORK WSMB 1330 CMHK KGB KMO KRIS KSCJ WDRC	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 500	B C M (1) C (5) C N R (225 M N C (5) C (5) C (5)	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4) Cruces, Cuba San Diego, Calif. Tacoma, Wash. Corpus Christl, Tex. Sioux City, Iowa Hartford, Conn.	1:30 am6:00 pm 6:30 am1:00 am 7:00 am1:00 am 8:00 am10:00 pm 10:00 am4:00 am 9:00 am3:00 am
KGMB KID KRNT WADC WORK WSMB 1330 CMHK KGB KMO KRIS KSCJ	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 z 2500 ak 1000 ak 1000 ak 1000 ak 1000	B C M (1) C (5) C N R (225 M N C (5) C (5) C (5)	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4) Cruces, Cuba San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Slour City, Iowa	
KGMB KRNT WADC WORK WSMB 1330 CMHK KGB KMO KRIS KSCJ WDRC WSAI WTAQ	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 z 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000	B C M (1) C (5) C (5) R C (225 M M C (5) C (5) C (5) MN(2.3)	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4)	
KGMB KRNT WADC WORK WSMB 1330 CMHK KGB KMO KRIS KSCJ WDRC WSAI WTAQ	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 z 250 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000	B C M (1) C (5) C (5) R C (225 M M C (5) C (5) C (5) MN(2.3)	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4)	
KGMB KID KRNT WADC WORK WSMB 1330 CMHK KGB KMO KRIS KSCJ WDRC WSAI WTAQ 1340	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000	B C M (1) C (5) C (5) R C (225 M M C (5) C (5) C (5) MN(2.3)	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4) Cruces, Cuba San Diego, Calif. Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. 5) Cincinnati. Ohio Green Bay, Wis.	
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KGMB KRDK WADC WORK WSMB 1330 CMHK KGB KMO KRIS KSCJ WDRC WSAI WTAQ 1340 CMAB CMJL KDTH	ak 500 ak 1000 ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000	B C M (1) C (5) C (5) R (225 M M C (5) C (Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4) Cruces, Cuba San Diego. Calif. Tacoma, Wash. Corpus Christl, Tex. Sioux City, Iowa Hartford, Conn. 5) Cincinnati. Ohio Green Bay, Wis. .7) Pinar del Rio, Cuba Camaguey, Cuba Dubuque, Iowa	
KGMB KRNT WADC WORK WSMB 1330 CMHK KGB KMO KRIS KSCJ WDRC WSAI WTAQ 1340 CMAB CMJL KDTH KGDY	ak 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 z 500 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 1000 ak 200 ak	B C M (1) C (5) C (5) R (225 M M C (5) C (5) C (5) M M(2.3 C (223 (223 C) C	Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Des Moines, Iowa Akron. Ohio York, Pa. New Orleans, La. .4)	1:30 am6:00 pm 6:30 am1:00 am 7:00 am1:00 am 8:00 am10:00 pm 10:00 am4:00 am 9:00 am3:00 am 7:00 am1:00 am 7:00 am1:00 am
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WBNX		1000		New York, N. Y.	
WMBC		500		Richmond, Va.	
1360	120	MO	(22)		
1000	K	ys.	(220	J.4)	
CMJH	dk	50		Ciego de Avila, Cuba	
KCRC	ak	250	M	Enid, Okla.	
KGER	ak	1000		Long Beach, Calif.	—8:00 am—11:00 pm
WCSC	ak	500	N (1)	Charleston, S. C.	7.00 am midult t
WFBL	ak	1000		Syracuse, N. Y.	-7:00 am-midnight
WGES	ak	500	Ĩ (Ì)	Chicago, Ill.	
WQBC		1000	D ``'	Vicksburg, Miss.	—8:00 am—9:00 pm
WSBT	ak	500	ĩ	South Bend, Ind.	
			•	South Bend, Md.	
1270	1		(210		•
1370	' KC	ys.	(218	5.8)	
CFAR				Eller Elere Ma	
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CMGE		100		Moncton, N. B.	
	-	150	b	Cardenas, Cuba	—10:00 am—10:30 pm
KAST	ak	100	D	Astoria, Ore.	-11:00 am-8:30 pm
KCMO KEEN	ak ak	100		Kansas City, Mo.	—7:00 am—2:00 am
		100	3	Seattle, Wash.	—3:00 pm—1:00 am
KELD	z	100		El Dorado, Ark.	
KERN	ak	100	N	Bakersfield, Calif.	—11:00 am—3:00 am
KFGQ	ak	100	D	Boone, Iowa	
KFJZ	ak	100	(.25)	Fort Worth, Texas	—7:30 am—midnight
KFRO	ak	250	D	Longview, Texas	—7:00 am—ss
KGAR	ak	100	(.25)	Tucson, Arizona	
KGFL	ak	100	4	Roswell, N. Mex.	
KGKL	ak	100	(.25)	San Angelo, Texas	
KICA	ak	100	4	Clovis, N. Mex.	-9:00 am-11:00 pm
KIUP	ak	100	• • • •	Durango, Colo.	-10:00 am-11:00 pm
KLUF	ak	100	÷ 1/ 35.	Galveston, Texas	—9:00 am—midnight
KMAC	ak	100	5 (.25)		8:00 am9:00 pm
KOBH	ak	100	· · · ·	Rapid City, S. Dak.	—8:00 am—midnight
KOKO	z	100	2	La Junta, Colo.	
KONO	ak	100	5	San Antonio, Tex.	-7:00 am-11:00 pm
KRE	ak	100	(.25)	Berkeley, Calif.	—24 hours daily
KRKO	ak	50	3	Everett, Wash.	
KRMC	Z	100	(.25)	Jamestown, N. D.	10.00
KSLM	ak	100	M	Salem, Ore.	—10:00 am—1:00 am
КТЕМ КТОК	ak	250	D	Temple, Texas	
	bk	100	Μ	Oklahoma City, Ok.	0 0 0 0
KUJ	ak	100	••••	Walla Walla, Wash.	—9:30 am—1:00 am
KVGB	z	100	(.25)P	Great Bend, Kans.	
KVRS	z	100		Rock Springs, Wyo.	0.00 11.1.1.
KWYO WABY	ak	100	(.25)	Sheridan, Wyo. Albany, N. Y.	-9:00 am-midnight
	ak	100	B		-7:00 am-midnight
WAGF WATL	ak ak	250	D (25)	Dothan, Ala.	-9:00 am-ss
WBLK	ak	100	(.25)	Atlanta, Ga. Clarksburg, W. Va. Buffalo, N. Y. Danville, Va.	—7:00 am—1:00 am
WBNY	ak	100	3 (35)	Duffelo N V	7.20 cm midultha
WBTM	ak	100	(25)	Donvillo Vo	-7:30 am-midnight
WCBM	ak	100 100	(.25)	Paltimore Md	-7:00 am-10:00 pm
WĐAS	ak	100	(.25)	Baltimore, Md. Philadelphia, Pa.	8.00 am midulaht
wows	ak	100	D		—8:00 am—midnight
WEOA	ak	100	C(.25)	Champaign, Ill. Evansville, Ind.	
WFOR	ak	100	G(.45)	Hattlesburg, Miss.	—8:00 am—9:00 pm
WGL	ak	100	N	Fort Wayne, Ind.	0.00 am 9.00 pm
WGRC	ak	250	D	New Albany, Ind.	
WHBQ	ak	100	D	Memphis Tenn	
WHDF	ak	100	(.25)	Memphis, Tenn. Calumet, Mich.	
WHLB	ak	100	Č(.25)	Virginia, Minn.	io.so and o.so pin
WIBM	ak	100	(.25)	Jackson, Mich.	6:30 am-12:30 am
WLLH	ak	100	Sy	Lawrence, Mass.	-7:30 am-midnight
WLLH	ak	100	MSVC	25) Lowell, Mass.	-7:30 am-midnight
WMBR	ak	100	C (.25)	Jacksonville, Fla.	-7:30 am-midnight
WMFD	ak	100	D	Wilmington, N. C.	and monthly
WMFO	ak	100	Ď	Decatur, Ala.	
WMIN	ak	100	(.25)	St. Paul, Minn.	-7:00 am-1:00 am
WOC	ak	100	C (25)	Davenport, Iowa	-7:00 am-1:00 am
WPAY	ak	109	(· 0)	Portsmouth, Ohio	7:00 am10:15 pm
WPRA	Z	100	(.25)	Mayaguez, P. R.	and iver put
WRAK	ãk	100	(.25)	Williamsport, Pa.	
WRDO	ak	100	M	Augusta, Maine	
WRJN	ak	100	(.25)	Racine, Wis.	-8:25 am-midnight
WSAU	ak	100	(,	Wausau, Wis.	-7:00 am-11:15 pm
wsvs	ak	50	2D	Buffalo, N. Y.	· · · · · · · · · · · · · · · · · · ·
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KOV	ak	500	CI		burgh, Pa	•	7:00 am-	-10:00) pm
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WKBH WNBC	ak ak	250	Ď		rosse, Wis Britain, C		-7:00 am-	-69	
WSMK	ak	200	č1		on, Ohio	onn.	7.00 am	-33	
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KLRA	ak	1000	C (5)		e Rock, Ai		-9:00 am-	12.15	i a m
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WHK	ak	1000	BM(2)	5) Cle	veland, O	hio	-7:00 am-	-mid	niðht
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CMGC	ad	150		Mat	anzas, Cul	ba	8:00 am-	-11:00	0 pm
CKKR	Z	100	CM.		iago, Cub	а			
KHBC KLO	ak ak	250 500	CM B	Odd	, Ť. H. en, Utah		-10:00 am	-1.00	lam
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WIRE	ak	1000	MR (5) <u>I</u> ndi	anapolis,	Ind.	-7:30 am-	-1:00	am
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CKFC	ak	50	5		couver, B.				
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CMCQ	ak	250	X	Cro	ana, Cuba nd Forks,	ND			
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KMED	ck	250	N N		ford, Ore.	40			
WAAB	ak	500	M (1)		ton, Mass.		-24 hours	daily	
WBCM	ak	500	(1)	Bav	City. Micl	h.		-12:3	0 am
WHIS	ak	500	(1)	Blue	efield, W. V	Va.			
WROK	ak	500	(1)		kford, Ill.		-7:30 am-		
WSFA	ak	500	C (1)	Mon	itgomery,	Ala.	—7:30 am-	-mid	night
1420	k	evs	(211)	.1)	9				
1120	~	-, 0.	\ <u>-</u>	/					
CHLN	z	100		Thr	ee Rivers,	P . Q .			
CKGB	ak	100	F		th Bay, Or			-11:	30 pm
KABÇ	ak	100	(.25)		Antonio,		—7:00 am-	-12:1	5 am
KABR	ak	100	XZ		rdeen, S. I				
KATE	Z	250	D		ert Lea, Mi		-2:00 pm-	-8.00	nm
KBPS	ak ak	100 100	4 (.25)		tland, Ore arkana, Te		-2.00 pm-	-0.00	pm
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KIDW	ak		1	Lan Doc	os, Texas		9:00 am- 8:00 am-		
KIUN	ak		(25) 1	PIA	os, Texas Grande, O	re.		10.0	• P.III
KLBM KNET	z ak	100 100	(.25) I D	Pala	estine, Ter	38			
KORE	ak		M	Eud	ene. Ore.				
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KXL	ak	100	4 (.25) Por	tland, Ore.			
WACO WAGM	ak. lak	100 100	С		o, Texas			
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WAZL	ak	100	2	Haz	leton, Pa.	renn.	7:00 am 9:00 am	-7:00 pm
WCBS	ak	100	(.25)	Spr	ingfield. III		-8:00 am-	-11:00 pm
WCHV WEED	ak ak	100 100	3 (.25) 3 (.25)) Cha	rlottesville	Va.	-7:00 am-	midnight
WELL	ak	100	3 (.23	Bat	ky Mount, tle Creek, N	N.C. Alah		
WGPC	ak	100		Alba	any, Ga.	aicn.		midnight
WHFC	ak	100	(.25)	Gice	ero, III.		-7:00 am-	1:00 am
WILM WJMS	aj ak	100	2	Will	mington, D	el.		
WLAP	ak	100	(.25)		wood, Mic ngton, Ky	h.		
WLEU	ak	100	(.25) I	3 Erie	. Pa.	•		
WMAS	ak	100	- C (.25) Spri	ngfield, Ma	ass.	-7:00 am-	midnight
WMBC WMBH		100	(.25)	Deti	olt, Mich.		-7:30 am-	midnight
WMBS	ak ak	100 250	(.25) D	Jopi	lin, Mo.	_		
WMFJ	ak	100		Dav	ontown, Pa tona Bch.,	t. Fila	6:00 am	6:00 pm
WMSD	ak	100		Chai				11.00 pm
WNNY	Z	100	(.25) F	' Wat	ertown, N.	Υ.	choc and	11.00 pm
WPAD WPAR	ak ak	100 100	(.25) C	Padi	ucah, Ky.		-7:00 am-	midnight
WPRP	ањ 2	100	(.25)	Para	kersburg, V ce, Puerto I	V.V. Diag		
	z	100		· Ken	ora, Ont.	NICO		
					,			
1430	kc	ys.	(209).7)				
		-	•					
CMJP KECA	ak ak	75 1000	(5) B	Mor	on, Cuba	-1	10.00 -	2
KGNF	ak	1000	\mathbf{D}	Nort	Angeles, Ca h Platte, N	ai. Jeh		-3:00 am
KSO	ak	500	BM(2.	5) Des	s Moines. L	owa		0:15 pm
WBNS	ak	500	- G (I)X	. Colu	imbus, Ohi	lo		
WHEC WHP	ak	500	C (1)	Rock	nester, N. Y	ζ.	-7:00 am-	midnight
WMPS	ak ak	500 500	C (1) (1) B	Mon	risburg, Pa nphis. Teni	•	6:30 am-	midnight
woko	ak	500	Č (1)	Alba	ny, N. Y.			:00 am
1440	kc	ys.	(208	3.2)	Г <u> </u>			
смоа-	7	150		How	Cuba			
KDFN	z ak	150 500	• • • •	Casr	ana, Cuba ber, Wyo.			
KELA	ak	500	MP	Cent	tralia, Was	h.		
KXYZ	ak	1000	B	Hou	ston, Texas	5		
WBIG WCBA	ak	1000	C	Gree	nsboro, N.	С.	-6:30 am-1	11:30 pm
WMBD	aj ak	500 1000	a C(5)		ntown, Pa. ia, Ill.		-7:30 am-1	
WSAN	aj	500	Na		ntown, Pa.		-7:00 am- -1:00 pm-	midnight
XEFI	ak	250			uahua, Ch	ih.	1.00 pm	11.50 pm
1450	1		1000	0)	<u> </u>			
1450	KC	ys.	(206	.8)				
CFCT	ak	500			oria, B. C.		—10:45 am—	-12:15 am
CHGS	ak	50	F	Sum	merside, P		-6:30 am-1	
CMHM	Z	100	· • · ·	Cien	fuegos, Cu	ba		-
KGCX KIEM	ak ak	1000 500	M(1)	Fure	Point, Mo ka, Calif.	nt.	10.00	1.00
KTBS		1000	N		veport, La.		—10:00 am— —7:30 am—1	
WAGA	ak	500	B (1)		nta, Ga.		7.50 am	am
WGAR	ak	500	C (1)	Cleve	eland, Ohio	0	-7:00 am-1	nidnight
WHOM	ak	250	M	Jerse	y City, N.	J.		nidnight
WSAR XEF	ak ak	1000 100			River, Mass ez, Chih.	8.		
1460	1-0		(205	4)				
1460	KC	ys.	(205	.4)				
CMKF KSTP	z ak 10	250 0000	R (25)	Holg St. P	uin, Cuba aul, Minn.			:00 am
WJSV	ak l		C	Wash	nington, D	. C.		
1470	kc	ys.	(204	.0)	·	7		
KGA		, 5000	вм		ane, Wash	I		· · ·
WLAC		5000	Č	Nash	ville, Tenn			

	and the second se			
1480	kcys.	(202		
кома	ak 5000	C	Oklahoma City, Ok.	
WHIP WKBW	z 5000 ak 5000	ĎР С	Hammond, Ind. Buffalo, N. Y.	—7:30 am—5:30 pm 8:00 am—1:00 am
WKDW	ak Juu	U	Dunalo, IV. I.	otovani 1.00 ani
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	ak 100		S. S. Marie, Ont.	—10:00 am—10:00 pm
KAWM	z 100		Gallup, N. Mex.	
KBIX KBST	ak 100 z 100	M 	Muskogee, Okla. Big Spring, Texas	0.00 am -11.00 pm
KDAL KDB	ak 100 ak 100	C M(.25)	Duluth, Minn.) Santa Barbara, Cal.	
KGFI	ak 100	(.25)	Brownsville, Tex.	
KGKB KGKY	ak 100 ak 100	(.25) (.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	ak 100	D	Pine Bluff, Ark.	—8:00 am—ss —8:00 am—10:00 pm
KOVC KPLC	ak 100 ak 100	(.25) (.25)	Valley City, N. D. Lake Charles, La.	-0:00 am-10:00 pm
KPLT KPQ	z 250 ak 1001	D M(.25)	Paris, Texas Wenatchee, Wash.	
KRNR	ak 1001	M(.25)	Roseburg, Ore.	
KROD KSAL	ak 100 ak 100	P (.25)	El Paso, Texas Salina. Kans.	
KUTA KVOE	z 100 ak 100	P M	Salt Lake City, Ut. Santa Ana, Calif.	-Noon to 2:00 am
KXO	ak 100		El Centro, Calif.	
WCNW WDNC	ak 100 ak 100	C (.25)	Brooklyn, N. Y. Durham, N. C.	—9:00 am—midnight —7:30 am—12:30 am
WGAL WHBB	ak 100 ak 100	(.25)	Lancaster, Pa. Selma, Ala.	7:30 amss
WHEF	ak 100	(.25)	Kosciusko, Miss.	-7:30 am-10:00 pm
WJBK WKAT	ak 100 z 100	(.25)	Detroit, Mich. Miami Beach, Fla.	-24 hours daily
WKBB WKBV	ak 100 ak 100	(.25) (.25)	E. Dubuque, Ill. Richmond, Ind.	
WKBZ	ak 100	(.25)	Muskegon, Mich.	-7:00 am-10:00 pm
WKEU WMBQ	ak 100 ak 100	D 1	Griffin, Ga. Brooklyn, N. Y.	
WMEX WNBF	ak 100 ak 100	(.25) C(.25)	Boston, Mass. Binghamton, N. Y.	
WNLC	ak 100	DM	New London, Conn.	
WOMI WOPI	z 100 ak 100		b) Owensboro, Ky. Bristol, Tenn.	-7:00 am-10:30 pm
WRDW WRGA		C(.25)) Augusta, Ga. Rome, Ga.	—7:00 am—9:00 pm —8:00 am—11:00 pm
WRTD	z 100	B	Richmond, Va. Rutland, Vt.	
WSYB WTMV	ak 100	(.25)	E. St. Louis, Ill.	
WWRL WWSW		1 (.25 (.25)) Woodside, N. Y. Pittsburgh. Pa.	—8:00 am—midnight
1510	kcys.	(198	8.6)	
CFRC	ak 100		Kingston, Ont.	-Noon-11:00 pm
CKCR	ak 100		Waterloo, Ont.	-8:00 am-11:00 pm
1530	kcys.	(19	6.0)	
КХВҮ	ak 1000		Kansas City. Mo.	-8:00 am-3:30 am
WBRY			Waterbury, Conn.	8:00 ammidnight
1550	kcys.	(19	3.4)	
KPMC WQXR	ak 1000		Bakersfield, Calif. New York, N. Y.	—10:00 am—2:00 am —10:00 am—9:15 pm
W QAR	ak 1000	• • • • •	NGW IUIK, N. I.	
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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.

AT ADADA			
ALABAMA	CALIFORNIA	Santa Barbara KDB 1500 100M	FLORIDA
Birmingham WAPI 1140 5000 C	Bakersfield	KDB 1500 100M KTMS 1220 500 B	
WAPI 1140 5000 C WBRC 930 1000 R	KERN 1370 100 N	Santa Rosa	Clearwater WFLA 620 1000 N
WSGN 1310 100 B	KPMC 1550 1000M Berkeley	KSRO 1310 250	Daytona Beach
Decatur	KRE 1370 100	Stockton	WMFJ 1420 100
WMFO 1370 100	Beverly Hills	KGDM 1100 1000M	Gainesville
Dothan	[KMPC 710 500	KWG 1200 100 N	WRUF 830 5000
WAGF 1370 250	Chico KHSL 1260 250	Visalia	Jacksonville
Gadsden	KHSL 1260 250 El Centro	KTKC 1190 250	WJAX 900 1000 N
WJBY 1210 100	KXO 1500 100	Watsonville	WMBR 1370 100 C
Huntsville	Eureka	KHUB 1310 250	Lakeland
WBHP 1200 100	KIEM 1450 500M	COLORADO	WLAK 1310 100
Mobile	Fresno KARM 1310 100	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	KIEV 850 250	Colorado Springs	Miami Beach
Selma WHBB 1500 100	Hollywood	KVOR 1270 1000 C	WKAT 1500 100
	KFWB 950 1000 Long Beach	Denver KFEL 920 500M	Orlando
Sheffield WMSD 1420 100	KFOX 1250 1000	KFEL 920 500M KLZ 560 1000 C	WDBO 580 1009 C
	KGER 1360 1000	KOA 830 50000 R	Pensacola
Tuscaloosa WJRD 1200 250	Los Angeles	KPOF 880 500	WCOA 1340 500 C
1200 230	KECA 1430 1000 B KEHE 780 1000	KVOD 920 500 B Durango	St. Augustine
ALASKA	KEHE 780 1000 KFAC 1300 1000	KIUP 1370 100	WFOY 1210 100
Anchorage	KFI 640 50000 R	Grand Junction	St. Petersburg WSUN 620 1000 N
KFQD 780 250	KFSG 1120 500	KFXJ 1200 100	WSUN 620 1000 N Tallahassee
Juneau	KFVD 1000 1000 KGFJ 1200 100	Greeley KFKA 880 500M	WTAL 1310 100
KINY 1310 100	KGFJ 1200 100 KHJ 900 1000M	KFKA 880 500M La Junta	Tampa
Ketchikan	KMTR 570 1000	KOKO 1370 100	WDAE 1220 1000 C
KGBU 900 500	KNX 1050 50000 C	Lamar	West Palm Beach WJNO 1200 100 C
1 DIGONIA	KRKD 1120 500 Merced	KIDW 1420 100 Pueblo	1000
ARIZONA	KYOS 1040 250	KGHF 1320 500 B	GEORGIA
Jerome	Modesto	Sterling	Albany
KCRJ 1310 100	KTRB 740 250	KGEK 1200 100	WGPC 1420 100
Lowell	Monterey KDON 1210 100M	CONNECTICUT	Atlanta
KSUN 1200 100	Oakland		WAGA 1450 500
Phoenix	KLS 1280 250	Bridgeport	WATL 1370 100 WGST 890 1000 C
KOY 1390 1000 C KTAR 620 1000 N	KLX 880 1000	WICC 600 500M	WSB 740 50000 R
KTAR 620 1000 N Tucson	KROW 930 1000 Pasadena	Hartford WDRC 1330 1000 C	Augusta
KGAR 1370 100	KPPC 1210 100	WTIC 1040 50000 R	WRDW 1500 100 C
KVOA 1260 1000	Redding	WTHT 1200 100M	Columbus WRBL 1200 100
Yuma	KVCV 1200 100	New Britain	WRBL 1200 100 Griffin
KUMA 1420 100	Sacramento KFBK 1490 5000 N	WNBC 1380 250	WKEU 1500 100
PLU-	KROY 1210 100	New Haven	Macon
ARKANSAS	San Bernardino	WELI 900 500	WMAZ 1180 1000 C Rome
Blytheville	KFXM 1210 100M	New London WNLC 1500 100M	WRGA 1500 100
KLCN 1290 100	San Diego		Savannah
El Dorado	KFSD 600 1000 B	Waterbury WATR 1190 100	WTOC 1260 1000 C
KELD 1370 100	KGB 1330 1000M	WBRY 1530 1000M	Thomasville WPAX 1210 100
Fort Smith	San Francisco		Waycross
KFPW 1210 100	KFRC 610 1000M KGGC 1420 100	DELAWARE	WAYX 1200 100
Hot Springs	KGO 790 7500 B	Wilmington	TT A XX/ A TT
KTHS 1060 10000 N Jonesboro	KJBS 1070 500	WDEL 1120 250 R	HAWAII
KBTM 1200 100	KPO 680 50000 R	WILM 1420 100	Hilo
Little Rock	KSFO 560 1000 C KYA 1230 1000	DISTRICT OF	KHBC 1400 250M
KARK 890 500 N	KYA 1230 1000 San Jose	DISTRICT OF COLUMBIA	Honolulu KCMP 1220 1000 C
KGHI 1200 100 KLRA 1390 1000 C	KQW 1010 1000M	COLOMBIA	KGMB 1320 1000 C KGU 750 2500 N
Pine Bluff	San Luis Obispo	Washington	
KOTN 1500 100	KVEC 1200 250	WJSV 1460 10000 C	IDAHO
		WMAL 630 250 B	275
Siloam Springs	Santa Ana	WOL 1318 166M (Roleo
KUOA 1260 5000	KVOE 1500 100M	WOL 1310 100M WRC 950 500R	Boise KIDO 1350 1000 N

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Coeur d'Alene	Fort Wayne	Kansas City	MARYLAND
KGCI 1200 100	WGL 1370 100 N	KCKN 1310 100	
Idaho Falls	WOWO 1160 10000 B	Lawrence	Baltimore
KID 1320 500	Gary	KFKU 1220 1000	WBAL 760 2500 B
	WIND 560 1000	WREN 1220 1000 B	WBAL 1060 10000 B
Lewiston	Hammond		WCAO 600 500 C
KRLC 1390 250		Manhattan	WCBM 1370 100
Nampa		KSAC 580 500	WFBR 1270 500 R
KFXD 1200 100	WWAE 1200 100	Pittsburg	College Park
Pocatello	Indianapolis	KOAM 790 1000 N	W3XJ 1060 100
KSEI 900 250	WFBM 1230 1000 C	Salina	
	WGVA 1050 1000	KSAL 1500 100	Cumberland
Twin Falls	WIRE 1400 1000 R		WTBO 800 250
KTFI 1240 1000	Muncie	Topeka	Frederick
		WIBW 580 1000 C	WFMD 900 500
ILLINOIS		Wichita	
	New Albany	KANS 1210 100 B	Hagerstown
Bloomington	WGRC 1370 250	KFH 1300 1000 C	WJEJ 1210 50
WJBC 1200 100	Richmond	KI'II 1300 1000 G	Salisbury
Carthage	WKBV 1500 100		WSAL 1200 250
		KENTUCK Y	
	South Bend		MASSACHUSETTS
Champaign	WFAM 1200 100	Ashland	millositetteob.to
WDWS 1370 100	WSBT 1360 500	WCMI 1310 100	Boston
Chicago	Terre Haute	_	WAAB 1410 500M
WAAF 920 1000	WBOW 1310 100 N	Covington	WBZ 990 50000 B
WBBM 770 50000 C		WCKY 1490 10000 N	WCOP 1120 500
WCBD 1080 5000 C	West Lafayette	Lexington	WEEI 590 1000 C
	WBAA 890 500	WLAP 1420 100	
		Louisville	
	IOWA		
WEDC 1210 100 WENR 870 50000 B		WAVE 940 1000 N WHAS 820 50000 C	WNAC 1230 1000 R WORL 920 500
	Ames		WORL 920 . 500
WGES 1360 500	WOI 640 5000	Middlesboro	Fall River
WGN 720 50000M	Boone	WLMU 1210 100	WSAR 1450 1000M
WJJD 1130 20000	KFGQ 1370 100	Owensboro	Greenfield
WLS 870 50000 B	•	WOMI 1500 100	WHAI 1210 250
WMAQ 670 50000 R	Cedar Rapids		Lawrence
WMBI 1080 5000	WMT 600 1000 B	Paducah	WLAW 680 1000
WSBC 1210 100	Davenport	WPAD 1420 100	WLLH 1370 100
Cicero	WOC 1370 100 C		Lowell
WHFC 1420 100	Decorah	LOUISIANA	WLLH 1370 100M
	KGCA 1270 100		New Bedford
Decatur WJBL 1200 100	KWLC 1270 100	Alexandria	WNBH 1310 100M
			Pittsfield
East Dubuque	Des Moines		WBRK 1310 100
WKBB 1500 100	KRNT 1320 1000 C	Baton Rouge	Springfield
East St. Louis	KSO 1430 500 B	WJBO 1120 500 B	WBZA 990 1000 B
WTMV 1500 100	WHO 1000 50000 R	Lafayette	WMAS 1420 100 C
	Dubuque	KVOL 1310 100	WSPR 1140 500M
Harrisburg	KDTH 1340 500		Worcester
WEBQ 1210 100		Lake Charles	WORC 1280 500 C
Joliet	Iowa City	KPLC 1500 100	WTAG 580 1000 R
WCLS 1310 100	WSUI 880 500	Monroe	JOU 1000 K
Peoria	Marshalltown	KMLB 1200 100	MICHIGAN
WMBD 1440 1000 C	KFJB 1200 100	New Orleans	MIGHIGAN
	Mason City	WBNO 1200 100	Battle Creek
Quincy		WDSU 1250 1000 B	
WTAD 900 1000	KGLO 1210 100 C		
Rockford	Shenandoah		Bay City
WROK 1410 500	KFNF 890 500	WSMB 1320 1000 R	WBCM 1410 500
Rock Island	KMA 930 1000	WWL 850 10000 C	Calumet
WHBF 1210 100	Sioux City	Shreveport	WHDF 1370 100
Springfield	KSCJ 1330 1000 C	KRMD 1310 100	Detroit
WCBS 1420 100	KTRI 1420 100	KTBS 1450 1000 N	WJBK 1500 100
WTAX 1210 100		KWKH 1100 10000 C	WJR 750 50000 C
Tuscola		KWKII II00 I0000 G	
			WMRC 1430 100
WD7 1000 250 4	KANSAS		WMBC 1420 100 WW1 920 5000 B
WDZ 1020 250	KANSAS	MAINE	WWJ 920 5000 R
Urbana	KANSAS Abilene	MAINE	WWJ 920 5000 R WXYZ 1240 1000 B
	KANSAS Abilene KFBI 1050 5000	MAINE Augusta	WWJ 920 5000 R WXYZ 1240 1000 B East Lansing
Urbana WILL 580 1000	KANSAS Abilene KFBI 1050 5000 Coffeyville	MAINE Augusta WRDO 1370 100M	WWJ 920 5000 R WXYZ 1240 1000 B East Lansing WKAR 850 1000
Urbana	KANSAS Abilene KFBI 1050 5000 Coffeyville KGGF 1010 1000M	MAINE Augusta WRDO 1370 100M Bangor	WWJ 920 5000 R WXYZ 1240 1000 B East Lansing WKAR 850 1000 Flint
Urbana WILL 580 1000 INDIANA	KANSAS Abilene KFBI 1050 5000 Coffeyville KGGF 1010 1000M Dodge City	MAINE Augusta WRDO 1370 100M Bangor WABI 1200 100	WWJ 920 5000 R WX YZ 1240 1000 B East Lansing WKAR 850 1000 Flint WFDF 1310 100
Urbana WILL 580 1000 INDIANA Anderson	KANSAS Abilene KFBI 1050 5000 Coffeyville KGGF 1010 1000M Dodge City KGNO 1340 250	MAINE Augusta WRDO 1370 100M Bangor	WWJ 920 5000 R WX YZ 1240 1000 B East Lansing WKAR 850 1000 Flint WFDF 1310 100 Grand Rapids
Urbana WILL 580 1000 INDIANA Anderson WHBU 1210 100	KANSAS Abilene KFBI 1050 5000 Coffeyville KGGF 1010 1000M Dodge City KGNO 1340 250 Garden City	MAINE Augusta WRDO 1370 100M Bangor WABI 1200 100 WLBZ 620 500 C	WWJ 920 5000 R WX YZ 1240 1000 B East Lansing WKAR 850 1000 Flint WFDF 1310 100 Grand Rapids WASH 1270 500 N
Urbana WILL 580 1000 INDIANA Anderson WHBU 1210 100 Elkhart	KANSAS Abilene KFBI 1050 5000 Coffeyville KGGF 1010 1000M Dodge City KGNO 1340 250 Garden City KIUL 1210 100	MAINE Augusta WRDO 1370 100M Bangor WABI 1200 100 WLBZ 620 500 C Portland	WWJ 920 5000 R WX YZ 1240 1000 B East Lansing WKAR 850 1000 Flint WFDF 1310 100 Grand Rapids WASH 1270 500 N WQOD 1270 500 N
Urbana WILL 580 1000 INDIANA Anderson WHBU 1210 100 Elkhart WTRC 1310 100	KANSASAbileneKFBI10505000CoffeyvilleKGGF10101000MDodgeCityKGNO1340250GardenCityKIUL1210100GreatBend	MAINE Augusta WRDO 1370 Bangor WABI 1200 WLBZ 620 Portland WCSH 940	WWJ 920 5000 R WX YZ 1240 1000 B East Lansing WKAR 850 WKAR 850 1000 Flint WFDF 1310 100 Grand Rapids WASH 1270 500 N WOOD 1270 500 N Ironwood
Urbana WILL 580 1000 INDIANA Anderson WHBU 1210 100 Elkhart WTRC 1310 100 Evansville	KANSASAbileneKFBI 1050 5000CoffeyvilleKGGF 1010 1000MDodge CityKGNO 1340 250Garden CityKIUL 1210 100Great BendKVGB 1370 100	MAINE Augusta WRDO 1370 Bangor WABI 1200 100 WLBZ 620 Solo C Portland WCSH 940 WGAN 640	WWJ 920 5000 R WX YZ 1240 1000 B East Lansing WKAR 850 1000 Flint WFDF 1310 100 Grand Rapids WASH 1270 500 N WOOD 1270 500 N Ironwood WJMS 1420 100
Urbana WILL 580 1000 INDIANA Anderson WHBU 1210 100 Elkhart WTRC 1310 100 Evansville WEOA 1370 100 C	KANSASAbileneKFBI1050CoffeyvilleKGCF10101000 CityKGNO1340250GardenCityKIUL1210100GreatBendKVGB1370100Hutchinson	MAINE Augusta WRDO 1370 100M Bangor WABI 1200 100 WLBZ 620 500 C Portland WCSH 940 1000 R WGAN 640 500 Presque Isle	WWJ 920 5000 R WX YZ 1240 1000 B East Lansing WKAR 850 1000 Flint WFDF 1310 100 Grand Rapids WASH 1270 500 N WOOD Ironwood WJMS 1420 100 Jackson 100 100 100
Urbana WILL 580 1000 INDIANA Anderson WHBU 1210 100 Elkhart WTRC 1310 100 Evansville	KANSASAbileneKFBI 1050 5000CoffeyvilleKGGF 1010 1000MDodge CityKGNO 1340 250Garden CityKIUL 1210 100Great BendKVGB 1370 100	MAINE Augusta WRDO 1370 Bangor WABI 1200 100 WLBZ 620 Solo C Portland WCSH 940 WGAN 640	WWJ 920 5000 R WX YZ 1240 1000 B East Lansing WKAR 850 1000 Flint WFDF 1310 100 Grand Rapids WASH 1270 500 N WOOD 1270 500 N Ironwood WJMS 1420 100

Kalamazoo WKZO 590 1000 B	Kansas City KCMO 1370 100	Atlantic City	WBOQ 860 50000
Lansing	KMBC 950 1000 C	WPG 1100 5000 C Bridgeton	WEAF 660 50000 R WEVD 1300 1000
WJIM 1210 100 Lapeer	WDAF 610 1000 R	WSNJ 1210 100 Camden	WFAB 1300 1000 WHN 1010 1000
WMPC 1200 100	WHB 860 1000M Poplar Bluff	WCAM 1280 500	WINS 1180 1000 WJZ 760 50000 B
Marquette WBEO 1310 100	KPBM 1310 100 St. Joseph	Jersey City WAAT 940 500	WMCA 570 1000
Muskegon	KFEQ 680 2500	WHOM 1450 250	WNEW 1250 1000 WNYC 810 1000
WKBZ 1500 100 Royal Oak	St. Louis KFUO 550 500	Newark WHBI 1250 1000	WOV 1130 1000 WQXR 1550 1000
WEXL 1310 50	KMOX 1090 50000 C KSD 550 1000 R	WOR 710 50000M	Olean
Saginaw WHAL 950 500	KWK 1350 1000 B WEW 760 1000	Red Bank WBRB 1210 100	WHDL 1400 250 Plattsburg
· · · · · · · · · · · · · · · · · · ·	WIL 1200 100 Springfield	Trenton	WMFF 1310 100
MINNESOTA	KGBX 1230 500 N	Whippany	Rochester WHAM 1150 50000 B
Albert Lea KATE 1420 250	<u>KWTO 560 5000</u>	W3XDD 50000 Zarephath	WHEC 1430 500 C WSAY 1210 100
Duluth	MONTANA	WAWZ 1350 500	Saranac Lake
KDAL 1500 100 C WEBC 1290 1000 N	Billings	NEW MEXICO	WNBZ 1290 100
Fergus Falls KGDE 1200 100	KGHL 780 1000 N Butte	Albuquerque	Schenectady WGY 790 50000 R.
Hibbing	KGIR 1340 1000 N Great Falls	KGGM 1230 1000	Syracuse WFBL 1360 1000 C
WMFG 1210 100 Minneapolis	KFBB 1280 1000 G	KOB 1180 10000 N Carlsbad	WFBL 1360 1000 C WSYR 570 1000 B
WCCO 810 50000 C WDGY 1180 1000 C	Helena KPFA 1210 100	KLAH 1210 100	Troy WHAZ 1300 1000
WLB 1250 1000	Kalispell KGEZ 1310 100	Clovis KICA 1370 100	Utica
WTCN 1250 1000 B Moorhead	Lewistown	Gallup	WIBX 1200 100 C
KVOX 1310 100 Northfield	KDNC 1200 100 Missoula	KAWM 1500 100 Roswell	Watertown WNNY 1420 100
WCAL 1250 1000 Rochester	KGVO 1260 1000 C Wolf Point	KGFL 1370 100 Santa Fe	White Plains WFAS 1210 100
KROC 1310 100	KGCX 1450 1000	KRQA 1310 100	Woodside
St. Cloud KFAM 1420 100	NEBRASKA	NEW YORK	WWRL 1500 100
St. Paul KSTP 1460 10000 R	Clay Center	Albany	NORTH CAROLINA
WMIN 1370 100 Virginia	KMMJ 740 1000 Kearney	WABY 1370 100 WOKO 1430 500 C	Asheville WWNC 570 1000 N
WHLB 1370 100 C	KGFW 1310 100 Lincoln	Auburn	Charlotte
Winona KWNO 1200 250	KFAB 770 10000 C	WMBO 1310 100 Binghamton	WBT 1080 50000 C WSOC 1210 100 N
MISSISSIPPI	KFOR 1210 100 C Norfolk	WNBF 1500 100 C Brooklyn	Durham WDNC 1500 100 C
	WJAG 1060 1000 North Platte	WARD 1400 500	Greensboro
Grenada WGRM 1210 100	KGNF 1430 1000	WBBC 1400 500 WBBR 1300 1000	WBIG 1440 1000 C High Point
Gulfport WGCM 1219 100	Omaha KOIL 1260 1000 B	WCNW 1500 100 WLTH 1400 500	WMFR 1200 100 Kinston
Hattiesburg	WAAW 660 500 WOW 590 1000 R	WMBQ 1500 100	WFTC 1200 100
WFOR 1370 100 Jackson	Scottsbluff	WVFW 1400 500 Buffalo	Raleigh WPTF 680 1000 N
WJDX 1270 1000 R Kosciusko	KGKY 1500 100	WBEN 900 1000 R WBNY 1370 100	Rocky Mount WEED 1420 100
WHEF 1500 100 Laurel	NEVADA	WEBR 1310 100 B WGR 550 1000 C	Wilmington WMFD 1370 100
WAML 1310 100	Reno KOH 1380 500 C	WKBW 1480 5000 C	Wilson
Meridian WCOC 880 500 C		WSVS 1370 50 Canton	WGTM 1310 100 Winston-Salem
Vicksburg WOBC 1360 1000	NEW HAMPSHIRE	WCAD 1220 500 Elmira	WAIR 1250 250 WSJS 1310 100 C
MISSOURI	Laconia WLNH 1310 100M	WESG 850 1000 C Freeport	NORTH DAKOTA
	Manchester WFEA 1340 500 N	WGBB 1210 100	·
Cape Girardeau KFVS 1210 100	Portsmouth	Jamestown WJTN 1210 100 B	Bismarck KFYR 550 1000 N
Columbia KFRU 630 500	WHEB 740 250	Newburgh WGNY 1210 100	Devils Lake KDLR 1210 100
Jefferson City	NEW JERSEY	New York	Fargo
KWOS 1310 100 Joplin	Asbury Park	WABC 860 50000 C WBIL 1100 5000	Grand Forks
WMBH 1420 100	WCAP 1280 500	WBNX 1350 1000	KFJM 1410 500

Jamestown KRMC 1370 100	Tulsa KTUL 1400 500 C	Reading WEEU 830 1000	Chattanooga WAPO 1420 100
Mandan	KVOO 1140 25000 N	WRAW 1310 100 Scranton	WDOD 1280 1000 C Jackson
Minot	OREGON	WGBI 880 500 WQAN 880 500	WTJS 1310 100
KLPM 1240 250 Valley City	Astoria	Sunbury	Knoxville WNOX 1010 1000 C
KOVC 1500 100	KAST 1370 100 Corvallis	WKOK 1210 100	WROL 1310 100 N
0000	KOAC 550 1000	Uniontown WMBS 1420 250	Memphis WHBQ 1370 100
OHIO	Eugene KORE 1420 100M	Wilkes-Barre	WMC 780 1000 R
Akron WADC 1320 1000 C	Klamath Falls KFJI 1210 100	WBAX 1210 100 WBRE 1310 100	WMPS 1430 500 B WREC 600 1000 C
WJW 1210 100	La Grande	Williamsport	Nashville
Ashtabula	KLBM 1420 100 Marshfield	WRAK 1370 100 York	WLAC 1470 5000 C WSIX 1210 100
WICA 940 250 Canton	KOOS 1200 100	WORK 1320 1000 N	WSM 650 50000 N
WHBC 1200 100	Medford KMED 1410 250 N	PUERTO RICO	TEXAS
Cincinnati WCPO 1200 100	Portland KALE 1300 500 C		Abilene
WKRC 550 1000 C	KBPS 1420 100	Mayaguez WPRA 1370 100	KRBC 1420 100
WLW 700 500000 N WSAI 1330 1000 N	KEX 1180 5000 B KGW 620 1000 R	Ponce WPRP 1420 100	Amarillo
W8XO 700 500000	KOIN 940 1000 C	San Juan	KGNC 1410 1000 N Austin
Cleveland WCLE 610 500M	KWJJ 1040 500 KXL 1420 100	WKAQ 1240 1000 WNEL 1290 1000	KNOW 1500 100 C
WGAR 1450 500 C	Roseburg KRNR 1500 100M		KTBC 1120 1000 Beaumont
WHK 1390 1000 B WTAM 1070 50000 R	Salem	RHODE ISLAND	KFDM 560 500 N
Columbus WBNS 1430 500 C	KSLM 1370 100M	Providence WEAN 780 1000M	Big Spring KBST 1500 100
WCOL 1210 100 N	PENNS YLVANIA	WJAR 890 1000 R WPRO 630 500 C	Brady
WHKC 640 500 Wosu 570 750	Allentown		KNEL 1500 250 Brownsville
Dayton	WCBA 1440 500 WSAN 1440 500 N	SOUTH CAROLINA	KGFI 1500 100
WHIO 1260 1000 C WSMK 1380 200 C	Altoona WFBG 1310 100	Anderson WAIM 1200 100 C	College Station WTAW 1120 500
Lima WBLY 1210 100	Easton	Charleston WCSC 1360 500 N	Corpus Christi KRIS 1330 500 N
Portsmouth	WEST 1200 100 Erie	Columbia WIS 560 1000 N	Corsicana
WPAY 1370 100 Toledo	WLEU 1420 100 B	Florence	KAND 1310 100 Dallas
WSPD 1340 1000 B	Glenside WIBG 970 100	WOLS 1200 100 Greenville	KRLD 1040 10000 C
WTOL 1200 100 Youngstown	Greensburg	WFBC 1300 1000 N Spartanburg	WFAA 800 50000 N WRR 1280 500M
WKBN 570 500 C	WHJB 620 250 C	WSPA 920 1000	Dublin .
Zanesville WALR 1210 100	Grove City WSAJ 1310 100	SOUTH DAKOTA	KFPL 1310 100 El Paso
1	Harrisburg	Aberdeen	KROD 1500 100
OKLAHOMA	WHP 1430 500 C WKBO 1200 100	KABR 1420 100	KTSM 1310 100 WDAH 1310 100
Ada KADA 1200 100M	Hazleton	Brookings KFDY 780 1000	Fort Worth
Ardmore	WAZL 1420 100	Huron	KFJZ 1370 100 KTAT 1240 1000M
KVSO 1210 100M Elk City	Johnstown WJAC 1310 100	KGDY 1340 250 Pierre	WBAP 800 50000 N
KASA 1210 100M	Lancaster	KGFX 630 200 Rapid City	Galveston KLUF 1370 100
Enid KCRC 1360 250M	WGAL 1500 100	KOBH 1370 100	Greenville
Muskogee KBIX 1500 100M	Philadelphia KYW 1020 10000 R	WCAT 1200 100 Sioux Falls	KGVL 1200 100 Houston
Norman	WCAU 1170 50000 C	KELO 1200 100 N	KPRC 920 1000 R
WNAD 1010 1000 Oklahoma City	WDAS 1370 100 WFIL 560 1000 B	KSOO 1110 2500 N Vermillion	KTRH 1290 1000 C KXYZ 1440 1000 B
KFXR 1310 100	WHAT 1310 100 WIP 610 1000	KUSD 890 500	Kilgore
KOMA 1480 5000 C KTOK 1370 100M	WPEN 920 1000	Watertown KWTN 1210 100	KOCA 1210 100 Longview
WKY 900 1000 N Okmulgee	WTEL 1310 100 Pittsburgh	Yankton WNAX 570 1000 C	KFRO 1370 250 Lubbock
KHBG 1210 100	KDKA 980 50000 B		KFYO 1310 100
Ponca City WBBZ 1200 100M	KOV 1380 500 C WCAE 1220 1000 R	TENNESSEE	Lufkin KRBA 1310 100
Shawnee	WJAS 1290 1000 C	Bristol	Midland
KGFF 1420 100M	WWSW 1500 100	WOPI 1500 100	KRLH 1420 100

Pales		100
KNET Pamj	1420 pa	100
KPDN Paris		100
KPLT Pecos	1500	250
KIUN Port	1420 Arthu:	100 Г
KPAC San	1260 Angelo	500
KGKL San	1370 Antoni	100 0
KABC KMAC	1420 1370	100 100
KONO KTSA	1370	100
WOAI Sheri	1190	50000 N
KRRV	1310	250
Tem _I KTEM	1370	250
Texa: KCMC	1420	100
Tyler KGKB	1500	100
Waco WACO	1420	100 C
Wesla KRGV Wich	1260	1000 N
Wich KGKO	ita Fal 570	ls 250 C
	UTAH	
Cedar		
KSUB Ogder	1310	100
KLO Price	1400	500 B
KEUB	1420	100
KEUB Salt I	Lake C	ity
KEUB Salt I KDYL	Lake C 1290	ity 1000 R
KEUB Salt I	Lake C 1290	ity
KEUB Salt I KDYL KSL KUTA	Lake C 1290 1130	ity 1000 R 50000 C 100
KEUB Salt I KDYL KSL KUTA VE Burlin	Lake C 1290 1130 1500 RMON	1000 R 1000 R 50000 C 100
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX	Lake C 1290 1130 1500 RMON RMON 1200	1000 R 50000 C 100 TT 100
KEUB Salt 1 KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A	Lake C 1290 1130 1500 RMON ng ton 1200 nd 1500 Ibans	ity 1000 R 50000 C 100 TT 100 100
KEUB Salt 1 KDYL KSL KUTA VE Burlhi WCAX. Rutla WSYB St. A WODM Sprin	Lake C 1290 1130 1500 RMON ngton 1200 .nd 1500 Ibans 1390 gfield	ity 1000 R 50000 C 100 TT 100 100 1000
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A WODM Sprin WNBX Water	Lake C 1290 1130 1500 RMON ngton 1200 nd 1500 Ibans 1390 gfield 1260 cbury	ity 1000 R 50000 C 100 TT 100 1000 500 C
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A WODM Sprin WNBX Water WDEV	Lake C 1290 1130 1500 RMON ng ton 1200 nd 1200 nd 1500 Ibans 1390 gfield 1260 cbury 550	ity 1000 R 50000 C 100 7T 100 100 1000 500 C 500
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A WODM Sprin WNBX WAter WDEV VI	Lake C 1290 1130 1500 RMON ngton 1200 nd 1500 gheld 1260 cbury 550 RGINI	ity 1000 R 50000 C 100 ito 100 ito 100 100 500 C 500 C 500 C 500 A 500 C
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A WODM Sprin WNBX WAter WDEV VI	Lake C 1290 1130 1500 RMON ngton 1200 nd 1500 gheld 1260 cbury 550 RGINI	ity 1000 R 50000 C 100 ito 100 ito 100 100 500 C 500 C 500 C 500 A 500 C
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A WODM Sprin WNBX Water WDEV VI Charl WCHV Danvi	Lake C 1290 1130 1500 RMON ngton 1200 nd 1500 Ibans 1390 gfield 1260 rbury 550 RGINI ottesvi 1420 Ile	ity 1000 R 50000 C 100 ito 100 ito 100 ito 500 C 500 C 500 500 A 100
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A WODM Sprin WNBX WAter WDEV VI Charl WCHV Danvi WBTM Harrit	Lake C 1290 1130 1500 RMON ng ton 1200 gfield 1260 gfield 1260 gfield 1260 gfield 1260 rbury 550 RGINI 0ttesvi 1420 Ile 1370 sonbur	ity 1000 R 50000 C 100 7T 100 100 1000 500 C 500 A Ille 100 100 g
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A WODM Sprin WNBX Water WDEV VI Charl WCHV Danvi WBTM Harris WSVA Lynch	Lake C 1290 1130 RMON ngton 1200 nd 1500 Ibans 1390 gfield 1260 rbury 550 RGINI ottesvi 1420 Ile 1370 sonbur 550 burg	ity 1000 R 50000 C 100 TT 100 100 100 100 500 C 500 C 500 C 500 C 500 C 500 A Ile 100 100
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A WODM Sprin WNBX Water WDEV VI Charl WCHV Danvi WBTM Harris WSVA Lynch	Lake C 1290 1130 1500 R MON ng ton 1200 nd 1500 Ibans 1390 gfield 1260 sbury 550 RGINI 0ttesvi 1420 Ile 1370 sonbur 550 uturg 1200	ity 1000 R 50000 C 100 TT 100 100 100 500 C 500 C 500 C 500 A 11e 100 100 100 500 C 500 A 100 8 500 100
KEUB Salt I KDYL KSL KUTA VE WCAX Rutla WSYB St. A WODM Sprin WNBX WAter WDEV VI Charl WCHV Danvi WBTM Harris WSVA Lynch WLVA Newp WGH	Lake C 1290 1130 IR MON Ington 1200 nd 1200 gfield 1260 gfield 1260 cbury 550 RGINI ottesvi 1420 Ile 1370 sonbur 550 burg 1200 1200 cburg	ity 1000 R 50000 C 100 TT 100 100 100 500 C 500 C 500 C 500 A 11e 100 100 100 500 C 500 A 100 8 500 100
KEUB Salt I KDYL KSL KUTA VE WCAX. Rutla WCAX. Rutla WCAX. Rutla St. A WODM Sprin WNBX WATEN WODY VI Charl WCHV Danvi WBTM Harris WSVA Lynch WLVA NewpO WGH Norfo WTAR	Lake C 1290 1130 RMON Ison Ison Ison Ison Ison Ison Ison RGINI Ottesvi 1420 Ile Ison RGINI Ison	ity 1000 R 50000 C 100 ito 100 iT 100 100 100 500 C 500 500 C 500 A 100 100 100 g 500 100 100 ws 100
KEUB Salt I KDYL KSL KUTA VE Burlin WCAX Rutla WSYB St. A WODM Sprin WNBX WAter WDEV VI Charl WCHV Danvi WBTM Harris WSVA Lynch WLVA Newp WGH Norfo WBBL	Lake C 1290 1130 ISO RMON ngton 1200 nd 1200 gfield 1200 softeld 1200 softeld 1200 softeld 1200 softeld 1200 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1210 softeld 1200 softeld 1210 softeld 1210 softeld 1200	ity 1000 R 50000 C 100 ito 100 ito 100 ito 100 ito 500 C 500 C 500 C 500 C 500 C 500 A 100 ite 100 ito 100 g 500 100 100 ws 100 ito 1000 N ito 100
KEUB Salt I KDYL KSL KUTA VE WCAX Rutla WSYB St. A WODM Sprin WNBX WAter WDEV VI Charl WCHV Danvi WBTM Harris WSVA Lynch WLVA Newp WGH Norfo WTAR Richn	Lake C 1290 1130 R MON ng ton 1200 nd 1200 gfield 1390 gfield 1260 sbury 550 RGINI 1420 lle 1370 sonbur 550 nd 1200 ottesvi 1420 lburg 1200 ort Ne 1310 lk 780 nond	ity 1000 R 50000 C 100 ito 100 iT 100 i00 500 C 500 C 500 A 100 ille 100 i00 100 g 500 i00 100 solution 100 i00 100 ws 100 i000 N 1000 N

WRTD WRVA	1500 1110	100 B 5000 C
Roan		1000 C
	HING	
Aberd KXRO	een 1310	100M
	gham	100M
Centr KELA	alia 1440	500M
Evere: KRKO		50
Longv KWLK		250
Olymj KGY	pia	_
Pullm KWSC	1210 an	100M
Seattl		1000
KEEN KIRO	1370 710	100 1000 C
KJR KOL	970 1270	5000 B 1000M
KOMO KRSC	920 1120	1000 R 250
KTW KXA	1220 760	1000 250
Spoka KFIO	ne 1120	100
KFPY KGA	890	1000 C 5000 B
КНО	1470 590	1000 R
Tacon KMO KVI	1330 570	1000 M 1000 C
Walla KUJ	Walls	
Wenat KPO		100M
Yakin KIT		250M
WEST	VIRG	
WEG1	VING	111111
Bluefi	eld 1410	500
Charle	eston	
WCHS Clarks	580 burg	500 C
WBLK Fairm WMMN		100
Hunti	ngton	500 C
WSAZ Parker	1190 sburg	1000
WPAR Wheel	1420 ing	100 C
WWVA	1160	5000 C
WIS	CONS	IN
Eau C WEAU	laire 1050	1000
Fond KFIZ		
Green WHBY		100
WTAQ Janesv	1330	1000 C
WCLO LaCros	1200	100
WKBH Madise	1380	1000 C
WHA WIBA	940	5000 1000 N
WIDA	1280	1000 N

Manitowoc	
WOMT 1210 100	C
Milwaukee	ΙČ
WEMP 1310 100	
WISN 1120 250 C WTMJ 620 1000 N	I
WTMJ 620 1000 N Poynette	
WIBU 1210 100	C
Racine	١ŭ
WRJN 1370 100	C
Sheboygan	
WHBL 1300 250	C
Stevens Point WLBL 900 5000	
WLBL 900 5000 Superior	N
WDSM 1200 100	_
Wausau	C.
WSAU 1370 100	
WYOMING	
Casper	v.
KDFN 1440 500	''
Rock Springs	C
KVRS 1370 100	
Sheridan	C.
KWYO 1370 100	
BAHAMAS	
BANAMAS	C.
Nassau	-
ZNS 540 400	
	-
CANADA	
ALDEDTA	
ALBERTA	
Calgary	
CFAC 930 1000 F	C
CFCN 1030 10000 F	
CJCJ 690 100 F	C
CJCJ 690 100 F Edmonton	C
CJCJ 690 100 F Edmonton CFRN 960 100 F	Ci Ci
CJCJ 690 100 F Edmonton CFRN 960 100 F CJCA 730 1000 F	C
CJCJ 690 100 F Edmonton CFRN 960 100 F CJCA 730 1000 F CKUA 580 500 F Grande Prairie	Ci Ci
CJCJ 690 100 F Edmonton CFRN 960 100 F CJCA 730 1000 F	
CJCJ 690 100 F Edmonton CFRN 960 100 F CJCA 730 1000 F CKUA 580 500 F Grande Prairie CFGP 1200 100 Lethbridge	Ci Ci
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CJCJ 690 100 F Edmonton CFRN 960 100 F CJCA 730 1000 F CKUA 580 500 F Grande Prairie CFGP 1200 100 Lethbridge CJOC 950 100 F	
CJCJ 690 100 F Edmonton CFRN 960 100 F CJCA 730 1000 F CKUA 580 500 F Grande Prairie CFGP 1200 100 Lethbridge	C1 C1 C1 C1 C1 C1 C1
CJCJ 690 100 F Edmonton CFRN 960 100 F CJCA 730 1000 F CKUA 580 500 F Crande Prairie CFGP 1200 100 Lethbridge CJOC 950 100 F BRIT. COLUMBIA Chilliwack	C1 C1 C1 C1 C1 C1 C1 C1 C1
CJCJ 690 100 F Edmonton CFRN 960 100 F CJCA 730 1000 F CJCA 730 1000 F CKUA 580 500 F Grande Prairie CFGP 1200 100 Lethbridge CJOC 950 100 F BRIT. COLUMBIA Chilliwack CHWK 780 100 F	C1 C1 C1 C1 C1 C1 C1
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Winn CJRC CK Y	ipeg 630 910	500 F 15000 F
NEW E	BRUN	SWICK
CFNB	ricton 550	500 F
Monc CKCW	1370	100 F
St. Jo CHSJ		500 F
N. W. 7		ITOR Y
Aklav CJCU	1K 1210	50
NOV		DTIA
Glace VAS Halifa	685	2000
CHNS	930	1000 F
Sydne CJCB Wolfv CKIC	1240 ille	1000 F
CKIC Yarm CJLS	outh	50
	1310 NTARI	100
Brant CKPC	930	100 F
Chath CFCO Cobal	630	100 F
Cobal CKMC Fort	1210 Willia	50
CKPR Hamil	730	100 F
CHML CKOC	1010 1120	100 F 500 F
Kenor Kings	1420	100
Londo	1510	100 F
CFPL North	730 Bay	100 F
CFCH CJKL	930 1310	100 F 100
CKGB Ottaw	1420 a 880	100 1000 F
CBO CKCO Owen	1010 Soun	100 F
Presco	1370 ott	100
CFLC St. Ca CKTB	930 thari:	
Sault CJIC		
Stratf		100
CJCS Sudbu	1210 Iry 780	50
CKSO Toron	780 to	1000 F
CBL CFRB CKCL CRCT		50000 10000 C 100 F
CRCT	580 840 960	5000 N 100 F
Water CKCR		100 1
	1010	100

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NORTH	ASIERICAN D. C. V	STATIONS BT LOC	CATIONS
			N
Windsor	CMJI 1130 150	GUATEMALA	XEMX 1280 100
CBW 600 500 F	CMJO 1180 50		XENG 860 50
CKLW 1030 5000M	Cienfuegos	Guatemala City	XEW 890 50000
Wingham	GMHJ 1160 175	TGW 1230-10000	XEXE 1270 17
CKNX 1200 100	CMHM 1450 100		XEYO 940 500
	CMHW 820 100	MEXICO	Тасива
PRINCE EDWARD	CMHX 760 200	ACTIACOM TENTER	XEFA 1180 500
ISLAND		AGUASCALIENTES	
ISLAND	Gruces	Aguascalientes	DURANGO
Charlottetown	СМНК 1330 250	XEBI 1000 25	
	Havana	XEXC 810 350	Durango
	CMBC 630 10000	AUAN 010 300	XEE 1210 50
CHCK 1310 50	CMBD 1170 500	BAJA CALIFORNIA	XEE 1210 59
Summerside	CMBF 770 10000	BAJA GALIFORSIA	
CHGS 1450 50 F			GUANAJUATO
eneo neo cor		Mexicali	
OUEBEC		XEAA 750 200	Irapuato
Verreite	CMBS 770 150	XEAO 660 250	XEBO 1310 25
Chlonuting	GMBX 1070 500	XECL 1100 1700	Leon
Chicoutimi	GMBY 970 150	Rosarito Beach	XEKL 1240 500
CRCS 1120 100 F	CMBZ 1000 500	XERB 730 500	2000 1244 July
Hull	GMG 1260 150	Tijuana	JALISCO
CKCH 1210 100 F	GMCA 1350 450	XEAC 980 5000	33613600
Montreal	CMCB 640 150	XEBG 820 1000	Cushalation
CBF 910 50000 N	CMCD 950 250	XEC 1150 100	Guadalajara
CBM 1050 5000 F	CMCF 810 600	XELO 670 50000	XEAD 1060 125
CFCF 600 500 B	CMCG 680 1000		XED 1160 2500
CHLP 1120 100 F	CMCH 1110 5000		Guzman
CKAC 730 5000 C	CMCJ 1110 500	XEOK 760 2500	XEBA 1080 20
New Carlisle	CMCK 1030	/319111011 + 1441 +	
		CHIHUAHUA	MICHOACAN
CHNC 960 1000 F			578 9 X 3 + 9 X 7 5 X 5 7 X 1 *
Quebec	CMCM 850	Chihuahua	Morella
CHRC 580 100	CMCO 1200 250	XEF1 1440 250	
CKCV 1310 100 F	CMGQ 1410 250	Juarez	XEI 1370 125
CRCK 950 1000 F	GMGU 1280 500	XEFV 1210 100	
Rimouski	CMGW 1140 500	XEF 1450 100	NUEVO LEON
CJBR 1030 1000 F	CMCX 1380 150	XEJ 1020 1000	
Sherbrooke	CMCY 570 5000	XEP 1160 500	Monterrey
CHLT 1210 100	CMK 720 3000		XFFB 870 200
Three Rivers	CMOA 1440 150	Parral	XFFJ 1230 100
CHLN 1420 100	CMOX 1320 200	XEAT 1210 250	XFG 1220 250
GILEN ITTE ITT	CMO 600 25000		XFH 720 250
SASKATCHEWAN	CMW 880 1400	COAHUILA	XET 690 5000
SASKATORE	CMX 920 1000		XEX 1310 125
Moose Jaw	630 10000	Piedras Negras	
CHAB 1200 100 F		XEMU 580	PUEBLA
	Holguin	XEPN 730 100000	• • • • • • • • • • • • • • • • • • • •
Prince Albert CKBI 1210 100 F	GMEK 1460 250	Sabinas	Puebla
ORDI INTO TOTA	CMKO 1280	XEBX 640 250	XETH 1210 100
Regina	Manzanillo	Saltillo	
CJRM 540 1000 F	CMKM 1120 200	XEAS 1160 50	SAN LUIS POTOSI
CKCK 1010 1000 F		XELA 1240 50	1 33 1 10 E E E E E E E E E E E E E E E E E
Saskatoon	Matanzas	Torreon	San Luis Potosi
CFOC 840 1000 F	CMGC 1400 150	XETB 1310 125	
Yorkton	CMGF 1120 250	Villa Acuna	
CJGX 1390 100 F	GMGH 790 500	XERA 840 350000	XEXH 1250 250
C10Y 1244 144 6	Moron		011110 211
COSTA DICA	CMJP 1430 75	D. F.	SINALOA
COSTA RICA	Pinar del Rio	174 114	
See loos		Atzespotzalco	Mazatlan
San Jose		XEMG 1060 109	XEBL 1220 50
TIEP 880 1000	Sagua la Grande		
TIPG 625 2000	CMHA 1070 50	Chapultepec	SONORA
	Sancti Spiritus	XERO 670	
CUBA	CMHB 1240 50	Gra, Anaya	Hermoallo
C H I	Santa Clara	XEDA 1220 200	XEBH 930 500
Caibarien	CMH1 1210 150		Nogales
CMHD 1270 250	Santiago	Mexico City	XEAF 990 750
Camaguey		XEAL 660 1000	
CMJA 1010 300		XEAY 1240 100	Obregon
CMJC 1390 150	CMKD 1050 250	XEB 1030 10000	XEAP 1240 50
CMJE 1220 50	CMKG 1160	XEBS 1240 200	
	CMKR 1400 100	NEBZ 1160 100	TAMAULIPAS
	CMKW 1350	XEGW 1310 10	Madaine
	CMKX 1190	XFDP 1080 500	Matamoroe
CMJL 1340 75		XEFO 930 5000	XEAM 750 25
CMJX 830 500	DOMINICAN	XEJP 1130 100	Nuevo Laredo
Cardenas	REPUBLIC	XEJW 870	XEBK 1999 60
CMGE 1370 150	REFUBLIC	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
	1 TTLY 000 100		

Reynosa XEAW 960 50000 Tampico XEFW 1310 250 XES 990 250 VERACRUZ	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
Cordoba XEAG 1310 10	Veracruz XETF 1220 30 XEU 1010 250	NEWFOUNDLAND St. John's VOAC 1065 40	. ,

Special DX Calendar

 $T_{\rm four}^{\rm HE}$ 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.

> You Can't Get Along Without It.

The price is only



	CBF 910 50000 Montreal, P. Q.		CJAT 910 Trail, B. C.	1000	CKSO	780	1000
	CBL 840 50000		CJBR 1030	1000	CKTB	y, Ont. 1200	100
	Toronto, Ont.		Rimouski, P. Q.	1000		tharines, C	
	CBM 1050 5000 Montreal. P. Q.		CJCA 730	1000	CKUA	580	500
	CBO 880 1000		Edmonton, Alta. CJCB 1240	1000	Edmon CKWX	ton, Alta. 1010	100
	Ottawa, Ont.		Sydney, N. S.	1000		iver, B. C	
	CBR 1100 5000 Vancouver, B. C.		CICI 690	100	СКХ	1120	1000
	CBW 600 500		Calgary, Alta. CJCS 1210	50	CKY	on, Man. 760	1000
	Windsor, Ont.		Stratford, Ont.	50		eg, Man.	1500 0
	CFAC 930 1000 Calgary, Alta.		CJCU 1210	50	CMAB		
	Calgary, Alta. CFAR 1370 100		Aklavik, N. W. T. CJGX 1390		Pinar of CMBC	del Rio. C 630	uba 10000
	Flin Flon, Man.		CJGX 1390 Yorkton, Sask.	100		a, Cuba	10000
	CFCF 600 500		CJIC 1500	100	CMBD	1170	500
	Montreal, Que. CFCH, 930 100		S. Ste. Marie, Ont.			a, Cuba	
	North Bay, Ont.		CJKL 1310 North Bay, Ont.	100	CMBF Havan	770 a, Cuba	10000
	CFCN 1030 10000		CJLS 1310	100	CMBL	750	2500
	Calgary, Alta.		Yarmouth, N. S.			a, Cuba	
	CFCO 630 100 Chatham, Ont.		CJOC 950 Lethbridge, Aita.	100	CMBQ Havan	680 a, Cuba	5000
	CFCT 1450 500		CJOR 600	500	CMBS	770	150
	Victoria, B. C.		Vancouver, B. C.			a, Cuba	
	CFCY 630 1000 Charlottetown, P.E.I.		CJRC 630	500	CMBX	1070 a, Cuba	500
	CFGP 1200 100		Winnipeg, Man. CJRM 540	1000	CMBY	-	150
	Grande Prairie, Alta.		Regina, Sask.			a, Cuba	
	CFJC 880 1000 Kamloops, B. C.		CKAC 730	5000	CMBZ		500
	CFLC 930 100		Montreal, Que. CKBI 1210	100	CMC	a. Cuba 1260	150
	Prescott, Ont.		Prince Albert, Sask			a, Cuba	100
•	CFNB 550 500 Fredericton, N. B.		CKCD 1010	100	CMCA		450
	CFPL 730 100		Vancouver, B. C. CKCH 1210	100	CMCB	a, Cuba . 640	150
	London, Ont.		Hull, Que.	100		a, Cuba	100
	CFPR 580 50		CKCK 1010	1000	CMCD		250
	Prince Rupert, B. C. CFQC 840 1000		Regina, Sask.	100	CMCF	a, Cuba 810	600
	Saskatoon, Sask.		Toronto, Ont.	100		a, Cuba	000
	CFRB 690 10000		CKCO 1010	100	CMCG		1000
	Toronto, Ont. CFRC 1510 100		Ottawa, Ont. CKCR 1510	100	CMCH	a, Cuba 1110	5000
	Kingston, Ont.		Waterloo, Ont.	100		a. Cuba	3000
	CFRN 960 100		CKCV 1310	100	CMCJ	1110	500
 	Edmonton, Alta. CHAB 1290 100		Quebec, Que. CKCW 1370	100	CMCK	a, Cuba 1030	
	Moose Jaw, Sask.		Moncton, N. B.	100		a, Cuba	•••
	CHCK 1310 50		CKFC 1410	50	CMCL		10000
	Charlottetown, P.E.I. CHGS 1450 50		Vancouver, B. C. CKGB 1420	100	CMCM	a, Cuba 1 850	
	Summerside, P.E.I.		CKGB 1420 North Bay, Ont.	100		a, Cuba	••••
	CHLN 1420 100		CKIC 1010	50	СМСО		250
	Three Rivers, P. Q.CHLP1120100		Wolfville, N. S.	5000		a, Cuba	05-
	Montreal, Que.		Windsor, Ont.	5000		1410 a, Cuba	250
	CHLT 1210 100		CKMC 1210	50	СМСО	1280	500
	Sherbrooke, P. Q. CHML 1010 100		Cobalt, Ont. CKMO 1410	100	Havan CMCW	a, Cuba / 1140	505
	Hamilton, Ont.		Vancouver, B. C.	100		a, Cuba	500
	CHNC 960 1000		CKNX 1200	100	смсх	1380	150
	New Carlisle, Que. CHNS 930 1000		Wingham, Ont. CKOC 1120	500		a, Cuba	
	Halifax, N. S.		Hamilton, Ont.	500	CMCY Havana	570 a, Cuba	5000
	CHRC 580 100		CKOV 630	100	CMGC	1400	150
	Quebec, Que. CHSJ 1120 500		Kelowna, B. C.	100		as, Cuba	
	St. John, N. B.		CKPC 930 Brantford, Ont.	100	CMGE Carden	1370 as, Cuba	150
	CHWK 780 100		CKPR 730	100	CMGF	1120	250
1	Chilliwack, B. C.	I	Fort William, Ont.		Matan	zas, Cuba	

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	Сман 790 500 🗌		,
	CMGH 790 500 Matanzas, Cuba	CRCK 950 1000 Quebec, Que.	KECA 1430 1000 Los Angeles, Calif.
	CMHA 1070 50 Sagua la Grande, Cuba	CRCS 1120 100 Chicoutimi, Que.	KEEN 1370 100
	CMHB 1240 50	CRCT 840 5000	Seattle, Wash. KEHE 780 1000
	Sancti Spiritus, Cuba CMHD 1270 250	Toronto, Ont. CRCY 960 100	Los Angeles, Calif. KELA 1440 500
	Caibarien, Cuba CMHI 1210 150	Toronto, Ont.	Centralla, Wash.
	Santa Clara, Cuba	HIX 800 700 Trujillo, D. R.	KELD , 1370 100 El Dorado, Ark.
	CMHJ 1160 175 Cienfuegos, Cuba	KABC 1420 100 San Antonio, Texas	KELO 1200 100
	CMHK 1330 250 Cruces, Cuba	KABR 1420 100	Sioux Falls, S. Dak. KERN 1370 100
	CMHM 1450 100	Aberdeen, S. Dak KADA 1200 100	Bakersfield, Calif. KEUB 1420 100
	Cienfuegos, Cuba CMHW 820 100	Ada, Okia. KALB 1210 100	Price, Utah
	Cienfuegos, Cuba CMHX 760 200	Alexandria, La.	Portiand, Ore.
	Cienfuegos, Cuba	KALE 1300 500 Portland, Ore.	KFAB 770 10000 Lincoln, Neb.
	CMJA 1010 300 Camaguey, Cuba	KAND 1310 100 Corsicana, Texas	KFAC 1300 1000
	CMJC 1390 150	KANS 1210 100	Los Angeles, Calif. 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.
	Camaguey, Cuba	KARM 1310 100 Fresno, Calif.	KFBI 1050 5000 Abilene, Kans.
1	CMJH 1360 50 Ciego de Avila, Cuba	KASA 1210 100 Elk City, Okla.	KFBK 1490 5000 Sacramento, Calif.
	CMJI 1130 150	KAST 1370 100	KFDM 560 500
	Ciego de Avila, Cuba CMJK 780 250	Astoria, Ore. KATE 1420 250	Beaumont, Texas KFDY 780 1000
	Camaguey, Cuba CMJL 1340 75	Albert Lea, Minn.	Brookings, S. D. KFEL 920 500
	Camaguey, Cuba	Gallup, N. Mex.	Denver, Colo.
	CMJO 1180 50 Clego de Avila, Cuba	KBIX 1500 100 Muskogee, Okla.	KFEQ 680 2500 St. Joseph, Mo.
	CMJP 1430 75 Camaguey, Cuba	KBPS 1420 100 Portland, Ore.	KFGQ 1370 100 Boone, Iowa
	CMJX 830 500	KBST 1500 100	KFH 1300 1000
	Camaguey, Cuba CMK 720 3000	Big Spring, Texas KBTM 1200 100	Wichita, Kans. KFI 640 50000
	Havana, Cuba	Jonesboro, Ark.	Los Angeles, Calif.
	CMKC 1250 150 Santiago, Cuba	KCKN 1310 100 Kansas City, Kans.	KFIO 1120 100 Spokane, Wash.
	CMKD 1050 250 Santiago, Cuba	KCMC 1420 100 Texarkana, Texas	KFIZ 1420 100 Fond du Lac, Wis.
	CMKF 1460 250	KCMO 1370 100	KFJB 1200 100
	Holguin, Cuba CMKG 1160	Kansas City, Mo. KCRC 1360 250	Marshalltown, Iowa KFJI 1210 100
	Santlago, Cuba	Enid, Okla. KCRJ 1310 100	Klamath Falls, Ore. KFJM 1410 500
	Manzanillo, Cuba	Jerome, Ariz.	Grand Forks, N. D.
	CMKO 1280 Holguin, Cuba	KDAL 1500 100 Duluth, Minn.	KFJZ 1370 100 Fort Worth, Texas
	CMKR 1400 100 Santiago, Cuba	KDB 1500 100 Santa Barbara, Calif.	KFKA 880 500 Greeley, Colo.
	CMKW 1350	KDFN 1440 500	KFKU 1220 1000
	Santiago, Cuba CMKX 1190	Casper, Wyo. KDKA 980 50000	Lawrence, Kans. KFNF 890 500
	Santiago, Cuba	Pittsburgh, Pa.	Shenandoah, Iowa
	CMOA 1440 150 Havana, Cuba	KDLR 1210 100 Devils Lake, N. D.	KFOR 1210 100 Lincoln, Neb.
	CMOX 1320 200 Havana, Cuba	KDNC 1200 100 Lewistown, Mont.	KFOX 1250 1000 Long Beach, Calif.
	CMQ 600 25000	KDON 1210 100	KFPL 1310 100
	Havana, Cuba CMW 880 1400	Monterey, Calif. KDTH 1340 500	Dublin, Texas KFPW 1210 100
	Havana, Cuba CMX 920 1000	Dubuque, Iowa	Fort Smith, Ark,
	CMX 920 1000 Havana, Cuba	KDYL 1290 1000 Salt Lake City, Utah	KFPY 890 1000 Spokane, Wash.
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	KFQD 780 Anchorage, Alaska	250	
	KFRC 610 San Francisco, Cal	1000	
	KFRO 1370	250	
	Longview, Texas KFRU 630	500	
	Columbia, Mo. KFSD 600	1000	
	San Diego, Calif. KFSG 1120	500	
	Los Angeles, Calif.		ļ
	KFUO 550 St. Louis, Mo.	500	L
	KFVD 1000 Los Angeles, Calif.		
	KFVS 1210 Cape Girardeau, M	100	
	KFWB 95. Hollywood, Calif.	1000	
	KFXD 1200	100	
	Nampa, Idaho KFXJ 1200	100	
_	Grand Junction, C KFXM 1210	010. 100	_
	San Bernardino, Ca	alif.	
-	KFXR 1310 Oklahoma City, O	100 kla.	
	KFYO 1310 Lubbock, Texas	100	
	KFYR 550	1000	
	Bismarck, N. D. KGA 1470	5000	
	Spokane, Wash. KGAR 1370	100	
	Tucson, Ariz. KGB 1330	1000	
×.	San Diego, Calif.		
	KGBU 900 Ketchikan, Alaska	500	
	KGBX 1230 Springfield, Mo.	500	
	KGCA 1270 Decorah, Iowa	100	
	KGCI 1200	100	
	Coeur d'Alene, Ida KGCU 1240	no 250	
	Mandan, N. D. KGCX 1450	1000	
	Wolf Point, Mont. KGDE 1200	100	
	Fergus Falis, Minn		
	KGDM 1100 Stockton, Calif.	1000	1
	KGDY 1340 Huron, S. D.	250	
_	KGEK 1200 Sterling, Colo.	100	
	KGER 1360	1000	
	Long Beach, Calif. KGEZ 1310	100	
	Kalispell, Mont. KGFF 1420	100	
	Shawnee, Okla		ļ
	KGFI 1500 Brownsville, Tex.	100	
	KGFJ 1200 Los Angeles, Calif	100	
	KGFL 1370 Roswell, N. M.	100	
	KGFW 1310	100	
	Kearney, Neb.		

	2. 0.		
	KGFX	630	200
_	Pierre, S. KGGC	1420	100
	San Fran KGGF	1010	1000
	Coffeyvill KGGM	le, Kan 1230	s. 1000
_	Albuquer KGHF		M. 500
	Pueblo, C KGHI	Colo. 1200	100
	Little Ro KGHL	ck, Ark 780	1000
_	Billings, 1 KGIR	1340	1000
	Butte, M KGIW	ont.	100
	Alamosa, KGKB	Colo.	
	Tyler, Te	as	100
	KGKL San Ange	lo, Tex	
	Wichita H		
	KGKY Scottsblu	ff, Neb	100
	KGLO Mason Ci	ty, Iow	
	KGMB Honolulu,	1320 T.H.	1000
	KGNC Amarillo,	1410	1000
	KGNF North Pla	1430	1000 eb.
	KGNO Dodge Ci	1340	250
	KGO San Fran	790	7500
	KGU Honolulu,	750	2500
	KGVL Greenville	1200	100
	KGVO	1260	1000
	Missoula, KGW	620	1000
	Portland, KGY	1210	100
	KGY Olympia, KHBC	1400	250
		1210	100
	Okmulgee KHJ	900	1000
	Los Ange KHQ	590	11. 1000
	Spokane, KHSL	Wash. 1260	250
-a	Chico, Ca	alif. 1310	250
	Watsonvil KICA	1370	11. 100
	Clovis, N KID	. M. 1320	500
	Idaho Fa KIDO	lis, Ida 1350	ho 1000
		aho 1420	100
	Lamar, C KIEM		500
	Eureka, (KIEV		250
	Glendale,		250
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	KINY 1310 Juneau, Alaska	100
	KIRO 710	1000
	KIRO 710 Seattle, Wash. KIT 1250	250
	Yakima, wash.	
	KIUL 1210 Garden Clty, Kan	100 s.
	KIUN 1420 Pecos, Texas	100
	KIUP 1370	100
	Durango, Colo. KJBS 1070	500
	San Francisco, Ca	lif. 5000
	KJR 970 Seattle, Wash. KLAH 1210	3000
	KLAH 1210 Carlsbad, N. Mex	100
	KLBM 1420 La Grande, Ore.	100
	KLCN 1290	100
	Blytheville, Ark. KLO 1400	500
_	Ogden, Utah	
	Minot, N. D.	
	KLRA 1390 Little Rock, Ark.	
	KLS 1280	250
	Oakland, Calif. KLUF 1370	100
	Galveston, Texas KLX 880 Oakland Calif	1000
	KLZ 560 Denver, Colo. KMA 930	1000
	KMA 930 Shenandoah, Iowa	1000
	KMAC 1370	100
-	San Antonio, Tex: KMBC 950	as 1000
	Kansas City, Mo. KMED 1410	250
-	Medford, Ore.	
	KMJ 580 Fresno, Calif.	1000
	KMLB 1200 Monroe, La.	100
	KMMJ 740	1000
	Clay Center, Neb KMO 1330	1000
	Tacoma, Wash. KMOX 1090	50000
	St. Louis, Mo. KMPC 710	
	Beverly Hills, Cali	
	KMTR 570 Los Angeles, Cali	1000 t.
	KNEL 1500 Brady, Texas	250
	KNET 1420	100
	Palestine, Texas KNOW 1500	100
	Austin, Texas	
	KNX 1050 Los Angeles, Callf	50000
	KOA 830 Denver, Colo.	50000
	KOAC 550	1000
	Corvallis, Ore. KOAM 790	1000
	Pittsburg, Kans.	

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 KOB 1180 10000		
 Albuquerque, N. M.	KRKO 1370 50 Everett, Wash.	KTKC 1190 25 Visalia, Calif.
KOBH 1370 100 Rapid City, S. Dak.	KRLC 1390 250 Lewiston, Idaho	KTMS 1220 50
KOCA 1210 100	KRLD 1040 10000	Santa Barbara, Calif. KTOK 1370 10
 Kligore, Texas KOH 1380 500	Dallas, Texas	Oklahoma City, Okla.
 Reno, Nev.	KRLH 1420 100 Midland, Texas	KTRB 740 25 Modesto, Calif.
KOIL 1260 1000 Omaha, Neb.	KRMC 1370 100	KTRH 1290 100
 KOIN 940 1000	Jamestown, N. Dak. KRMD 1310 100	Houston, Texas KTRI 1420 10
 Portland, Ore. KOKO 1370 100	Shreveport, La.	Sloux City, Iowa
 KOKO 1370 100 La Junta, Colo.	KRNR 1500 100 Roseburg, Ore.	KTSA 550 100 San Antonio, Texas
KOL 1270 1000	KRNT 1320 1000	KTSM 1310 10
 Seattle, Wash. KOMA 1480 5000	Des Moines, Iowa KROC 1310 100	El Paso, Texas
 Oklahoma City, Okla.	Rochester, Minn.	KTUL 1400 50 Tulsa, Okia.
KOMO 920 1000 Seattle, Wash.	KROD 1500 100 El Paso, Texas	KTW 1220 100 Seattle, Wash.
 KONO 1370 100	KROW 930 1000	KUJ 1370 10
 San Antonio, Texas KOOS 1200 100	Oakland, Calif. KROY 1210 100	Walla Walla, Wash.
 Marshfield, Ore.	KROY 1210 100 Sacramento, Calif.	KUMA 1420 10 Yuma, Ariz.
KORE 1420 100 Eugene, Ore.	KRQA 1310 100 . Santa Fe, N. Mex.	KUOA 1260 500
KOTN 1500 100	KRRV 1310 250	Siloam Springs, Ark. KUSD 890 50
 Pine Bluff, Ark. KOVC 1500 100	Sherman, Texas	Vermiliion, S. Dak.
Valley City, N. Dak.	KRSC 1120 250 Seattle, Wash.	KUTA 1500 10 Salt Lake City, Utah
KOY 1390 1000 Phoenix, Ariz.	KSAC 580 500	KVCV 1200 10
 KPAC 1260 500	KSAL 1500 100	Redding, Calif. KVEC 1200 25
 Port Arthur, Texas	Salina, Kans.	San Luis Obispo, Cal.
KPBM 1310 100 Poplar Bluff, Mo.	KSCJ 1330 1000 Sioux City, Iowa	Great Bend, Kans,
KPDN 1310 100	KSD 550 1000	KVI 570 100
 Pampa, Texas KPFA 1210 100	St. Louis, Mo. KSEI 900 250	Tacoma, Wash. KVOA 1260 100
 Helena, Mont.	Pocatello, Idaho	KVOA 1260 100 Tucson, Ariz.
KPLC 1500 100 Lake Charles, La.	KSFO 560 1000 San Francisco, Calif.	KVOD 920 50
KPLT 1500 100	KSL 1130 50000	Denver, Colo. KVOE 1500 10
 Paris, Texas KPMC 1550 1000	Salt Lake City, Utah KSLM 1370 100	Santa Ana, Callf.
 Bakersfield, Calif.	KSLM 1370 100 Salem, Ore.	KVOL 1310 10 Lafayette, La.
KPO 680 50000 San Francisco, Calif.	KSO 1430 500	KVOO 1140 2500
KPOF 880 500	Des Molnes, Iowa KSOO 1110 2500	Tulsa, Okla. KVOR 1270 100
 Denver, Colo. KPPC 1210 100	Sioux Fails, S. Dak.	Colorado Springs, Colo
 Pasadena, Callf.	KSRO 1310 250 Santa Rosa, Calif.	KVOS 1200 10 Bellingham, Wash.
KPQ 1500 100 Wenatchee, Wash.	KSTP 1460 10000 *	KVOX 1310 10
 KPRC 920 1000	St. Paul, Minn KSUB 1310 100	Moorhead, Minn. KVRS 1370 10
 Houston, Texas KQV 1380 500	Cedar City, Utah	Rock Springs, Wyo.
Pittsburgh, Pa.	KSUN 1200 100 Lowell, Ariz.	KVSO 1210 10 Ardmore, Okla.
KQW 1010 1000	KTAR 620 1000	KWBG 1420 10
 San Jose, Calif. KRBA 1310 100	Phoenix, Ariz. KTAT 1240 1000	Hutchinson, Kans. KWG 1200 10
Lufkin, Texas	Fort Worth, Texas	Stockton, Calif.
KRBC 1420 100 Abilene, Texas	KTBC 1120 1000 Austin, Texas	KWJJ 1040 50 Portland, Ore.
KRE 1370 100	KTBS 1450 1000	KWK 1350 100
 Berkeley, Calif. KRGV 1260 1000	Shreveport, La.	St. Louis, Mo.
Weslaco, Texas	KTEM 1370 250 Temple, Texas	KWKH 1100 1000 Shreveport, La.
KRIS 1330 500 Corpus Christi, Tex.	KTFI 1240 1000	KWLC 1270 100
 KRKD 1120 500	Twin Falls, Idaho	Decorah, Iowa KWLK 780 250
Los Angeles, Calif.	Hot Springs, Ark.	Longview, Wash.

	HORI	
KWNO	1200 , Minn.	250
KWOS	1310	100
Jefferso KWSC	on City; N 1220	10. 1000
Pulimar KWTN	1220 h, Wash. 1210	100
	own, S. Da	
Springfi	ield, Mo.	
Sherida	1370 п, Wyo.	100
KXA Seattle,	760 Wash.	250
KXBY	1530 City, Mo.	1000
KXL	1420	100
Portlan KXO	1500	100
KXRO	tro, Calif. 1310	100
Aberde KXYZ	en, Wash. 1440	1000
	n, Texas	1000
San Fra	ancisco, Ca	alif.
Merced	1040 , Calif.	250
KYW Philade	1020 iphia, Pa.	10000
TGW	1230 nala City,	10000 Guat.
TIEP	880 e, Costa F	1000
TIPG	625	2000
VAS	e, Costa F 685	2000
Glace B VOAC	ay, N.S. 1065	40
VOAS	n's, Nfld. 940	100
St. Joh	n's, Nfld.	200
St. John	n's, Nfld. 840	400
	n's, Nfld.	
St. Joh	1195 n's, Nfld.	500
VOWR St. Joh	681 n's, Nfid.	500
WAAB Boston	1410	500
WAAF Chicago	0.20	1000
WAAT	940	500
WAAW		500
Omaha, WABC	Neb. 860	50000
	ork, N. Y. 1200	
Bangor	, Maine	
WABY Albany	1370 , N. Y.	100
WACO Waco,	1420 Texas	100
WADC Akron,	1320	1000
WAGA Atlanta	1450	500
WAGF	1370	250
Dothan	, A18.	

	WAGM 1420	100
	Presque Isle, Me. WAIM 1200	100
	Anderson, S. C.	100
	WAIR 1250	250
	Winston-Salem, N.	
	WALA 1380 Mobile, Ala.	500
	WALR 1210	100
	Zanesville, Ohio	
	WAML 1310 Laurel, Miss.	100
	WAPI 1140 Birmingham, Ala.	5000
	Birmingham, Ala. WAPO 1420	
	Chattanooga, Ten	100 1.
	WARD 1400 Brooklyn, N. Y. WASH 1270	500
	WASH 1270 Grand Rapids, Mic	
	WATL 1370 Atlanta, Ga.	100
	Atlanta, Ga. WATR 1190	100
	Waterbury, Conn.	
	WAVE 940 Louisville, Ky.	1000
	Louisville, Ky.	500
	Zarephath, N. J.	300
	WAWZ 1350 Zarephath, N. J. WAYX 1200 Wayaross Ga	100
,	Waycross, Ga. WAZL 1420	100
	Hazleton, Pa.	100
	WBAA 890	500
	West Lafayette, In	2500
	Baltimore, Md.	2300
	WBAL 760 Baltimore, Md. WBAL 1060 Baltimore, Md.	10000
	During the start	50000
	Fort Worth, Texas	
	WBAX 1210	100
	Wilkes-Barre, Pa. WBBC 1400	500
	Brooklyn, N. Y.	•••
	WBBL 1210	100
	Richmond, Va. WBBM 770	50000
	Chicago, Ill.	
	WBBR 1300	1000
	Brooklyn, N. Y. WBBZ 1200	100
	Ponca City, Okla.	
	WBCM 1410 Bay City, Mich.	500
	WBEN 900	1000
-	Buffaio, N. Y.	
	WBEO 1310 Marquette, Mich.	100
	WBHP 1200	100
	Huntsville, Ala.	
	WBIG 1440 Greensboro, N. C.	1000
	WBIL 1100	5000
	New York, N. Y. WBLK 1370	100
	WBLK 1370 Clarksburg, W. Va	100 s.
	WBLY 1210	100
	Lima, Ohio WBNO 1200	100
	WBNO 1200 New Orleans, La.	100
	WBNS 1430	500
	Columbus, Ohio	

WBNX 1350 1000 New York, N. Y. WBOQ 860 50000 New York, N. Y. WBOQ 860 50000 New York, N. Y. WBOW 1310 100 Terre Haute, Ind. WBRE 1210 100 Red Bank, N. J. WBRC 930 1000 Birmingham, Ala. WBRC 930 100 WBRE 1310 100 Pittsfield, Mass. WBRY 1530 1000 Waterbury, Conn. WBT 1080 50000 Charlotte, N. C. WBT 1370 100 Danville, Va. WBZ 990 50000 Boston, Mass. WBZA 990 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAL 1250 1000 Pittsburgh, Pa. WCAL 1250 1000 Northfield, Minn. WCAL 1250 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAL 1250 1000 Springfield, Mass. WCAL 1250 1000 Carton, N. J. WCAL 1200 100			
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WBOQ 860 50000 New York, N. Y. WBOW 1310 100 Terre Haute, Ind. WBRE 1210 100 Red Bank, N. J. WBRC 930 1000 Birmingham, Aia. WBRE 1310 100 WIRSC 930 1000 Wikes-Barre, Pa. WBRY WBRY 1530 1000 Waterbury, Conn. WBT 1080 50000 Charlotte, N. C. WBT 1370 100 Danville, Va. WEZ 990 50000 Boston, Mass. WBZA 990 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAE 1220 500 Canton, N. Y. WCAE 1200 1000 Pittsburgh, Pa. WCAI 1250 1000 Northfield, Minn. WCAE 1220 500 Canton, N. Y. WCAE 1220 500 Caston, N. J. WCAI 1250 1000 Northfield, Minn. WCAA 1200 100		WBNY 1370	
New York, N. Y. WBOW 1310 100 Terre Haute, Ind. WBRC 1310 100 Red Bank, N. J. WBRC 930 1000 Birmingham, Ala. WBRC 1310 100 Wilkes-Barre, Pa. WBRK 1310 100 Pittsfield, Mass. WBRY 1530 1000 WBRK 1310 100 Dirtsfield, Mass. WBT 1080 50000 Charlotte, N. C. WBT 1080 50000 Boston, Mass. WBZ 990 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAL 1220 1000 Pittsburgh, Pa. WCAL 1220 1000 Pittsburgh, Pa. WCAM 1280 500 Canton, N. Y. WCAL 1220 1000 Pittsburgh, Pa. WCAL 1250 1000 Carton, N. J. WCAM 1280 500 Carton, N. J. WCAU 1170 50000 Carton, N. J. WCAU 1200 100 Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa.			
WBOW 1310 100 Terre Haute, Ind. WBRB 1210 100 Red Bank, N. J. WBRC 930 1000 Birmingham, Aia. WBRC 930 1000 WIRes-Barre, Pa. WBRK 1310 100 Pittsfield, Mass. WBRY 1530 1000 WBRY 1530 100 Pittsfield, Mass. WBRY 1530 100 Darville, Va. WBT 1080 50000 Charlotte, N. C. WBT 1370 100 Darville, Va. WBZ 990 50000 Boston, Mass. WBZ 990 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAL 1250 1000 Northfield, Minn. WCAL 1250 1000 Canton, N. Y. WCAA 1220 500 Canton, N. J. WCAA 1220 500 Canton, N. J. WCAA 1200 100 Rapid City, S. Dak. WCAA 1200 100 Rapid City, S. Dak. WCAA 1200 100 Burlington, Vt. WCAA 1200 100 <t< td=""><td></td><td></td><td>50000</td></t<>			50000
WBRE 1210 100 Red Bank, N. J. WBRC 930 1000 Birmingham, Ala. WBRE 1310 100 WIRE 1310 100 Wilkes-Barre, Pa. WBRK 1310 100 Pittsfield, Mass. WBRY 1530 1000 WARY 1530 1000 WARY 1530 1000 WARY 1530 1000 WBRY 1530 1000 Charlotte, N. C. WBT 1080 WBZ 990 50000 Boston, Mass. WBZ 990 WBZA 990 1000 Springfield, Mass. WCAD 1220 WCAD 1220 500 Canton, N. Y. WCAE 1220 WCAL 1250 1000 Northfield, Minn. WCAM 1280 WCAM 1280 500 Canton, N. J. WCAO 600 WCAM 1280 500 Baitimore, Md. WCAO 1000 Rapid City, S. Dak. WCAU 1170 WCAU 1170 50000 Philadeiphia, Pa. WCAX 1200 WCAX 1200		WBOW 1310	100
Red Bank, N. J. WBRC 930 1000 Birmingham, Ala. WBRC 930 100 WBRE 1310 100 101 WBRK 1310 100 101 WBRK 1310 100 101 Pittsfield, Mass. WBRY 1530 1000 WBT 1080 50000 Charlotte, N. C. WBT 1370 100 Danville, Va. WBZ 990 50000 Boston, Mass. WBZA 990 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAE 1220 1000 Northfield, Minn. WCAL 1280 500 Canden, N. J. WCAM 1280 500 Castiry Park, N. J. WCAM 1280 500 Rapid City, S. Dak. WCAU 1170 50000 Rapid City, S. Dak. WCAU 1170 50000 Allentown, Pa. WCAX 1200			100
WBRC 930 1000 Birmingham, Ala. WBRE 1310 100 WBRE 1310 100 101 WBRK 1310 100 101 Pittsfield, Mass. WBRY 1530 1000 WBRY 1530 1000 Charlotte, N. C. WBT 1080 50000 Charlotte, N. C. WBT 990 50000 Boston, Mass. WBZ 990 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAL 1250 1000 Northfield, Minn. WCAL 1280 500 Canton, N. J. WCAL 1280 500 Canton, N. J. WCAA 1200 100 Baltimore, Md. WCAA 1280 500 Asbury Park, N. J. WCAA 1200 100 Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa. WCAX 1200 100 Carthage, I			100
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Wilkes-Barre, Pa. WBRK 1310 100 Pittsfield, Mass. 100 WBRY 1530 1000 Waterbury, Conn. WBT WBT 1080 Charlotte, N. C. WBTM WBZ 990 Boston, Mass. WBZA WBZA 930 Springfield, Mass. WCAD WCAD 1220 Canton, N. Y. WCAE WCAL 1250 Northfield, Minn. WCAM 1280 S00 Canton, N. Y. WCAL 1220 Northfield, Minn. WCAM WCAM 1280 MCAO 600 Baltimore, Md. WCAT 1200 Baltimore, Md. WCAZ 1070 Burlington, Vt. WCAZ 100 Philadelphia, Pa. WCAZ 100 Baltimore, Md. WCBD 1080 S0000 Chicago, Ill.			100
Pittsfield, Mass. WBRY 1530 1000 Waterbury, Conn. Waterbury, Conn. WBTM 1370 100 Danville, Va. WBTM 1370 100 Danville, Va. WBZA 990 50000 Boston, Mass. WBZA 990 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAE 1220 1000 Pittsburgh, Pa. WCAL 1250 1000 Northfield, Minn. WCAM 1280 500 Canden, N. J. WCAM 1280 500 Gamden, N. J. WCAM 1280 500 Masbury Park, N. J. WCAP 1220 100 Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa. WCAX 1000 100 Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa. WCAZ 1070 100 Carthage, Ill. WCBM 1370 100 Baltimore, Md. WCBD 1080 5000 Chicago, Ill. WCBM 1370 100 Baltimore, Md. WC			100
WBRY 1530 1000 Waterbury, Conn. WBT 1080 50000 Charlotte, N. C. WBTM 1370 100 Danville, Va. WBZA 990 50000 Boston, Mass. WBZA 990 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAL 1220 1000 Pittsburgh, Pa. WCAL 1250 1000 WorkL 1250 1000 Northfield, Minn. WCAL 1250 500 Canton, N. Y. WCAL 1250 500 Gamden, N. J. WCAL 1250 1000 Northfield, Minn. WCAM 1280 500 Gamden, N. J. WCAM 1280 500 Gamden, N. J. WCAM 1280 500 Baltimore, Md. WCAY 1220 100 Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa. WCAZ 1070 100 Carthage, Ill. WCAS 1440 500 Allentown, Pa. WCBA 1440 500 Chicago, Ill. WCBM 1370 100 Baltim	1		100
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WBZA 990 1000 Springfield, Mass. WCAD 1220 500 Canton, N. Y. WCAE 1220 1000 Pitsburgh, Pa. WCAL 1250 1000 Northfield, Minn. WCAM 1280 500 Canden, N. J. WCAM 1280 500 MCAM 1280 500 Baltimore, Md. WCAO 600 500 Baltimore, Md. WCAP 1280 500 Asbury Park, N. J. WCAT 1200 100 Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa. WCAZ 1070 100 Carthage, Ill. WCAZ 1070 100 Carthage, Ill. WCBA 1440 500 Allentown, Pa. WCBM 1370 100 Baltimore, Md. WCBM 1370 100 Springfield, Ill. WCBM 1370 100 Springfield, Ill. WCBM 1370 100		Boston, Mass.	30000
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Canton, N. Y. WCAE 1220 1000 Pittsburgh, Pa. WCAL 1250 1000 Northfield, Minn. WCAM 1280 500 Camden, N. J. WCAM 1280 500 Baltimore, Md. WCAP 1280 500 Asbury Park, N. J. WCAP 1280 500 Asbury Park, N. J. WCAT 1200 100 Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa. WCAZ 1000 Burlington, Vt. WCAZ 1070 100 Carthage, Ill. WCBA 1440 500 Allentown, Pa. WCBM 1370 100 Baltimore, Md. WCBM 1370 100 Baltimore, Md. WCBM 1370 100 Springfieid, Ill. WCCB 1420 1000 Chicago, Ill. WCCB 580 500 Charleston, W. Va. WCFL 970 5000 Charleston, W. Va. W			500
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WCAM 1280 500 Canden, N. J. WCAO 600 500 Baltimore, Md. WCAP 1280 500 Asbury Park, N. J. WCAT 1200 100 Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa. WCAU 1170 50000 Philadelphia, Pa. WCAX 1200 100 Burlington, Vt. WCAX 1070 100 Carthage, Ill. WCBA 1440 500 MCBA 1440 500 Allentown, Pa. WCBD 1080 5000 Chicago, Ill. WCBM 1370 100 Baltimore, Md. WCBS 1420 100 Springfield, Ill. WCFL 970 5000 Chicago, Ill. WCFL 970 5000 Charleston, W. Va. WCHV 1420 100 Charlottesville, Va. WCKY 1430 10000 Covington, Ky. WCLS 1310 100 Janesville, Wis. WCLS 1310 100 Joliet, Ill.			1000
Camden, N. J. WCAO 600 500 Baltimore, Md. WCAP 1280 500 Asbury Park, N. J. WCAT 1200 100 Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa. WCAU 100 Burlington, Vt. WCAX 1200 100 Burlington, Vt. WCAX 1070 100 Carthage, III. WCBA 1440 500 Allentown, Pa. WCBD 1080 5000 Chicago, III. WCBS 1420 100 Baltimore, Md. WCBS 1420 100 Springfield, III. WCCC 810 5000 Chicago, III. WCCS \$100 Springfield, III. WCCC WCFL 970 5000 Charleston, W. Va. WCFL 970 5000 Charleston, W. Va. WCHV 1420 1000 Covington, Ky. WCLE 610 500 Cleveland, Ohio	L		544
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Rapid City, S. Dak. WCAU 1170 50000 Philadelphia, Pa. WCAX 1200 100 Burlington, Vt. WCAX 1070 100 Carthage, Ill. WCBA 1440 500 Allentown, Pa. WCBD 1080 5000 Chicago, Ill. WCBM 1370 100 Baltimore, Md. WCBS 1420 100 Springfield, Ill. WCCO 810 50000 Minneapolis, Minn. WCFL 970 5000 Chicago, Ill. WCHV 1420 100 Charleston, W. Va. WCKY 1490 10000 Covington, Ky. WCLE 610 500 Cleveland, Ohio WCLS 1310 100 Joliet, Ill. WCKI 1310 100			
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Janesville, Wis. WCLS 1310 100 Joliet, Ill. WCMI 1310 100			100
Joliet, Ill. WCMI 1310 100			100
WCMI 1310 100			100
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	WCNW 1500 Brooklyn, N. Y.	100		WELI 900 New Haven, Conn	500	[WGL 1370	100
	WCOA 1340 Pensacola, Fla.	500		WELL 1420	100		Fort Wayne, Ind. WGN 720	50000
	WCOC 880	500		Battle Creek, Mic WEMP 1310	h. 100		Chicago, Ill. WGNY 1210	
	Meridian, Miss. WCOL 1210			Milwaukee, Wis.			WGNY 1210 Newburgh, N. Y.	100
·`	Columbus, Ohio	100		WENR 870 Chicago, Ill.	50000		WGPC 1420 Albany, Ga.	100
	WCOP 1120 Boston, Mass.	500		WEOA 1370	100	`	WGR 550	1000
	WCPO 1200	100		Evansville, Ind. WESG 850	1000	·	Buffalo, N. Y. WGRC 1370	250
	Cincinnati, Ohio WCRW 1210		<u> </u>	Elmira, N. Y.			New Albany, Ind.	
	WCRW 1210 Chicago, Ill.	100		Easton, Pa.	100		WGRM 1210 Grenada, Miss.	, 100
	WCSC 1360 Charleston, S. C.	500		WEVD 1300 New York, N. Y.	1000		WGST 890	1000
	WCSH 940	1600		WEW 760	1000	<u> </u>	Atlanta, Ga. WGTM 1310	100
	Portland, Me. WDAE 1220	1000		St. Louis, Mo. WEXL 1310	50		Wilson, N. C.	
	Tampa, Fla.			Royal Oak, Mich.			WGVA 1050 Indianapolis, Ind.	1000
	WDAF 610 Kansas City, Mo.	1000		WFAA 800 Dallas, Texas	50000		WGY 790	50000
	WDAH 1310	100		WFAB 1300	1000	<u> </u>	Schenectady, N. Y WHA 940	r. 5000
	El Paso, Texas WDAS 1370	100		New York, N. Y. WFAM 1200	100		Madison, Wis.	
	Philadelphia, Pa.	100		South Bend, Ind.	100		WHAI 1210 Greenfield, Mass.	250
	WDAY 940 Fargo, N. Dak.	1000		WFAS 1210 White Plains, N. Y.	100		WHAL 950 Saginaw, Mich.	500
	WDBJ 930	1000		WFBC 1300	1000		WHAM 1150	50000
	Roanoke, Va. WDBO 580	1000	i	Greenville, S. C. WFBG 1310	100		Rochester, N. Y. WHAS 820	50000
	Orlando, Fla.			Altoona, Pa.			Louisville, Ky.	30000
	WDEL 1120 Wilmington, Del.	250		WFBL 1360 Syracuse, N. Y.	1000		WHAT 1310 Philadelphia, Pa.	100
	WDEV 550	500		WFBM 1230	1000		WHAZ 1300	1000
	Waterbury, Vt. WDGY 1180	1000		Indianapolis, Ind. WFBR 1270	500		Troy, N. Y. WHB 860	1000
	Minneapolis, Minn			Baltimore, Md. WFDF 1310		ļ	Kansas City, Mo.	
	WDNC 1500 Durham, N. C.	100		WFDF 1310 Flint, Mich.	100		WHBB 1500 Selma, Ala.	100
	WDOD 1280 Chattanooga, Tenn	1000		WFEA 1340 Manchester, N. II	500		WHBC 1200	100
	WDRC 1330	1090		WFIL 560	1000		Canton, Ohio WHBF 1210	100
	Hartford, Conn. WDSM 1209	100		Philadelphia, Pa. WFLA 620	1000		Rock Island, Ill. WHBI 1250	1000
	Superior, Wis.	100		Clearwater, Fla.			Newark, N. J.	1000
	WDSU 1250 New Orleans, La.	1000		WFMD 900 Frederick, Md.	500		WHBL 1300 Sheboygan, Wis.	250
	WDWS 1370	100		WFOR 1370	100		WHBQ 1370	100
	Champaign, Ill. WDZ 1020	250		Hattlesburg, Miss. WFOY 1210	100		Memphis, Tenn. WHBU 1210	100
	Tuscola, Iil.	230		St. Augustine, Fla.			Anderson, Ind.	100
	WEAF 660 New York, N. Y.	50000		WFTC 1200 Kinston, N. C.	100		WHBY 1200 Green Bay, Wis.	100
	WEAN 780	1000		WGAL 1500	100		WHDF 1370	190
	Providence, R. I. WEAU 1050	1000		Lancaster, Pa. WGAN 640	500		Calumet, Mich. WHDH 830	. 1000
	Eau Claire, Wis.			Portland, Me. WGAR 1450	500		Boston, Mass.	
	WEBC 1290 Duluth, Minn.	1000		Cleveland, Ohio	500	[WHDL 1400 Olean, N. Y.	250
	WEBQ 1210 Harrisburg, Ill.	100		WGBB 1210 Freeport, N. Y.	100		WHEB 740	250
	WEBR 1310	100	<u> </u>	WGBF 630	500		Portsmouth, N. H. WHEC 1430	500
	Buffalo, N. Y. WEDC 1210			Evansville, Ind. WGBI 880	500		Rochester, N. Y.	
	Chicago, Ill.	100		Scranton, Pa.	300		WHEF 1500 Kosciusko, Miss.	100
	WEED 1420 Rocky Mount, N.	100		WGCM 1210 Gulfport, Miss.	100		WHFC 1420 Cicero, Ill	100
	WEEI 590	1000		WGES 1360	500		WHIO 1260	1000
	Boston, Mass. WEEU 830	1000		Chicago, Ill. WGH 1310	100		Dayton, Ohio	
	Reading, Pa.	2000		Newport News, Va			WHIP 1480 Hammond, Ind.	5000

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	WHIS 1410 Bluefield, W. Va.	500		WJBW 1200 100 New Orleans, La.		WLBZ 620 500 Bangor, Me.
	WHJB 620	250		WJBY 1210 100		WLEU 1420 100
<u> </u>	Greensburg, Pa. WHK 1390	1000		Gadsden, Ala. WJDX 1270 1000		Erie, Pa. WLLH 1370 100
	Cieveland, Ohio WHKC 640	500		Jackson, Miss. WJEJ 1210 50		Lawrence, Mass.
	Columbus, Ohio			WJEJ 1210 50 Hagerstown, Md.		WLLH 1370 100 Lowell, Mass.
	WHLB 1370 Virginia, Minn.	100		WJIM 1210 100 Lansing; Mich.		WLMU 1210 100 Middlesboro, Ky
	WHN 1010	1000		WJJD 1130 20000		WLNH 1310 100
	New York, N. Y. WHO 1000	50000		Chicago, Ill. WJMS 1420 100		Laconia, N. H. WLS 870 50000
	Des Moines, Iowa WHOM 1450	250		Ironwood, Mich. WJNO 1200 100		Chicago, Ill.
	Jersey City, N. J.			W. Palm Beach, Fia.		WLTH 1400 500 Brooklyn, N. Y.
	WHP 1430 Harrisburg, Pa.	500		WJR 750 50000 Detroit. Mich.		WLVA 1200 100 Lynchburg, Va.
	WIBA 1280	1000		WJRD 1200 250		WLW 700 500000
	Madison, Wis. WIBG 970	100		Tuscaloosa, Ala. WJSV 1460 10000		Cincinnati, Ohio WMAL 630 250
	Glenside, Pa. WIBM 1370	100		Washington, D. C. WJTN 1210 100		Washington, D. C. WMAQ 670 50000
	Jackson, Mich.			Jamestown, N. Y.		Chicago, Ill.
L	WIBU 1210 Poynette, Wis.	100		WJW 1210 100 Akron, Ohio		WMAS 1420 100 Springfield, Mass.
	WIBW 580 Topeka, Kans.	1000		WJZ 760 50000		WMAZ 1180 1000
	WIBX 1200	100		New York, N.Y. WKAQ 1240 1000		Macon, Ga. WMBC 1420 100
	Utica, N. Y. WICA 940	250		San Juan, P. R. WKAR 850 1000		Detroit, Mich. WMBD 1440 1000
	Ashtabula, Ohio			East Lansing, Mich.		Peoria, Ill.
1	WICC 600 Bridgeport, Conn.	500		WKAT 1500 100 Miami Beach, Fla.		WMBF 610 1000 Miami, Fla.
	WIL 1200 St. Louis, Mo.	100		WKBB 1500 100 East Dubuque, Ill.		WMBG 1350 500 Richmond, Va.
	WILL 580	1000		WKBH 1380 1000		WMBH 1420 100
	Urbana, Ill. WILM 1420	100		LaCrosse, Wis. WKBN 570 500		Joplin, Mo. WMBI 1080 5000
	Wilmington, Del. WIND 560	1000		Youngstown, Ohio WKBO 1200 100		Chicago, Ill. WMBO 1310 100
<u> </u>	Gary, Ind. WINS 1180	1000		Harrisburg, Pa.		Auburn, N. Y.
	New York, N. Y.			WKBV 1500 100 Richmond, Ind.		WMBQ 1500 100 Brooklyn, N. Y.
	Miami, Fla.	1000		WKBW 1480 5000 Buffalo, N. Y.		WMBR 1370 100 Jacksonville, Fla.
<u> </u>	WIP 610	1000		WKBZ 1500 100		WMBS 1420 250
	Philadelphia, Pa. WIRE 1400	1000		Muskegon, Mich. WKEU 1500 100		Uniontown, Pa. WMC 780 1000
	Indianapolis, Ind. WIS 560	1000		Griffin, Ga. WKOK 1210 100		Memphis, Tenn. WMCA 570 1000
	Columbia, S. C.			Sunbury, Pa.		New York, N. Y.
	Milwaukee, Wis.	250		WKRC 550 1000 Cincinnati, Ohio		WMEX 1500 100 Boston, Mass.
	WJAC 1310 Johnstown, Pa.	100		WKY 900 1000 Oklahoma City, Okla.		WMFD 1370 100 Wilmington, N. C.
	WJAG 1060	1000		WKZO 590 1000		WMFF 1310 100
	Norfolk, Neb. WJAR 890	1000		Kalamazoo, Mich. WLAC 1470 5000		Plattsburg, N. Y. WMFG 1210 100
	Providence, R. I.		<u> </u>	Nashviile, Tenn		Hibbing, Minn.
	WJAS 1290 Pittsburgh, Pa.	1000	1	WLAK 1310 100 Lakeland, Fla.		WMFJ 1420 100 Daytona Beach, Fla.
	WJAX 900 Jacksonville, Fla.	1000		WLAP 1420 100 Lexington, Ky.		WMFO 1370 100 Decatur, Ala.
	WJBC 1200	100		WLAW 680 1000		WMFR 1200 100
—	Bloomington, Ill. WJBK 1500	100		Lawrence, Mass. WLB 1250 1000		High Point, N. C. WMIN 1370 100
	Detroit, Mich. WJBL 1200	100	L	Minneapolis, Minn.		St. Paul, Minn. WMMN 890 500
	Decatur, Ill.			Muncie, Ind.		Fairmont, W. Va.
	Baton Rouge, La.	500		WLBL 900 5000 Stevens Point, Wis.		WMPC 1200 100 Lapeer, Mich.
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	WMPS1430500Memphis, Tenn.	WPAR 1420 100 Parkersburg, W. Va.	WSAU 1370 100 Wausau, Wis.
	WMSD 1420 100	WPAX 1210 100	WSAY 1210 100
	Sheffield, Ala. WMT 600 1000	Thomasville, Ga.	Rochester, N. Y.
	Cedar Rapids, Iowa	WPAY 1370 100 Portsmouth, Ohio	WSAZ 1190 1000 Huntington, W. Va.
	WNAC 1230 1000	WPEN 920 1000	WSB 740 50000
	Boston, Mass. WNAD 1010 1000	Philadelphia, Pa. WPG 1100 5000	Atlanta, Ga.
	Norman, Okla.	WPG 1100 5000 Atlantic City, N. J.	WSBC 1210 100 Chicago, Ill.
	WNAX 570 1000	WPRA 1370 100	WSBT 1360 500
	Yankton, S. D. WNBC 1380 250	Mayaguez, P. R. WPRO 630 500	South Bend, Ind. WSFA 1410 500
	New Britain, Conn.	Providence, R. I.	WSFA 1410 500 Montgomery, Ala.
·	WNBF 1500 100 Binghamton, N. Y.	WPRP 1420 100	WSGN 1310 100
	WNBH 1310 100	Ponce, P. R. WPTF 680 1000	Birmingham, Ala, WSIX 1210 100
	New Bedford, Mass.	Raleigh, N. C.	Nashville, Tenn,
	WNBX 1260 500 Springfield, Vt.	WQAM 560 1000	WSJS 1310 100
	WNBZ 1290 100	Miami, Fla. WQAN 880 500	Winston-Salem, N. C. WSM 650 50000
	Saranac Lake. N. Y.	Scranton, Pa.	Nashville, Tenn.
	WNEL 1290 1000 San Juan, P. R.	WQBC 1360 1000 Vicksburg, Miss.	WSMB 1320 1000
	WNEW 1250 1000	WQDM 1390 1000	New Orleans, La, WSMK 1380 200
	New York, N. Y. WNLC 1500 100	St. Albans, Vt.	Dayton, Ohio
	WNLC 1500 100 New London, Conn.	WQXR 1550 1000 New York, N. Y.	WSNJ 1210 100 Bridgeton, N. J.
	WNNY 1420 100	WRAK 1370 100	WSOC 1210 100
	Watertown, N. Y. WNOX 1910 1000	Williamsport, Pa.	Charlotte, N. C.
	Knoxville, Tenn.	WRAW 1310 100 Reading, Pa.	WSPA 920 1000 Spartanburg, S. C.
	WNYC 810 1000	WRBL 1200 100	WSPD 1340 1000
	New York, N. Y. WOAI 1190 50000	Columbus, Ga. WRC 950 500	Toledo, Ohio
i	San Antonio, Texas	WRC 950 500 Washington, D. C.	WSPR 1140 500 Springfield, Mass.
	WOC 1370 100	WRDO 1370 100	WSUI 880 500
	Davenport, Iowa WOI 640 5000	Augusta, Me. WRDW 1500 100	Iowa City, Iowa WSUN 620 1000
	Ames, Iowa	Augusta, Ga.	St. Petersburg, Fla.
	WOKO 1430 500 Albany, N. Y.	WREC 600 1000	WSVA 550 500
	WOL 1310 100	Memphis, Tenn. WREN 1220 1000	Harrisonburg, Va. WSVS 1370 50
	Washington, D. C.	Lawrence, Kans.	Buffalo, N. Y.
	WOLS 1200 100 Florence, S. C.	WRGA 1500 100 Rome, Ga,	WSYB 1500 100 Rutland, Vt.
	WOMI 1500 100	WRJN 1370 100	WSYR 570 1000
	Owensboro, Ky, WOMT 1210 100	Racine, Wis.	Syracuse, N. Y.
	Manitowoc, Wis.	WRNL 880 500 Richmond, Va.	WTAD 900 1000 Quincy, Ill.
	WOOD 1270 500	WROK 1410 500	WTAG 580 1000
	Grand Rapids, Mich. WOPI 1500 100	Rockford, Ill,	Worcester, Mass.
	Bristol, Tenn.	WROL 1310 100 Knoxville, Tenn.	WTAL 1310 100 Tailahassee, Fla.
	WOR 710 50000	WRR 1280 500	WTAM 1070 50000
	Newark, N. J. WORC 1280 500	Dallas, Texas WRTD 1500 100	Cleveland, Ohio WTAO 1330 1000
	Worcester, Mass.	Richmond, Va.	WTAQ 1330 1000 Green Bay, Wis.
	WORK 1320 1000 York, Pa.	WRUF 830 5000	WTAR 780 1000
	WORL 920 500	Gainesville, Fla. WRVA 1110 5000	Norfolk, Va. WTAW 1120 500
	Boston, Mass.	Richmond, Va.	College Station, Tex.
	WOSU 570 750 Columbus, Ohio	WSAI 1330 1000 Cincinnati, Ohio	WTAX 1210 100
	WOV 1130 1000	WSAJ 1310 100	Springfield, Ill. WTBO 800 250
	New York, N. Y.	Grove City, Pa.	Cumberland, Md.
	WOW 590 1000 Omaha, Neb.	WSAL 1200 250 Salisbury, Md.	WTCN 1250 1000 Minneapolis, Minn.
	WOWO 1160 10000	WSAN 1440 500	WTEL 1310 100
	Fort Wayne, Ind. WPAD 1420 100	Allentown, Pa.	Philadelphia, Pa.
		WSAR 1450 1000	WTHT 1200 100

	Hartford, Conn.	XEBH 930 500 Hermosillo, Sonora	XEKL 1240 500 Leon, Guan.
	WTJS 1310 100 Jackson, Tenn.	XEBI 1000 25 Aguascalientes, Ags.	XEL 780 1000 Mexico City, D. F.
	WTMJ 620 1000 Milwaukee, Wis	XEBJ 1160 20 Merida, Yuc.	XELA 1240 50
	WTMV 1500 100	XEBK 1000 60	Saltillo, Coah. XELO 670 50000
	East St. Louis, Ill. WTNJ 1280 500	Neuvo Laredo, Tams. XEBL 1220 50	Tijuana, B. Cfa. XELZ 1370 100
	Trenton, N. J. WTOC 1260 1000	Mazatlan, Sin. XEBO 1310 25	Mexico City, D.F. XEMG 1060 100
	Savannah, Ga. WTOL 1200 100	Irapuato, Guan.	Atzcapotzalco, D. F.
	Toledo, Ohio	XEBS 1240 200 Mexico City, D. F.	XEMO 860 5000 Tijuana, L. C.
	WTRC 1310 100 Elkhart, Ind.	XEBX 640 250 Sabinas, Coah.	XEMU 580 Piedras Negras, Coah.
	WVFW 1400 500 Brooklyn, N. Y.	XEBZ 1160 100 Mexico City, D. F.	XEMX 1280 100 Mexico City, D. F.
	WWAE 1200 100	XEC 1150 100	XENC 860 50
_	Hammond, Ind. WWJ 920 5000	Tijuana, L. C. XECL 1100 1700	Mexico City, D. F. XENT 910 150000
_	Detroit, Mich. WWL 850 10000	Mexicali, B. Cfa. XECW 1310 10	Nuevo Laredo, Tams. XEOK 760 2500
	New Orleans, La. WWNC 570 1000	Mexico City, D. F.	Tijuana, L. C.
	Asheville, N. C.	San Luis Potosi, S.L.P.	XEP 1160 500 Juarez, Chih.
	WWRL 1500 100 Woodside, N. Y.	XED 1160 2500 Guadalajara, Jal.	XEPN 730 100000 Piedras Negras, Coah.
	WWSW 1500 100 Pittsburgh, Pa.	XEDA 1220 200 Gra. Anaya, D. F.	XERA 840 350000 Villa Acuna, Coah.
	WWVA 1160 5000	XEDF 810 75	XERB 730 500
-	Wheeling, W. Va. WXYZ 1240 1000	Nuevo Laredo, Tams.XEDP1080500	Rosarito Beach, B. Cfa. XERO 670
	Detroit, Mich. W3XDD 50000	Mexico City, D. F. XEDW 1150 20	Chapultepec, D. F. XES 990 250
	Whippany, N. J.	Minatitlan, Ver.	Tampleo, Tams.
	W3XJ 1060 100 College Park, Md.	XEE121050Durango, Dgo.	Monterrey, N. L.
	W8XO 700 500000 Cincinnati, Ohio	XEF 1450 100 Juarez, Chih.	XETB 1310 125 Torreon, Coah.
	XEAA 750 200 Mexicall, B. C.	XEFA 1180 500 Tacuba, D. F.	XETF 1220 30 Veracruz, Ver.
	XEAC 980 5000	XEFB 870 200 Monterrey, N. L.	XETH 1210 100
	Tijuana, L. C. XEAD 1060 125	XEFC 550 100	Puebla, Pue. XEU 1010 250
····	Guadalajara, Jal. XEAF 990 750	Merida, Yuc. XEFE 980 150	Veracruz. Ver. XEW 890 50000
-	Nogales, Son. XEAG 1310 10	Laredo, Tams. XEFI 1440 250	Mexico City, D. F XEX 1310 125
	Cordoba, Ver.	Chihuahua, Chih.	Monterrey, N. L.
	XEAL 660 1000 Mexico City, D. F.	XEFJ 1230 100 Monterrey, N. L.	XEXB127050Jalapa, Ver.
	XEAM 750 25 Matamoros, Tams.	XEFO 930 5000 Mexico City, D. F.	XEXC 810 350 Aguascalientes, Ags.
	XEAO 660 250	XEFV 1210 100	XEXD 1340 350 Jalapa, Ver.
	Mexicall, B. C. XEAP 1240 50	Juarez, Chih. XEFW 1310 250	XEXE 1270 17
	Obregon, Son. XEAS 1160 50	Tampico, Tams. XEG 1220 250	Mexico City, D. F. XEXH 1250 250
	Saltillo, Coah. XEAT 1210 250	Monterrey, N. L. XEH 720 250	San Luis Potosi, S.L.P. XEXS 1000 100
	Parral, Chih.	Monterrey, N. L.	Portable in Mexico XEYO 940 500
	XEAW96050000Reynosa, Tams.	XEI 1370 125 Morelia, Mich.	Mexico City, D. F.
	XEAY 1240 100 Mexico City, D. F.	XEJ 1020 1000 Juarez, Chih.	XEZ 630 500 Merida, Yuc.
1	XEB 1930 10000 Mexico City, D. F.	XEJP 1130 100 Mexico City, D. F.	ZNS 540 400 Nassau, Bahamas
	XEBA 1080 20	XEJW 870	Trassau, Dallallas
	Guzman, Jal. XEBG 820 1000	Mexico City, D. F. XEK 990 100	
	Tijuana, B. Cfa.	Mexico City, D. F.	

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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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