

Girdling the Globe with Two Tube Set Getting Rid of Radio Noise New List of World Stations

EIGHTH YEAR Contents

Frontispiece — Sylvia Froos, Blues Singer — On the CBS at 7:30 p.m. EST Tuesdays and Thursdays	
Getting Rid of Radio Noises	1
Girdling the Globe on Two Tubes	
"Station KUKU Is Broadcasting"	4
The Popular Puzzle Page	1
Experiments with Aerials and Grounds	5
Betty's Page of Radio Gossip	1
In the Editor's Sanctum	14
The Trouble Department, Questions and Answers	17
Tuning In with the Radexers	19
Their Time On the Air, Some DX Targets	3(
Classified Index to Chain Programs	31
What's On the Air Tonight?	33
A Complete Index by Frequencies	42
A Complete Index by States and Cities	56
A Complete Index by Call Letters	62
Broadcasting Stations of the World	68
Published Monthly Excepting July and August See Subscription Blank on page 22	

\$1.75 per Year

25c per Copy

THE RADEX PRESS

5005 Euclid Avenue

Cleveland, Ohio

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

Printed in U.S.A.

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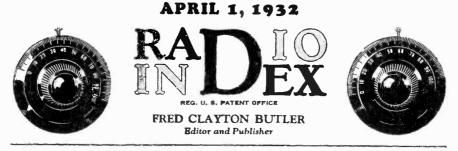
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GETTING RID of RADIO NOISES

by B. Francis Dashiell

S TRANGE noises appear from time to time in every radio receiver. Because of the sensitivity of modern sets, and particularly superheterodynes, a higher ratio of noises is to be expected. The more or less normal noise in a receiver—the noise level—is offset by the ability to receive extremely weak signals. But when this level increases because of defects and faults in the set or electric sources without, the noise becomes so excessive that all radio reception is spoiled or impossible.

Radio noises may be given several classifications. First are those sounds which arise from without the receiver and cannot well be controlled; second, the abnormal electrical and mechancal disturbances of the set itself; and, third, the annoying hum caused by alternating current sources and difficulties within the radio set.

Noise, without doubt, is the most discussed of all radio troubles. Service men are called up more frequently to discover and correct noises than for any other kind of defects. And this magazine, through its question columns, receives many communications calling for assistance in the eternal battle against radio noises.

When a receiver commences to sound excessively noisy it is proper to suspect it of something more than its inherent noise level. What, then, is the nature of these noises; what shall be done to locate the trouble; and how is it to be remedied? It is best always to remember that modern radios have a great many sources of noise trouble, and that while some cases are obvious enough to indicate the cure, there are others so exasperating and stubborn as to call for the services of expert repairmen. However, since we can do no more than brush over the whole subject in a general way, we shall endeavor to explain the noises which are more commonly experienced.

The first duty is an attempt to isolate the trouble for immediate correction. Remove the aerial and turn on the set to full volume on a local station. If the noise persists it is obvious that the source is in the ground or the set. Replace the aerial and remove the ground; if the noise again persists it must therefore be in the set. If the noise stops at the removal of the aerial and ground or



Clara, Lu'n' Em, entertaining gossipers, daily except Salurday and Sunday, 10:15 a.m. NBC-WJZ

either one, then look for trouble in these essentials. The aerial may be loose and touching some object, or another aerial may have fallen across it. This frequently happens in apartment house conditions. Or the wires may be loosely joined without perfectly soldered connections. The ground may be loose or imperfect. A long and bare ground wire that touches some metallic surface between the point of grounding and the set will give considerable noise.

Noise that persists in the set after the removal tests for aerial and ground is caused by external or internal troubles. The external sources are practically eliminated when no aerial or ground is used and the set is carefully shielded to exclude all electric waves. It is obvious, therefore, that good metallic shielding is necessary to prevent many noises from penetrating the radio coils. A careful examination of all shielding joints and groundings is essential in diagnosing radio troubles.

Noises brought into the receiver from external sources through the aerial and ground may be due to atmospheric conditions such as static and stormy weather, or to what is commonly called "manmade static." All electrical apparatus are a great source of trouble; motors, fans, oil heaters, vacuum cleaners, bells, X-ray and violet ray apparatus (both of which are very annoying), light switches, elevators, automatic refrigerators, loosely held electric lamps, power lines (usually producing hum), street cars, motor cars, and telephone lines, give much grief.

Filters for Power Devices

But these sources can be controlled. The remedy for troublesome motors and sparking brushes is an overhauling and cleaning, and the installation of filter condensers across the offending circuits to absorb the sparks that transmit the static waves. Noise filters for power lines —large condensers with choke coils may be purchased and easily installed. Some electric induction is hard or impossible to eliminate, but shielded aerial and ground leads can be used with a certain degree of satisfaction.

Radio tubes are primary sources of noise. When they fail or do not fit well in their sockets a popping and clicking noise is heard, or there is a bedlam of howls and squeals. Test all tubes and replace those that appear defective. Tube prongs may not fit perfectly in the sockets, or the internal wires soldered to the ends of the prongs may be loose and cause open circuits. Internal tube troubles cause many peculiar sounds which cannot be remedied.

Howls and Squeals

Howling is one of the most annoying radio troubles. It sometimes increases steadily after the set is turned on. This is known as microphic howl and is caused by internal vibration that sets the tubes, generally the detector, into oscillation. Replacing the detector tube with a new one sometimes stops the noise, or the tube may be covered with a "howl arrester." The speaker often sets up this vibration and may require some additional cushioning to stop the microphonic howls. Howling may be induced by electric vibrations from adjacent parts of the circuit and is a more complex matter.

Other howls and squeals come from poor contacts or breaks in circuits leading to grids of tubes. Too low plate voltages such as may be experienced with run-down B batteries or defective eliminators cause howl. Again a too high plate voltage especially on the detector tube plate, will cause howling. All wires in the grid circuits, and in the secondaries of intermediate radio-frequency coils in superheterodynes, and r. f. coils of other sets, must be examined for breaks.

The volume control of a set sometimes becomes noisy. Due to wear or the looseness of its parts this device may need replacing. Grease or dirt in the bearing or on the contact arm will give an easily overlooked source of noise and howl.

Noise accompanying the moving of the tuning dial of the set is due to defective condensers and contacts and connections. Dirt, such as dust particles, between the plates of the variable condenser will cause loud clicks when the condensers are turned. Crooked or warped plates, or faulty connections to (Continued on page 29)

[2]

GIRDLING the GLOBE on TWO TUBES

I CLAIM the championship of the East for DX reception on small receivers. I use a two-tube set which I made, and have received and verified stations from over both seas, Central and South America, and stations located in islands on both the Pacific and Atlantic. Among my best receptions have been 1RO, Rome, Italy, on 680 kcys., heard at 8:20 p.m., EST, and CX-26. Montevideo, Uruguay, heard at 7 p.m. in the evening.

If any of your readers have a better record than mine for a two-tube receiver, or any small set, I should appreciate hearing from them.

On the Pacific coast I have received and confirmed to date exactly 60 stations. These range from 50 watts up and from Kelowna and Vancouver to Tia Juan, in Baja California. Across the Pacific, Japan, Australia, New Zealand and Hawaii have been received and specifically confirmed in nice personal letters from the stations themselves.

Here's How

Here is how to receive these distant stations. All those on the far shores of the Pacific are heard early in the early morning hours here in Eastern United States. Between 4 a.m. and daylight is the best time to try for them, and this is practically the only time that these stations can be heard. Hawaii is one exception; it may be heard as early as 2 a.m., EST. As for Europe, I find they will come in during the evenings here in the East if it is possible to get a clear wave for them. The ideal time to catch them is around 9 p.m. EST. However, to hear Europe at this time it is necessarv for the station heard to be giving a test or DX program, as it would then by 2 or 3 a.m. their time. I say that this is the ideal time to hear them because it is then complete darkness between the points of transmission and reception. South America may come in during the evening if you can get a clear wave for them. Reception of early morning programs of the European and South American stations is not so successful, although it can be done.

How George Lilley Does It

Of course, in all DXing the dialer must know exactly what wave he is on, what stations come on the particular waves, and have up-to-date information on these stations. I always have RADEX open in front of me when DXing.

It may help your readers to know a little about my aerial and ground. My aerial is exactly 150 feet long including the lead in. It is 55 feet high and runs north and south. 150 feet seems to be



Walter Winchell, the Gossip of Broadway. Master of Ceremonies on Lucky Strike. 10:00 p.m. EST Tuesdays, Thursdays and Saturdays

plenty long enough for the best of DXing: if it is longer, the set becomes much less selective and hinders the evening reception. Height and insulation of the aerial are much more important factors than the length of it. My ground is made up of as much buried metal, wire, and pipes as I could find. These are all soldered together, taped, and one wire connects them all to my set.

Although my receiver is only two (Continued on page 30)

STATION KUKU is Broadcasting

The Cheese Hour By SUSIE SEXTON

A LTHOUGH Raymond Knight, director, author, announcer and leading man of Station KUKU's Kut-Ups on the National Broadcasting Company's network has half a dozen college degrees in law, theology and the drama, his most prized possession is the honorary title of Doctor of Sound Effects, conferred on him by acclaim at the behest of radio fans and executives.

Mr. Knight, who is the tallest and most educated man before the microphone today-quite apart from his personal popularity with all classes and conditions of fans-can express any crises in the lives of human beings from Hamlet to Ed Wynn by tearing a Number 16 collar, carefully starched, in the proper direction. By tap-dancing on last season's straw lid, crunching the crown in his fist, or masticating the brim with fury he can imitate anything from the roar of the fast freight to the last gasp of poor, unhappy Camille. And with one package of assorted sandpaper purchased for a dime, it is said, he can depict as much human anguish as Conan Doyle or George Bernard Shaw ever put into thirty-five volumes.

The Big Cheese Himself

Professionally, at least among the KUKU Kut-Ups who make merry in behalf of the Blue Moon Cheese Spread every Saturday afternoon at 5:30, Mr. Knight enunciates as Ambrose J. Weems, the Big Cheese Himself. But he is much more than that to Station KUKU. The staff of that unit which broadcasts under the wings of a cuckoo is that madly hilarious group which includes Mrs. Pennyfeather, the palpitating, saccharine damsel who gives the benefit of her advice-unasked- to "dear perturbed people" everywhere, Dolly Gray, Percival Pother, the Green Monster, Fetlock Soames of Scotland's Back Yard and the Sing-Up-A-Tree-O. These delightfully whimsical merrymakers poke fun with rare art at most of the foibles of humans including the recipe girls, gasp-and-go sports madmen, London broadcasts, commercial credits, the poets who will recite "Trees" and bedtime couplets no matter what happens, crooners and those good old traditions—the detective yarn and five-and-ten melodrama.

Mr. Knight's active brain is responsible for all of these activities as well as the sound effects. He writes, directs, acts the parts of Eddie McGurk and the Green Monster, announces as Ambrose J. Weems, and sings in the Tree-O for the Kut-Ups as well as being the life of half a dozen other broadcasts, including Raising Junior. For a while he was Bill Borealis of the Cliquot Club Eskimos. His film for Pathe on sound effects used in the studios ran for five weeks at the Palace Theatre in New York.

Like all men with an irrepressible sense of humor and original wit, Mr. Knight himself looks very sad indeed.



Raymond Knight, as Professor Ambrose J. Weems, playing the "Melody in H" and the Cuckoos listen entranced. Following the wellknown left to right we have Robert Ambruster, Jack Arthur, the Big Cheese, Eustace Wyatt, Mary McCoy and Adelina Thomason. The KUKU program is broadcast each Saturday at 5:30 orm. EST over the NBC-WEAF network.



His dress is as fastidious as that of the Prince of Wales. And he has a pleasant naturalness of manner.

"Where did you get the idea for Station KUKU?" I asked.

"Somebody in the studio thought they wanted a cuckoo program," was the reply. "I was delegated to write it. We went on the air two years ago on New Year's Day. At first it was a sustaining feature and originally we were on the air in the evening, Early this year we began broadcasting for the Blue Moon product.

"At first I wrote the sketches, announced the program and acted several parts. Then they decided I must be a director.

"Now it is an unwritten law in broadcasting studios that a continuity writer, which was my particular job, cannot be a director. In order to get around this predictment they made me a director who writes continuities, thus avoiding a tense situation.

"Our first dramatic efforts included Fetlock Soames of Scotland's Back Yard 'Pitting His Wits Against the Green Monster,' "The Face on the Grandfather Clock' and 'Who Stole the Fence From Scotland's Back Yard.'

"I write my own sketches. Usually they are ready weeks in advance. I direct them, too. But I never know beforehand just what I am going to write about. Usually I just sit down at the typewriter and write a line or two of dialogue. Start any conversation between two people and something in the way of a plot is bound to develop before very long."

He went on-

"The radio has brought in a new whimsical and satirical type of humor. And the quiet chuckle seems preferable to the noisy guffaw on the air. In those early days of the movies a comedian had to shave with charlotte russe, toboggan on custard pies and dive into flour barrels to hold his public. The radio is more subtle and less spectacular."

Station KUKU has laughed with and at everything and everybody. But there are three subjects at which its arrow-like wit is never aimed. History, religion and the D. A. R.

You cannot even snicker at the events or men who made our country—funny as they may seem now or in the past. The public won't let you, declares Mr. Knight. And Mr. Knight knows his laughs and laughers.

Americans may roar merrily at the Volstead law, matrimony, Senators, gangsters, leap year and men in top hats, but they never get even a grin out of the Fathers of their Country, no matter how funny they are. The last characters of history who sent a chuckle round the world were Hannibal, Nero and Julius Caesar. Nothing later than the old Romans is eligible as fun material on the air.

But Mr. Knight admits that some of our history past and present is pretty funny. He cannot explain the public aversion to talking about it out loud.

Incidentally the KUKU Kut-Ups have one of the largest and most cosmopolitan audiences on the air. Their greatest admirers are college professors and children although all classes and conditions write in. Tickets for the broadcasts are gone ten weeks in advance. Albert Payson Terhune never misses them if he can possibly get to the radio. Particularly he enjoys the yarns featuring the detective of Scotland's Back Yard.

Tickles the Kids

Children are the most enthusiastic listeners. Mr. Knight has a boy and a girl of his own in a rambling old house one hundred and sixty-five years old which is hidden near Redding Ridge, ten miles south of Danbury, Conn. They love the stories about Dolly Gray and Blue Riding Hood, whose grandmother had a diamond dog collar and ate the wolf to end the depression.

When plans were on foot recently to change the KUKU period from 5:30 Saturday afternoon a dreadful hullabaloo arose. The youngest generation protested against losing the feature before they went to bed.

"The love of nonsense is pretty universal," declares Mr. Knight. "Of course, some people never could understand us. But our fan mail contains comments from illiterates who can barely write, farmers, clerks, bankers, educators, actresses, housemaids and debutantes."

Mr. Knight, by the way, had no mean reputation as a playwright when he undertook the whimsicalities of the KUKU's. Indeed back in 1927 he won a prize for the best experimental one-act play of the year presented annually by the Drama League of America.

His collegiate degrees laid end to end perpendicularly would rival his own striking altitude. His path to the broadcasting studios was a zigzag trail leading from the Law School at Boston University and a law practice of two years in Boston to the Harvard Theological School for one year. From the Church

it detoured to the theatre when Mr. Knight decided to study drama under Professor Baker. Immediately he became stage manager of the famous 47 Workshop. Later he went to Yale to study playwriting under Professor Baker.

One of his most unusual experiences was that of professor of miscellaneous subjects at Ruston Academy in Havana during Professor Baker's sabbatical year. There he instructed the young idea in everything he knew nothing about and "ducked" after class so that his pupils would not ask questions.



Remember Lee Sims and his ever-changing piano rhythms back in the old "crystal" days. Here is Lee and his beautiful partner, Ilomay Bailey; have five periods a week on the NBC.

The cast of the KUKU Kut-Ups is just as remarkable as Mr. Knight himself. All of the actors are young people. There is Robert Armbruster, the maestro, Adeline Thomason as Mrs. Pennyfeather, Mary McCoy as Dolly Gray, Eustace Wyatt as Percival Pother and Jack Arthur, who sings on many programs.

At the age of eleven young Bob Armbruster made his debut as a child prodigy with the old Philadelphia Symphony Orchestra. He is a splendid pianist and director as well. At one time he (Continued on page 30)

PUZZLE PAGE IS POPULAR

T is too early in the month as we write this. to know how difficult our readers are finding the March puzzles. The new call from Newfoundland was all that made possible the "J" puzzle, the correct solution being as follows:

С	Κ	С	V
Κ	0	М	0
W	R	J	Ν
Х	Ε	F	А

It is possible our puzzlers may find other solutions but we believe this to be the only one.

Mr. Pheasey's "magic square" ought to prove much more difficult. When it was received, the puzzle editor doubted if it could be worked and so he took it home without the key and what a tussle he got out of it. His method of solving it may be of interest to those who tried it and failed. On a large sheet of paper he drew six squares and in these he entered the frequencies of all the calls beginning with the initial letters of that square. KV having but four frequencies-1260, 1140. 1270 and 1200-he took each of

1		2	3	4	5		6	7	8	Τ	9	10
		124	″		1	12	13	1	14		51	
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70		7/	72	73 //	74		75	76	77	1	78	79
80	81		82	83			84	-	85	86	87	88
	12.3	a la Statute in	8%	A	1	90	-	-	91			
92			93	94	95		96	97	98	99		100

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these in turn and added it to each of the frequencies for CJ and subtracted from 3540. If the answer appeared in the WO square, that frequency was checked as a possible solution. Continuing the process, the possible answers were checked in each square after which it was not difficult to find those which added to 3540 in all directions. It was a corking good puzzle.

The four states in Raymond Corbett's problem were Florida, Arizona, Alabama and New York. This, too, was very well designed.

The April Problems

The No. 1 cross-call this month was designed by Carl Forestieri, Bronx, N.Y. It is of excellent design and enough calls have been reversed to get away from the hackneved combinations of KWKH-CKWX. This puzzle should give our readers a struggle. Following is the key to the calls.

Across

- 1 50 k. w. on the blue.
- 2 Shares time with another 50-watter.
- 6 Four share on this wave
- 10 Reverse. Recently traded calls with sister station.
- 12 Reverse. 24 other 100-watters on this wave.
- 14 Reverse. Half a k. w. in the West.
- 15 Its newspaper is in French.
- 18 Another newspaper.
- 20 All 100-watters on this wave but six.
- 22 Seeds.
- 27 Reverse. In Wisconsin.
- 27 Four stations in same city share time.
- 30 A newspaper on the red.
- 31 On the Potomac.
- 35 Reverse. Daytime on clear wave.
- 39 Reverse. Little but important.
- 41 Has half a clear wave.
- 46 Reverse. Station has two calls.
- 49 Reverse. In western part of western state.
- 49 Newspaper station in the CBS.
- 52 Reverse. Has two owners. 52 Portable Wireless Telephone.
- 58 Reverse. Shares time with three on same island. 59 Near 100 on most dials.

- 64 Belongs to NBC. 67 This station is a "wow."
- 70 While this one is a "ham."
- 73 And this one a "key
- 76 It interferes with Akron.
- 79 Reverse. In Jersey.
- 82 Reverse. Its wave is 1725.72 feet long.

[7]

- 84 Reverse. Just changed its call and moved to another state. 86 Reverse. A Missouri blue.
- 86 In California.
- 90 Reverse. Monumental radio.
- 90 On 1210.
- 92 150 watts.
- 93 Reverse. On 1420.
- 93 Daytime on key wave.
- 99 Reverse. Only 50 watts.
- 99 Synchronized with its sister.

Down

- 1 City of the same name. 5 Andres Martinez.
- 6 One of four CBS synchronized.
- 8 Whole wave is CBS.

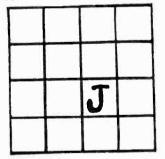
- 10 100 watts on 1310.
- 12 In the Red River Valley. 16 Interstate broadcasting.
- 22 Blue in the West.
- 26 Reverse. St. Olaf's
- 27 Reverse. Ditto with 10.
- 30 Reverse, Call stands for state.
- 35 Shuman of Nebraska.
- 37 Shares with a doctor.
- 39 Reverse. An NX station.
- 40 500 watts in California.
- 41 Reverse. Same four letters as another station on same wave.
- 46 Shares time with 37.
- 47 Two on this wave.
- 49 Last three letters stand for city and state
 - No. 2

- 57 Reverse. University with 750.
- 60 Reverse, 12,500.
- 64 A motion picture booking agency.
- 65 Uses a split frequency.
- 69 A CX station.
- 70 An agricultural college.
- 73 The Sun-Telegraph.
- 75 A phantom.
- 76 Interferes with another Columbia.
- 79 Ditto with 41.
- 82 Only NBC in the state.
- 85 1 k. w. but no chain.
- 86 Reverse. A Dn station.
- 90 Reverse. 100 on 1370.
- 91 Reverse. Call has three letters alike. 95 Reverse. Three cities in one state
 - share time.

WWW WWW WWXX AAC CCCF FGGG GKKK KLM MOOR RVV

No. 2 is a clever little thing designed by Carl Schmidt of Scranton, Pa. It is a palindrome which, the dictionary tells us, is a word or sentence which reads the same beginning at either end. Thus WMCA-CMW is a palindrome. The problem is to arrange the letters given into ten station calls so the letters will be in the same order both left to right and right to left.

And in No. 3 we have our old friend, the J puzzle with new requirements. The problem is to fill in eight station calls of four letters each with every other line and every other column reversed. That is, the first and third lines read left to right and the other two right to left; the first and third columns read down and the other two read up.



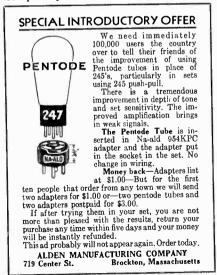
All of the calls in these puzzles are contained in the regular index of the March issue of this magazine. Get the answers to these problems to us by April 20th and have your subscription extended one issue, a free copy of the May RADEX or a radio map of North America. Be sure to specify which. We'll be waiting for you "when the moon comes over the mountain."

Aerials and Grounds

(Continued from page 10)

Park Place, St. Joseph, Mo. "I got WEAF one Sunday afternoon at 4 o'clock, also at 6 a.m. with KFEQ, a 2000-watt local only two channels distant. I can now get WABC, WEAF and WJZ almost at will."

"I have tried all kinds of grounds and aerials," says Wm. F. Zimmerman, Route 4. Oshkosh, Wis., "but the best yet is to take about sixty feet of No. 22 d. c. c. wire and wrap it around the electric cord that goes to the wall plug from your set." This idea of Mr. Zimmerman's sounds very good and should be well worth trying. It is, of course, the induction principle.



EXPERIMENTS with Aerials and Grounds

Some Interesting Conclusions

THE subject of Aerials and Grounds will always be a live one for several reasons. In the first place is the importance of these two factors in the perfect operation of any set. Second, the best aerial and the best ground can be found only by experiment, for what is best for one will not be for another. Third, some want distance and some want volume and some want beauty of tome and therefore the ideal is a matter of taste.

In this article we are giving the opinions of some of our readers who have done a great deal of experimenting in the antenna-ground field. Some of them point out that volume often increases with the removal of the ground. This is true, although we have found this increase in volume applied only to certain parts of the dial with the other parts reduced by the removal of the ground.

About Removing Ground

We feel that we should warn our readers that removing the ground is a risky experiment, as some sets are so constructed that the ground is a sort of safety-valve and such sets should never be operated for any length of time without a ground or it is subject to very serious damage. Before using your set without a ground, study your instruction book carefully to see whether the manufacturer has warned against such operation. It is impossible for the lavman to tell from a set whether or not it may safely be used without a ground. The Philco is one of the sets which issues a warning against using without a ground, although this may or may not apply to all Philco receivers. The Model 55 Atwater Kent is another. Our book on Radio Theory and Modern Practice says: "Ground connection must be used with Model 55. This set also will not operate with either aerial post connected to the ground."

"In your article 'In the Wide Field of Radio,' I certainly agree with Mr. Owens as to aerial length, the longer the better in my opinion," states Roger Causse, Radio Operator, SS. Thermo, care P. O. Box 6688, Lester, Pa. "Here on the ship I have an aerial 750 feet long and using the 'world's best ground,' the ocean. I can get stations on my three-tube set, and with a volume unbelievably strong, which I cannot even hear on my Victor R32 at home. I have not the facilities of erecting a longer aerial at home or I would. With the present day sharpness of sets, the longer the aerial, the better."

Uses 600-Foot Antenna

"I have been very much interested in the various items appearing in RADEX concerning the topics of 'Long Aerials Short Aerials,' and 'Waterpipe VS. Grounds Specially vs. Constructed Grounds'," writes Richard D. Caddell, 605 Ridge Ave. N. S., Pittsburgh, Pa. "To begin with, I have been experimenting with different types of grounds and aerials for fourteen years now, in many different localities, both in the United States and Canada, and also



Chester Lauck (right) and Norris Goff, "Lum and Abner" who have rocketed to popularity in less than a year. At 2:00 p.m. EST, Monday, Tuesday and Wednesday, NBC-W.JZ

abroad. I have experimented with over seventy different types and lengths of aerials ranging from 2300 feet to 10 feet in length, and numerous systems of grounds.

"You may tell your radio audience not to condemn one particular type of ground, or an aerial of a certain type of length, just because they might not give the best results in the location they are used, as the identical ground and aerial might bring the very best results in another location. I have studied grounds and aerials and have found that the best results cannot be expected simply by erecting one aerial and ground and then expect to receive foreign reception. It may take at least a dozen or so of grounds and aerials to find the combination best suited to that particular location.

Ground Helps and Hinders

"I have also found that in some locations a ground connection will reduce the volume on some sets when used. It will also be found that on certain nights a ground will boost up the volume of a set, and again the next night reduce the volume. For good DX reception a knife switch should be connected to the ground connection of a set, as many stations never heard before can be tuned in by simply using the knife switch, thus disconnecting the ground. I highly recommend a ground when a short aerial is in use, or if the set owner lives in a poor location. A ground is at its best in those two instances.

"A ground is nothing more than a filter, and consequently when used with a perfect aerial has a tendency to drain part of the signal strength, in some cases. However, all in all, it is up to the set owner himself to experiment and find out which system of ground and aerial is most suited to his set and its location. I am at present using a 600foot aerial and would use a longer one but for lack of space. I use no ground."

It will be seen from the above that Mr. Caddell takes exactly the opposite view regarding grounds from that advocated by Ollie Ross of California, who has stated his belief in several issues of this magazine, that the ground is perhaps the one most important factor in proper reception.

Uses Three Antennas

"The discussion regarding short and long antennas finds me on the long end," reports Robert R. Rawstron, 296 Main St., Claremont, N. H. "My aerial at present is 350 feet long, some 50 feet high, with 25 feet of lead-in. My own experience reveals that 200 feet is much stronger in volume that 100 feet and that while 300 feet is stronger in volume than 200 feet, the difference is not so marked. I feel well repaid with my efforts in putting up a longer aerial than is considered customary."

"For some time I have used three antennas, about 100 feet each, with 40-foot lead-in each, to a single throw switch each on wall panel; a single r. c. wire connects radio with the three switches," advises Chase Pulsifer, Box 576, Yuma, Ariz. "Have demonstrated to many local fans, on several makes of radios, from 6 to 10-tube, the jump in volume of reception as each additional antenna is switched on. The jump is especially noticeable when a. c. current is turned low before each addition. Arizona, especially Yuma, has a hot, dry climate and very many periods of static. The small amount of a. c. volume required to operate with long antenna, as noted above, frequently changes log from 'excess static on one antenna' to 'clear reception on three antennas'."

"You who have A-K 70 receivers or similar models and can't use long aerials for fear of spoiling your selectivity, try my trick," suggests Richard F. Miller, 2705 Pennsylvania Ave., Dallas, Texas. "Take about 15 inches of insulated copper wire, lay it across the leads from the r. f. coils to the condensers. This will cause an oscillation which can be governed by raising or lowering as desired, according to amount of volume you use. I have mine fixed on a lever which is controlled from beneath the cabinet, and now I can get CMK and WSB on either side of XER, which is pretty good for this location."

"I have tried winding the aerial and ground spirally together and connecting opposite ends, and it works swell," reports Richard Douglas, (1125 Krug (Continued on page 8)

BETTY'S PAGE of GOSSIP

T has been thirteen years since Billy Jones and Ernie Hare first met; eleven years since their first broadcast, yet they are still together and still radio headliners. Singing together, joking together, they have laughed and jested their way into the acquaintance of millions. They have seen a whole decade of changing public taste, and have remained successful and inseparable.

They were born on the same day of the month, and although not related their mothers had the same maiden name. They are the same height, the same weight, and are even beginning to look alike. Both had a try at business before taking the advice of friends and going on the stage.

Ernie Hare was born in Norfolk, Va. As a boy he sang in church choirs, but

Meet the Folks You Hear

for a career he selected the baking powder business. He became a traveling salesman, but failed to down the desire to sing. Whenever he found himself stranded in a small town over Sunday he always hurried around to the nearest church and offered his services as a soloist. Once he gained sufficient faith in his voice, he lost no time in breaking into the the lost no time in breaking into the the atrical profession. He made Broadway in four years and his record there includes fourteen musical shows, among them "Sinbad," in which he understudied Al Jolson. Then he met Billy Jones.

Jones was born in New York City, and he, too, sang as a choir boy during his early school days, but abandoned the



thought of a music career and went to work in the Custom House; then to a bank, and later to hard labor. He herded sheep in Wales. mined ore in New York State, climbed poles for the telephone company and made cable for Western Union. All the time he continued to sing for his fellow workers and friends. Eventually they persuaded him to give his voice a real trial, and finally he was launched on a theatrical career.

After several seasons in vaudeville, he reached Broadway and scored a real success in musical shows. More musical shows, vaudeville and concert tours followed. Then he started making phonograph records. Meanwhile Ernie Hare was also making records, and it was in a recording laboratory that Gustave Haenschen, now an NBC orchestra director, introduced them.

The team of Jones and Hare was born that afternoon. Haenschen wanted someone to sing a duet for a record his orchestra was making. Billy and Ernie offered to assist him before going their separate ways. To their surprise, they found that their voices blended exceptionally well. They liked each other's songs; they liked each other's jokes; in fact, they liked each other. They left the laboratory together, and before reaching the street corner had decided to stav together. For a while they appeared in vaudeville. Then, more for the fun of it than anything else, they faced a microphone "that looked like a tomato can hanging on a hook" and gave a ninetyminute program in the studio of the old WJZ station in Newark, N. J. This was in 1921. One broadcast led to another, and today the boys claim the distinction of being the first entertainers ever to be paid for radio work.

Listen in for this famous pair any night, except Saturday and Sunday, at 7:45 p.m. EST over the NBC-WJZ network. And for Rocky Mountain and Pacific Coast listeners at 12:45 a.m. EST.



Vivien Ruth was born on January 22, 1913, which makes her just 19, but numerologists ought to figure out just what 22 means in Vivien's life. Her mother and father celebrated their birthdays on June 22 and February 22, respectively. And. oddly enough, they were married on July 22. When Vivien was still wearing long curls her father passed away-on August 22. Another milestone in her life occurred last December 22, when, as a result of her singing at a private party, she made her radio debut over a New Jersey station. And exactly one month later-January 22-the singer first poured her songs into a Columbia microphone, singing as an exclusive artist with that network the same day. Also, if we may mention it, it was on February 22, three years ago, that Vivien parted with a misbehaving appendix, and just what "22" holds in store for her remains to be seen.

Stepped Into Big-Time

Vivien professes to have been a tomboy always. When a youngster in Passaic, N. J., her home-town, she never played with the girls, but would find delight in playing games with the boys. From her mother, a talented pianist, she inherited her musical ability. Vivien reached her third year in high school, imbued with a desire to become a physical training teacher, but that unruly appendix brought her to the hospital. She never returned to school, choosing instead to become a homebody. After a while she became restless and decided to seek employment. Two positions awaited her-one in a Ford agency at \$25 weekly, and the other in the agency of a higher-priced car which offered \$20. She took the second.

Last December she happened to be singing at a party which was attended by a friend who was associated with radio in New Jersey. He suggested she try microphone singing, and arranged for her debut over a local station. Her success was instantaneous. On that eventful January 22, Vivien Ruth stepped into the "Big-time" with her first broadcast over the Columbia network. She wasn't a bit nervous on the occasion, nor does she ever get mikefright, at least so she says. Peter B. Kyne is her favorite author. Though she can't read a note, she only has to hear a song but once to know it. Her pet is a Maltese cat, and her pet songs are "Sleepy Time Down South" and "The Rosary." Vivien can be heard at 5 p.m. on Tuesdays, over the Columbia network.



FRANK KNIGHT

You've probably heard Frank Knight do a lot of announcing, but now we are pleased to announce Frank Knight. Frank was born in St. Johns, Newfoundland, on May 10, 1894, the son of one of the town's most prominent barristers. After his graduation from St. Bonaventure's he settled in the town of his birth and took up life as a bank clerk.

At the outbreak of the war in 1914 he enlisted with the Royal Newfoundland Regiment. During his three years overseas he took part in action on the Western front and about Gallipoli, and was wounded in the battle of the Somme. Returning home broken in health. Frank was faced with the problem of readjustment, His health was slow to return and after months of recuperation he became restless and anxious to break away from what he considered the tedium of banking. Knight enrolled at McGill University for a course in medicine, but the long hours of study and strenuousness of that calling forced him to abandon his studies during the second year. Then Frank went to New York. He had vaguely thought many times that he would like to be actor. He had little training for the theatre other than courage, but it was just that abstract quality that won for him a place behind the footlights. After playing numerous

minor roles in road companies of Broadway productions, he appeared opposite such stars as Francine Larrimore and Nance O'Neill.

From Hobby to Business

Frank went into radio at first only as a hobby. He played occasional small parts in radio dramas, but as time went on he gave more and more serious attention to its possibilities. But there were hardly enough radio dramas to justify giving up the theatre altogether. He was still doubtful when he yielded to the advice of his close friend, Ted Husing, to join the ranks of WABC announcers. Although he occasionally misses the glamour of the stage, Knight never has regretted the move.

Frank is tall and good-looking. His hair is black, greying a bit around the temples. His bearing instantly suggests his military training. He is quiet and well-poised. Frank Knight is Columbia's British-accented announcer with an all-American following.



Burns and Allen

Have you heard Gracie, the "Dumb Dora" of the team of Burns and Allen? Gracie provides the laughs and George "feeds" her the lines. Although George Burns and Grace Allen are one of the most popular and widely-known comedy teams that have appeared in vaudeville and talkie shorts, it was only a short

(Continued on page 28)

IN THE EDITOR'S SANCTUM

The Monthly Confab

W E have gotten into trouble several times by changing our index upon reports from our readers particularly regarding change of frequencies. Oftentimes the frequency of a station shown on their verification card or letter is incorrect, being an old one. We are therefore including these reports in The Month's Changes under the head "Heard on Other Frequencies." As fast as these can be officially verified the index will be changed but not otherwise. Readers should therefore watch these rumored changes in their DX work.

"Could you please help me about my set," requests John J. Barlow, 2803 Woolsey St., Berkeley, Calif. "It is an Apex (6-tube and rectrifier) Neutrodyne. This set has a wonderful tone, but is extremely broadtuning. On a 12-foot indoor aerial many of the locals take up many spaces while when I use my outdoor aerial the locals, especially KRE and KGO, take up from 5 to 20 spaces on my dial. About the only distant stations that I can get when the locals are on are KFI, KNX, KSL and, once in a while, XER, WTAM, KWJJ, KEX and KJR. I have put a small fixed condenser between my aerial and set, but this does not seem to help. I have talked to several radio men about wave traps, etc., but they all say that my set is too broad to be helped by any of those appliances."

Perhaps the most frequent inquiry that comes to us from our readers is how they can sharpen the tuning of their set. It is a difficult question to answer helpfully and if any of our readers have succeeded in this problem with their own sets, we would like to have them write us about it.

"In your index the symbol after WCFL, Chicago, is 'Dn,' but I have often received it after midnights," reports I. H. Nixon, 265 Pacific Ave., Toronto, Ont. The symbol D indicates a daytime station but Dn indicates a daytime station which may use evening hours by

special arrangement. Most restrictions on all stations are waived after midnight. In addition to this, this magazine carried a notice an issue or two ago that under special arrangement with KJR in Seattle, WCFL would try out night hours to see if they could broadcast nights without interference. RADEX gives the information you want if you will follow it closely. Very often someone who evidently buys a copy only now and then writes us for information that has appeared in our pages just recently. If you are truly interested in Radio, you cannot afford to miss a single issue of "The Radio Fan's Own Magazine."

Set Won't Bring Japan

"Why can't I get Japan?" is the cry that comes to us frequently from readers all over the continent. Thus Robert Rosenberger, 17 Jansen Place, Kansas City, Mo., writes: "The set I use is a Kolster, six-tube. It has gotten KFSD in San Diego, CMBS, KTAR, WSYB and 100-watters in South Dakota. Illinois and Alabama. Why cannot this set get over the seas?" We might answer this question by asking another. "I use the same kind of golf clubs and the same balls as a friend of mine. He got a hole in one; why can't I?" It isn't so much the set one uses, for we have reports of transoceanic reception on many different kinds of set. Perhaps with the very best set one may never tune in European or Asiatic stations in the b. c. band, but if one does it will be a combination of infinite patience, tuning at the right time and-luck.

WGM Passes Out

WGM, Jeannette, Penna., just won't play the game with us. We refused to list them when they were on the air and then when we did finally include them, they seem to have gone off the air. Says K. Vance Shaffer, 463 Center St., Morgantown, W. Va.:

"WGM's owner, Mr. Spencer, was convicted of interfering with other stations and appealed his case. When it came into Federal Court in February, Mr. Spencer was paroled for two years by the Federal judge and ordered to discontinue operations of WGM.

"Their last broadcast was February 17th and they will be back on the air soon if they can get a license. I heard their last broadcast and got this information from their lawyer on the broadcast."

Here's That GZ7

Here's a report on the mysterious GZ7 from Elmer C. Roth, 1294 W. Grand Blvd., Detroit, Mich. "This is the call assigned to the Armory for experimental purposes. It is located at Brush and Larned Streets in Detroit. They have been given permission to use 635 kcys. It is on the air every Monday and Friday evenings from 7:00 to 8:00 p.m. EST." This doesn't exactly clear up the mystery, for where do they get a "G" call and why are they permitted on a split frequency in the broadcast band? We have a hunch the armory boys are trying to slip something over.

George Fabian, 1463 Virginia Park, Detroit, adds the following regarding this station: "GZ7 is the station of the Michigan National Guard, 182nd Field Artillery. February 1st they broadcast their own band, played well-known marches, asked for criticism and promised music every Friday at 8:00 p.m. EST. They are on 640 and 1275 kcys. Come in best on 640."

The Early Worms

Up in Toronto, a radio person by the name of Al Leary has conceived a fantastic idea. He has inaugurated the Early Worms club. The idea is that the Early Worms go on the air at 2:30 o'clock Saturday morning and the feature of the program is the initiation of some New York radio star into the club. This is done by calling the person to be initiated on long distance telephone and broadcasting the conversation between Toronto and New York. If your set will bring in CKCL in Toronto, you'll probably hear a most amazing program every Saturday morning.

Chas. E. Summers, Sr., 28 Gallatin Ave., Buffalo, N. Y., thinks that The Stebbins Boys, Amos 'n' Andy, and other programs must be from records because he hears the same program twice each evening, "word for word." There are, of course, a number of programs on the air which come through electrical transcription, such as the Seiberling Singers, but such programs are seldom if ever given a "spot," that is they do not appear regularly at any certain hour but are used to "fill-in" in periods not otherwise taken. The features Mr. Summers names are separate performances by actual artists. Careful rehearsal accounts for the "word by word."

One Station with Two Powers?

"I believe you are wrong," writes an anonymous reader from Des Moines, Iowa, "in listing WBAP with only 10,000 watts and WFAA with 50,000 as



Bess Johnson, leading lady of "The Witching Hour," a spooky program. At 9:45 p.m. EST, Saturdays, CBS

they are the same station using same transmitter and power." It is true that both transmitters are located at Grapevine, Texas, which is between Dallas and Fort Worth, but the Radio Commission always shows the power as 10 k. w. for WBAP and 50 k. w. for WFAA. If they use one transmitter, why are they given different ratings? Can some of our Texas readers advise us?

"I have a Philco Baby Grand," writes F. L. Askew, Ocean Falls, B. C. "From 550 to 1200 every station comes in where it should but KGA at 1470 comes in at 1380 and KPQ at 1500 comes in at 1400, KSTP at 1460 comes in at 1400, etc." We have pointed out before how difficult it is to mark dials in kilocycles and have stations on all channels come in accurately. In fact, if there is a set on which stations come in as marked from 550 to 1500, we have never seen it. But the trouble experienced by Mr. Askew is exceptional.

XER Wants Whole Dial

Dr. John R. Brinkley, Kansas goat gland specialist, today announced plans for increasing power of his station XER in Villa Acuna, Mexico, to 150,000 watts, says a newspaper clipping sent us by Richard F. Miller, 2705 Pennsylvania Ave., Dallas, Texas. So set aside about one-quarter of your dial for the good doctor. Mr. Miller thinks southern readers should be able to tune in CFCN Friday nights at midnight CST. If you want to hear a program that's different try WCKY at 1490 at 7:30 every night except Monday, CST, adds Mr. Miller.

There was a real KUKU, says Donald Cohoon, 48 Close Ave., Toronto, Ont. It was a portable set operated by a sound-movie company in the wilds of Brazil which used these call letters. It was in constant touch with U. S. amateurs during its sojourn there.

A traveler who always carries a portable radio set asked the clerk at the hotel, "Do you have A. C. or D. C. current here?" and got this reply: "Neither of 'em registered."

That "Fraudulent" Mail

"For the benefit of the Prairie State DX Club, perhaps the letters they mailed to XER and XED contained currency," writes Mrs. Roy Schanck, El Paso, Texas. "If so, that is the reason they were returned. XED broadcasts the Tamaulipas State Lottery and the sale of tickets. Uncle Sam returns the letters to the senders if they are addressed to the Radio Station. One can gamble in Wall Street on stocks, but purchasing lottery tickets, even though in a foreign country, and it's fair and square, is forbidden, at least by mail."

If your volume control is noisy or makes poor contact, here's a suggestion from Keith L. Freas, 17 Pullman Ave., Kenmore, N. Y.: "Wipe the resistance

winding off with a cloth dampened with cigar lighter fluid to clean it, and oil it sparingly with Nujol or American oil. This lubricant is the one recommended by the set manufacturers, as it contains no acid, does not become rancid, or does not gum. The oil is to be applied with a soft cloth. Don't ever try to use sand or emery paper to clean this fine wire, as you will be sure to wreck it."

"I have some 'dope' on pepping up Radiola 44 sets." suggests George Buckman, Hillside and College Aves., So. Nyack, N. Y., "which will prove helpful to DXers with such sets. Some simple soldering and a 75-cent resistor are all that is required. On my set I increased sensitivity so much that KPCB came in the very first time I DXed after the change. Previously KFI had been my only coaster with that set. DXers may have this information if they will enclose postage in any letters I may receive."

Reception by Arithmetic

Many of our readers jump to the natural conclusion that one ought to be able to estimate reception mathematically but radio is too temperamental to be figured out thus easily. "How is it that I can't hear WCAU, Philadelphia, when WPG with half the power is further away and comes in fine?" asks John Videberg, 375 Waterville St., Waterbury, Conn. Distance and power are only two factors. Geographical, metereological and even geological conditions have greater influence. Radio reception is peculiar and just cannot be estimated by distance and power.

From Wm. E. Johnson, Vinalhaven, Maine, comes the report that radio reception is considered very good there. "We get Chicago stations in the daytime, when reception is good," he says. "I have tuned a number of coast stations, but as yet haven't got any foreigners, outside, of course, of the Mexicans, etc. My best catch was last February when I tuned in TJW, Hamilton, Bermuda, with 7½ watts power. I also have CNRV, Vancouver."

"In the November RADEX Herbert Haussler claimed Pacific DXers bragged too much of their Japanese catches, and wished to know if any Pacific Coaster (Continued on page 26)

The TROUBLE DEPARTMENT

Conducted by The Technical Editor

All Wave Set Is Inefficient on Short Waves

Can you help me out on my Tyrmen, model 80, all wave receiver? It does not work well on short waves, and is noisy and interfering on higher waves. Can you tell me how to rewire it for standard waves, or just for short waves, so that it will work better?

The circuit of your receiver is conventional, and should give as good results as possible for such a set. We believe, however, that the shielding of the tubes, which seems to be in contact through some insulating material, touches the metal tip of the screen grid tubes. If this is the case, that material ought to be removed so that the cap is freely projected out through the top of the shield can. This touching of the tube cap may be responsible for considerable loss of energy at the low waves.

Your tubes should be checked, and perhaps a new oscillator will help matters. You cannot substitute new -35s for the -24s in this circuit. An automatic volume control cannot be installed, unless a complete change of wiring is undertaken. We know of no method by which the wiring can be changed to make a standard broadcast receiver without practically creating a new circuit. Even then, its efficiency would not be improved. We are sorry that we know very little of this set, and cannot furnish you with the present location of the factory. It is likely that they are no longer in business.

Short Wave Converter

I have just purchased a short wave converter to use with my R. C. A. superheterodyne receiver. I have a lot of trouble in finding a good spot to work the converter on my receiver. Can I use a wave trap between the converter and the set?

You cannot use a wave trap between the aerial and the converter so as to make the superheterodyne tune more sharply and respond to the short waves. The wave trap could be used if the converter were discarded. But the converter responds to only the short waves, and the wave trap most likely responds only to the higher waves.

The receiver should be set at about 1,000 kilocycles before attempting to tune the converter. You do not say what kind of converter you use. In other words, your set is tuned to its intermediate frequency, or heterodyne signal wave length, and the converter then acts as an oscillator to drive the short



One appearance as guest artist made her star of "Today and Yesterday." Gladys Britain, soprano. CBS Friday at 8:30 p.m. EST

wave signals, after beat note conversion, through the broadcast receiver.

Signals Louder Without Ground

I have a model 80 R. C. A. set. Would you advise me to change to the -35 tubes, and put in a -50 in place of the -45s? Why does WJAY at Cleveland come in louder when the ground wire is removed, but all other stations best with a ground?

We do not recommend any changes in the tubes of this receiver. Leave well enough alone. You could not replace the -45s with a -50 without considerable rewiring and power output alterations. It is impracticable.

Occasionally a freak of nature bobs up in radio reception. All stations should be received best when a ground wire is in place. The trouble may be due to a fault in the ground wave coming from WJAY, making reception best on the reflected atmospheric wave. Do others observe the same freakishness? We are at a loss to account for it. Of course. defective tuning or extra capacity in the receiver, may account for some freaks of radio tuning.

Those Crackling Noises

I have an Atwater Kent model 67 receiver which now makes sharp crackling sounds at times. This set has been overhauled and seems to be perfect, but now these sounds have started. They do not vary with operation of the volume control. What do you advise me to do?

We infer that these sounds have not been heard for very long. This type of noise can come from a defective "B" battery. When one cell in the battery breaks down it causes much noise. Test the battery with a voltmeter set in place for some time. As each noise comes from the speaker notice to see if the indicator hand of the meter shows some deflection. The obvious remedy is a new battery, or the removal of the defective cell.

You will also find coming from the secondary of the output transformer two colored wires that lead to the voice coil of the speaker. The wires are yellow with black traces through them. Test for looseness, and also test out the speaker coils. Noise may also come from the tubes in their sockets, particularly the two -71A power tubes. Disconnect the aerial and if the noise stops then the trouble is in the aerial; it may be loose or touch some metallic object.

Noisy Condensers

I have a Knight eight-tube set that is noisy when the dial is turned, but the sounds stop as soon as I cease tuning in a station. The set also howls when it is being tuned to certain stations. What must I do to remedy these annoyances?

The Knight receiver uses three -24s, two -27s, two -45s, and one -80, and if these tubes are set tightly in their sockets and have been tested and found satisfactory, the trouble is elsewhere in the set. Therefore, we believe that loose contacts in the variable condensers or grease and oil in the shaft bearings is the cause of this annoyance. Spring connections between the rotor plates and the stationary parts of the condensers frequently cause tuning noises. Check for perfect electrical conductivity. Also, one

of the condenser plates may be touching and rubbing as it moves in and out when the dial is turned. There are three of the variable condensers tuned with a single dial and shaft.

Howls and squeals that are noticed when the set is tuned, especially at the high end of the dial, may be due to imperfect grounds, particularly the brackets that hold the radio frequency coils and choke coils. Each bracket should be grounded to the metal chassis. If the trouble is microphonic then the tube that is in trouble should be covered with a "howl" arrester. This tube may be found by grasping it when the howls are being heard.

Patience Is Needed

My 726 Alt-Wave Silver-Marshall receiver seems to have considerable noise and does not get many short wave stations. There is a nearby station in Pittsburgh that I cannot get on this set. What can I do to make this set work better?

The set you are using is one of the best receivers of this combination type procurable. If the set is new it might be best to take the matter up with the local dealer. But one of the principal difficulties of short wave reception is the inability to pick up short wave stations with ease. Short waves require an infinite amount of patient tuning, for they are very sharp and may be passed over without knowledge of their presence. Turn the dials very slowly, and be sure that you set the broadcast receiver tuning dial to about 650 kilocycles.

The noise may be due to the great sensitivity of the set. There is a certain amount of noise level which cannot be avoided in these sets. Do not turn the volume control of the broadcast receiver up too far. The converter portion of the set is a short wave detector and oscillator using -24 and -27 tubes. The incoming wave is heterodyned to the radio frequency to which the broadcast set is tuned. This gives the entire outfit a series of three detectors, two oscillators, and five other tubes in the radio and audio circuits. Noise must be expected in such a sensitive hook-up. However, check your power tubes (47s) and speaker for faults. (Continued on page 23)

[18]

TUNING IN with the RADEXERS

ELL, how many of our DXers pulled in KXRO and 10-BQ on their special broadcasts for RADEX listeners? And who will prove to have either station at the greatest distance? If these two tests were successful in interesting considerable numbers of our readers, arrangements will be made for similar programs in the future, probably with the coming of the next DX season.

In the meantime, let's see what our DXers are doing and thinking about.

"I see some of the radio fans boasting about their wonderful radio reception,' comments Cecil Westcott, 1318 Third Ave. No., Lethbridge, Alta., "and thought I would say how well I have been receiving stations. I have only had my radio the last three weeks and I have had from coast to coast. It is only a seven-tube set (no pentode tubes either). During the three weeks I have logged seven Mexican stations, besides many U. S. and Canadian stations. WABC comes in pretty regularly, as does WTIC and WCAM. Another eastern station received is WCAD. Canton, N. Y."

"My log now consists of 242 stations collected in six months of DXing," says Thayer Bartlett, Borodino, N. Y. "These have been brought in over a loudspeaker with an Atwater Kent Model 84-F Superheterodyne. My log includes KPO, KFI, KFOX, KNX, KOA, KSL, XER, XED, XEW, XEO and CMK. I have tried grounds connected to the aerial post, inside aerials, and outside aerials, and of these I get the best results with the inside aerial, of seven-strand copper wire, non-directional, strung in a loop in the attic of my home, about 95 feet long."

Ten Watter Reaches Out

"Mr. Leigh wonders how far WNBW, the ten-watt station Carbondale, Pa., was heard," recalls James Fogarty, 143 Wilkins Ave., Port Chester, N. Y. "While listening in to one of their DX programs, I heard the announcer read a telegram from a listener in California,

What the Log Builders are Doing

saying they were enjoying the program and requesting a number played." Which shows how a ten-watter can reach out and how many more stations our DXers can log with great patience. "How is this for a DX prize?" queries Mr. Fogarty further. "A two-pound package of date prunes from KPQ in Wenatchee, Wash., for the first report on their DX program of January 24th from the state of New York." It's not everybody that can tune in a box of prunes, James.

· Verification Without Reception

Robert E. Moran, 31 Rochester St., Ottawa, Ont., must DX in his sleep. He has just received a verification from CMBG, Havana, stating his reception of that station was correct. "But the funny part of it is," says Robert, "I have never heard this station and I have never corresponded with him in any way." Life is like that—one fellow gets a verification he never earned and others write twenty letters to get one that is coming to them. Mr. Moran postscripts to Richard W. Mitchell, Three Rivers, Que, that the station he heard was CMCD from the Hotel Palace (not the Statler) in Havana. And to Wm. Scholer his KDK was undoubtedly KGEK, Yuma, Colo., as that station has been coming through fine lately.

Gets Sydney for Breakfast

"I have a Marconi DeLuxe Model 27 S. W. all-wave radio and have done considerable DXing with it, but have had no luck with the Canadian West. Mexico, California, Texas, Spokane, Wash., and all those stations come in. but no Canadian West stations. Could any of your readers help with time on the air for Winnipeg, Vancouver, or any others?" asks Fred W. Harp, 52 Dundas St., Brantford, Ont. I get VK2MC, Sydney, Australia, every Sunday morning between 5:30 and 6:30 EST. Would be very glad if you could inform me as to where I could get a good short-wave log with time on the air (universal)."

"DX reception has been very peculiar here this year," reports Edw. C. Houlgate, 351 Adelaide St., London, Ont. "Static has been very bad at times, and although we have had some real good nights, reception has not been as consistent as in other years. In a little over six months I have logged 486 stations. Have some good catches, such as KGFJ, KJBS, KPCB, KGCX, CKMO, CMCY, CMGF, etc. Have 121 stations using 100 watts, and 19 using 50 watts or less. My only station off the continent is KGU and I was lucky to get them. The morning I tuned them in (January 19th). WDAY was shooting their carrier wave out, every few minutes, testing."

Some Good Records

"I have a radio which was five years old last November," writes 14-year-old Ray Duerling, 2102 Harford Ave., Baltimore, Md. "It is an A. C. Dayton five-tube set. My set may be old, but in the last two years I have brought in 128 stations of good distances. My best catch was KFI, Los Angeles, which is 2282 miles from here. CFRB, Toronto; CHYC, Montreal; CKCK, Regina, Sask., are three of my eight Canadian catches. I have also brought in CMX, CMK and CMC, Havana, and XER, Villa Acuna, and XEO and XEW, Mexico City."

"I am very proud of what I received on Sunday morning, February 14th," says C. Herbert Herr, 957 W. College Ave., York, Pa. "On this occasion I heard five new stations in California: KGER, KSFG, KTM, KELW and KMPC. KELW came on immediately after KTM signed off. On the same morning I got WWRL, Woodside, N.Y.; WCOA, Pensacola, Fla.; WJTL, Atlanta, Ga.; KFEL, Denver, and KGCX, Wolf Point, Mont., all new ones. I am most proud of this last station, as it is only a 100-watter."

"I was sure surprised February 2nd," writes Earl R. Roberts, 712 So. 9th St., Cambridge, Ohio. "A letter came from 4-RK, Rockhampton, Australia, and verified my reception of that station on Monday, November 14th, from 5:28 to 6:01 a.m. EST. The letter was postmarked January 2, 1932, and was just one month in travel. 4-RK came in on

the loudspeaker, although very weak and fady at times. I also heard this same station the next morning at 5:30 and so had two mornings for verification."

"My husband is the DX fan and I'm the puzzle fan," confesses Mrs. M. N. Deacon, 20 Hammond St., North Bay, Ont. "In all sincerity I can say that every month we can see some added improvement in RADEX. We've used it ever since we got our radio and I think my husband has logged some fine catches, including WNBW (10 watts) Carbondale, Pa., CKMO (100 watts) in Vancouver, also nearly every state in the U. S. and Mexico, and nearly all the provinces in Canada."

"Although I haven't a short-wave set, I get short-wave station W5XA of Shreveport, La.," reports Russell N. Ely, 2488 Whitney Ave., Niagara Falls, N. Y. "My dial is graduated up to 1600 kcys. They verified my letter and would like to hear from other fans. At present their daily time on the air is 4 to 5 a.m. and 1:30 to 2:30 p.m. CST. It is an experimental station broadcasting on 1594 kcys., with various amount of power up to 100 watts."

He Gets 2YA, Too

"I am very interested in the letter of Arthur Collins, Buffalo, N. Y.," writes Harold G. Lorang, Darien Center, N. Y. "He has a really wonderful record and 2YA is a great catch, but he is wrong in thinking that he is the only one in this locality to reach New Zealand. I have a verification from 1YA at Auckland, New Zealand, and I also have JOCK, JOGK, LR4 and CMGB (7½ watts, Matanzas, Cuba), all-verified."

"Have been reading with great interest the DX pages for a couple of years," writes M. H. Deacon, 20 Hammond St., North Bay, Ont., "and wish to give you a few of what I call good catches and all verified. Have a Stromberg - Carlson, which I got last fall, and have stations from coast to coast, in Canada and the United States, and also have one Cuban. Have a log of over 350 stations now and if announcements were more frequent, could add another hundred this month."

"You're to blame for getting me to stay up until dawn breaks, getting new stations," accuses S. H. Parsons, Jr., Box 289, University, Ala. "I've verified 262 since October. I've yet to try and not get at least one new station each time I sit up late. My five-tube Gloritone has pulled in KXRO, KPCB, KHQ, KVI, KEX, VAS and 54 of 100 watts or less, the lowest being CMJE, Camaguey, Cuba, a 20-watter."

"I have had a nine-tube RCA Model 80 for 16 days," postcards Richard P. Tickell, Jr., 1443 E. Wood St., Decatur, Ill., "and have logged 247 stations. My list contains 15 California stations, 13 Canadian, 6 Cuban and 6 Mexican. I recently caught KPCB, a 100-watter in Seattle; KRMD, Shreveport, and CKPR, Port Arthur, Ont., both 50 watts. I have every channel except 540.

"On January 1, 1932, I had a log of 222 stations, with 79 verifications," reports Rexford Newcomb, Jr., 605 W. Nevada St., Urbana, Ill. "Today, February 18th, I have a log of 329 stations with 197 verifications. That's pretty good improvement, I think. I am trying to hit the 250 mark on verifications before the current DX season is ended." "For the past five weeks I have been using an Apex model 7-A seven-tube Superheterodyne and have logged more than 180 stations on all broadcast channels except 540 kcys.," comments G. W. Peeler, 509 No. Main St., Elk City, Okla. "There is nothing exceptional about my log, although I do drag in a few 100-watters on the west coast."

"I would like to know what all you DX fans think of my list of stations," inquires Milford Voss, 940 E. Fulton St., Grand Rapids, Mich. "Who can beat this for being 1800 miles away? I have 33 California stations of the 41 listed; 22 Mexican stations; 7 Cuban, and 38 Canadian. In all I have 579 stations."

"Those west coast stations come in better than ever before," writes A. W. Snyder, 3216 W. 38th Place, Chicago, Ill. I used to think KOAC, KTM, KMTR, etc., were good catches last year, but this year I bring in KFVD almost every night and have heard KGFJ, KFXM and KREG very clearly at times."

Jameson Lewis, 215 West 2nd St., Dayton, Ohio, submits a long list of

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NAME	
ADDRESS	
CITYSTATE	

[21]

stations he has received this season on his Victor R-32. His farthest east is the new WRDO at Augusta, Maine. His best western is KPCB which came through from Seattle one morning in January at 5:00 a.m. with excellent volume for a hundred-watter.

"When I bought my first RADEX I had only 125 stations. Within a month, I doubled my total and at present I have logged 324 stations. I have been DXing only since about the first of November. I use a Philco nine-tuber." Edward Friedman, Jr., 92-13 Boulevard, Rockaway Beach, N. Y.

A log of 163 stations since Christmas is the record of Arthur G. Turner, 36 Arlington Ave., Beverly, Mass., with his new RCA-Victor. He wants time on the air for a number of stations. He will just have to watch the columns of RA-DEX for this information as it appears from time to time.

"I now have 429 stations (since last January a year ago) in North America," reports Russell R. Quaintance, 720 Gibbard Ave., Columbus, Ohio. "Am using a Majestic 131 TRF radio. That is on broadcast wave only. I have many more on short wave with a converter."

"I am a thorough DXer," admits I. H. Nixon, 265 Pacific Ave., Toronto, Ont., "owning a single-peanut-tube set, which, I think, has given me wonderful DX. My only opportunity to use this is on week-ends, but even with this handicap, I have had 175 stations."

"I received the headphone adapter all right," writes C. E. Lyons, Handley, W. Va., "I picked up several new stations from fifty watts to 250 and at 11:20 EST, my boy got London, England, direct."

WHEC still uses the WABO call on tests, Tuesdays from 5:30 to 5:45 a.m. EST, according to R. R. Rawstron, Claremont, N. H.

"I am writing to you about a station on 1000 keys, that answers the description to the one Sam Kiamie of New York wrote about which appeared in the December RADEX," writes Ernest Paynter, 30 Daniel St., Dayton. Ohio. "I have been hearing this station for some time but never could get the call letters clearly until Wednesday morning, February 10th. He was giving stock quotations and sounded like a rebroadcast from a foreign country, but as soon as he quit giving stock quotations he said. 'WWAS, Cincinnati,' then went silent," WWAS is the Department of Commerce station at Cincinnati.

Here are some tips from R. H. Van Beynum, Wilbraham Academy, Wilbraham, Mass. "CMCD, CKCJ, CMCY, CMCU can all be received after mid-(Continued on page 25)

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Trouble Department

(Continued from page 18)

Certain short waves cannot be heard at nearby points for they are subject to what is known as the "skip distance," which causes signals to pass over without being heard. This may be the case with the nearby Pittsburgh short wave station that cannot be heard.

Automatic Volume Control

I have a General Electric model H-31 receiver. Can I put on an automatic volume control. You said in the December RADEX that this could be done, but the General Electric Company advises that the change is impracticable. What is the information you have about it?

If you will again read the question and answer on page 29 of the December issue of RADEX you will see that the word "automatic" is not used, and the question does not refer to automatic volume control. Your receiver cannot be changed to use the volume control which is known as automatic. This scheme is an integral part of the circuit and is entirely different than the usual manually operated volume control. There is no way to install automatic volume control on your receiver without a great deal of unsatisfactory work. The circuit of the set must be designed for this form of control, and all circuits cannot use it.

Two Sets and One Speaker

I have a short wave and also a broadcast set but only one loud speaker. How can I place these two sets and the speaker in a cabinet so as to use the speaker with either one of the sets at will?

You have not stated whether your sets are battery operated or a. c. operated. And if the speaker is of the magnetic type the solution is simple. Procure a double-pole double-throw knife switch of small size. Connect the speaker leads to the two center blade contacts. Then connect the two contacts at one end of the switch to the outlets of the short wave set, and the opposite end of the switch to the outlets of the broadcast receiver. Just throw the switch to either set when it is being used.

However, if the set uses a dynamic speaker you must install two of the

double-throw double-pole switches set side by side so as to provide four blades. Connect the wires from the speaker to the center blade contacts. Two of these are from the speaker voice coil and two from the output transformer. Connect the proper four wires from the short wave set to the four terminals at one end of the two switches, and the four wires from the long wave set to the remaining four contacts. If the sets have plugs and sockets for speaker connections the work will be simplified. Some sets have only three wires, such as is found on certain Philco types. Use only three knives and contacts in such cases. The practicability of this scheme depends upon the similarity of the audio circuits of the two separate receivers.

Our Long Wave Receiver

How shall I connect a "C" battery in the long wave set that was described in the January issue of RADEX? A circular coming with the tube I bought said to use $4\frac{1}{2}$ volts C battery.

Do not use a "C" battery with the receiver described in the January RA-DEX for the tube acts only as a detector and does not require a negative grid bias voltage. And a C battery of $4\frac{1}{2}$ volts would be too much for the filament of a -30 tube. Use only two volts on the tube and 45 volts on the plate. A 15 ohm rheostat may be used to cut down the three volts of two dry cells to the proper two volts for the tube.

Loose Condenser Contacts

My Gloritone set gives a loud vibrating sound when a station is tuned in, and when the dial is being moved. It does not do this when the tuning operation has been completed.

We assume your set to be the model 26P chassis which is a five-tube circuit employing the -47 pentode in the last stage. We suggest that you examine the connections for loose wires on the condensers, particularly in the "pig tail" springs between the rotary parts and the frame of the variable condensers. Then look after the tubes, and have them tested. See that they fit snugly in their sockets. The shielding surrounding the tubes may be poorly caught in the socket

made for it. Clean the plates of the variable condensers with pipe cleaners which will pass easily between the plates so as to remove all large flakes of dust.

Long Wave Government Station Interferes

A Department of Commerce airways radio station nearby broadcasts frequent weather information to planes in the air. It is a great source of interference. How can I change my Airline seven-tube set so as to eliminate this source of annoyance in my radio reception?

It will be difficult to overcome this trouble. The airport station probably broadcasts on approximately 900 meters. There are harmonics which cause interference, and the nearness and power of the station create a situation that is hard to overcome. Any changes in coils or condensers in your set will be reflected in unsatisfactory reception from other distant stations. We cannot recommend any changes in wires, coils or condensers in your Airline receiver. Try shortening your aerial to about 30 feet and inserting a small fixed condenser in series with the aerial. A wave trap should be of some assistance.

Changing to Two-Volt Tubes

How can I change a Silver-Marshall model 720 receiver over to the more economical two-volt tubes, if this can be done?

The change can be made. Replace the three -22s with three -32s; the -12A with a -30; the first -71A with a -30; and the last power -71A with a power -31 tube. The present 45 volt (red-maroon) wire leading to the screen-grids of the tubes must connect to a B battery of 67.5 volts. There is a 1.5 ohm resistor in series with a wire that leads to the three filaments of the -22 tubes which must be removed and replaced with a piece of wire. Or the resistor may be shortcircuited with a wire.

You must use 90 volts B battery on the plate of the detector (a black-red wire), and 4.5 volts C battery negative bias on the grid of the first audio tube (the brown wire) in place of the three volts now used. Use 90 volts instead of 135 in the plate of the first audio tube (a maroon wire).

There is a wire from the old 135-volt plate terminal post of the set which leads to plates of the present -22 tubes. This wire must be cut from other parts of the circuit. This makes a new 135 volts lead instead of being tied as at present with the maroon wire of 135 volts which must be changed to 90 volts as mentioned in the preceding paragraph. Use 22.5 volts C battery on the grid of the power (-31) tube (green wire), and 135 volts on the plate in place of the 180 volts now used. Two volts only must be applied to the A (black) positive and A (black-green) negative wires. Turn the rheostat on full way when in use.

Long Aerial

What do you think of an aerial 600 feet in tength with the tead-in taken off the center?

We do not consider a 600-foot aerial practicable and necessary for broadcast reception. It might do if there were only a few broadcasting stations operating. A 50-foot aerial is much more satisfactory. The 600-foot wire would respond to natural wave lengths of lower frequencies and may be better for longwave code reception. Its tuning would be very broad.

Battery Chargers

Are battery chargers expensive to run? What is the best type to use, and what about the generator type run with an engine?

All battery chargers cost something to operate. If one charges a battery at a rate of five amperes an hour it consumes about as much electricity as a 75-watt lamp bulb. The trickle chargers take very little current for they charge at the rate of about half an ampere an hour and take as much current as a small 10-watt bulb. The tungar tube type of charger is believed by many to be very satisfactory. At least it delivers a high rate and is relatively quiet. The magnetic type is also good but is quite noisy with a constant buzzing sound. Dry rectifier chargers of the trickle types are quiet, but are slow in their results. The generator charger with engine power is necessary when either a. c. or d. c. house sources are not available. This form of electricity is perhaps the most expensive to create.

Installing Push-Pull Amplification

How can I change my Silver-Marshall model 720 receiver so as to use the pushpull method of power amplification?

If you wish to use push-pull amplification in the 720 set you must replace the last stage audio transformer with an output push-pull transformer with a split secondary. The two outer ends of the secondary go to the grids of two power tubes instead of the single one now used. You will also need another output transformer with a split primary to connect to the two plates of the tubes. The secondary goes to the voice coil of the speaker. Some slight changes in wiring must be made but the work is not difficult.

Answers to Inquiries

"In answer to a query by Mr. Erlbeck in the February RADEX, CKCD goes on the air every evening, except Sunday, from 8:30 to 8:50 p.m. PST, to give the news of the day," advises Fred Pheasey, 1625 Hollywood Crescent, Victoria, B. C., Can. "On Sundays, by arrangement with CKFC, the news is broadcast a few minutes before 9 p.m., depending upon the time the church service broadcast from CKFC is brought to a close. I do not think CKFC has any regular broadcast other than the Sunday services."

H. Montgomery, 215 Reifert St., Pittsburgh, Pa., sends in answers to two questions in last month's "Mill": "Tell Harry Durand that WWAP is an air station at Bettis Field in Pittsburgh. The frequency is 254 kcys. or approximately 1200 meters. Also tell Frank Claro his station was WRDO, Augusta, Maine."

"The Mexican station H. Durand heard on 1315 was XEFB, Monterrey," thinks Lester R. Reinmund, 1120 South 76th St., West Allis, Wis., who adds, "W. Scholer heard KGEK, Yuma, Colo., which broadcasts a DX program every Friday night and continuing until 1:30 a.m. Saturday, MST."

In answer to the inquiry of C. W.

Thomas as to whether WJSV is ever on the air when WLAC and KSTP are silent, C. D. Cook, 133 13th St., N. E., Washington, D. C., says: "The present broadcast period of WJSV is from 6:00 a.m. until 11:30 p.m. EST."

Kenneth Peterson, 184 Francis Ave., Pontiac, Mich., submits the following answer to a previous inquiry: For John J. Swatko, WFK is in Frankfort, Mich., and is used for broadcasting to boats and other commercial stations.

For George B. Holland: WEEU is on from sunrise to sunset EST and HIX can be heard on Wednesday between 9:00 and 9:30 p.m. EST. This information is from Ores Zoniades, 147 Steger St., Nutley, N. J.

With the Radexers

(Continued from page 22)

night on Saturday. WWAE and WBOW can be received until one on Sunday mornings. KFYR has been testing on Sunday mornings recently and comes in with a big crash. WJTL goes late Sunday mornings. KFWI can be played for a few minutes after WFIW signs off on Sunday mornings. The former never signs off promptly, so try it sometime. WHBC comes in very loud at 6:30 a.m. weekdays."

"I recently played WHBC, the tenwatter in Canton, Ohio, and in their verification they said their hours were 6:30 a.m. to noon and 3:30 p.m. to 10:00 p.m. daily, EST," is the information that comes from James Fogarty, 143 Willins Ave., Port Chester, N. Y. "The station Mr. Scholer had was KGEK in Yuma, Colo., which broadcasts the Jack Rabbits from 11:00 p.m. to 1:00 a.m. MST, Friday nights and Saturday mornings." Mr. Fogarty wants the time on the air for WABI in Bangor, Maine.

The following tips come from T. J. Johnson, Bowlegs, Okla.: XEFB broadcasts a test program every morning except Monday on 1312 kcys. from 1:00 to 4:00 a.m. CST. Try for the Worms' Club DX program from CKCL about 2:00 a.m. CST Thursdays. KPQ has been coming in fine here every Saturday night after midnights PST. Tell your readers to address XED at Hidalgo, Texas, if they want their letter delivered to the station.

The information given in a previous issue by Arthur Collins of Buffalo regarding the time on the air of VOWR, St. John's, Newfoundland (Sundays 11:00 a.m. to 6:30 p.m., Tuesdays and Thursdays at 8:00 p.m.) is correct says G. N. Rose, of St. John's, but the time is Newfoundland time which is an hour and a half faster than EST.

Under the new arrangement by the Commission, the following hours are given to WHAD, Milwaukee and WISN gets all those not used by WHAD: Daily, 9:30 to 10:15 a.m. and 3:00 to 4:00 p.m., Mondays, Tuesdays and Wednesdays, 8:30 p.m. to 9:00; Thursdays 8:30 to 9:30 p.m. and Fridays 8:30 to 11:00 p.m., all CST.

"I have a card from KGU in Honolulu on which they say: 'KGU broadcasts daily from 8:15 a.m. to 11:00 p.m. When it is 6:00 o'clock in Honolulu it is 8:30 PST, 9:30 MST, 10:30 CST and 11:30 EST'." This message comes from A. J. Parfitt, 1933 East 69th St., Cleveland, Ohio.

WOPI, Bristol, Tenn., 1500 kcys., 100 watts, broadcasts a special DX program the first Wednesday of each month from 3:00 a.m. to 6:00 a.m. EST. "It's a very good program," reports W. K. Shaw, 560 Birr St., Rochester, N. Y.

WPFB, The Voice of the Pines, Hattiesburg, Miss., will have DX programs on April 16th and April 30th from midnight to 5:00 a.m., writes R. H. Seidel, 2828 Washington St., Lincoln, Nebr. We assume this means Sunday mornings and that the time is given in CST.

They Keep the Dimes

WFEA, Manchester, N. H., does not answer requests for verifications, says Wm. F. Zimmerman, Route 4, Box 57, Oshkosh, Wis. He sent them two letters with postage and two cards but no answer. What will we do with these stations that do not answer letters? Many readers have suggested a black-list, but when we publish such an item as this we always receive letters from other readers protesting that such a station verified them promptly. It's a problem.

"Don't send CMCY, Havana, Cuba, any money for verification unless you want to get stung," warns P. E. Donnelly, 901 Third Ave., Los Angeles, Calif. "I sent them 10c for verification of the Newark News Radio Club DX Special December 28th and they kept the money and never did answer."

Mail for XER for verification should be addressed to XER, P. O. Box 1083, Del Rio, Texas, says Dr. A. A. Dewey, 44 Prospect St., Bristol, Conn.

Correspondence Wanted

Particular subject or interest and age are given in parenthesis.

- Wm. Frazier (16), 225 Menominee St., Chicago, Ill.
- Joseph H. Ronzone (Earl 41 owners), 1847 Narragansett Ave., Bronx Heights, New York, N. Y.
- H. Montgomery, 215 Reifert St., Detroit, Mich.
- Arthur B. McBride, La Habra, Calif.
- Thaver Bartlett, Borodino, N. Y.
- Russell R. Quaintance, 720 Gibbard Ave., Columbus, Ohio.
- A. Hayter, Apt. 3, Lorane Apts., 610 Ontario St., Toronto, Ont.
- "Radio Reception Reporters," 6262 Fraser St., Vancouver, B. C.
- Ernest Byers (Trans-Pacific DXers), 210¹/₂ Maple St., Waterloo, Iowa.
- George J. Barmann, 232 West Second St., Chillicothe, Ohio.
- Selwyn A. Adamson, Care Canadian Press, 272 Bay St., Toronto, Ont.

The Editor's Sanctum

(Continued from page 16)

ever heard any Atlantic station," writes Blaine Menth, 1003 E. Union Ave., Olympia, Wash. "I have heard several Atlantic stations. In New York, WHAM, WJZ, WKBW, WEAF, WGY, WABC and WBZ. In Pennsylvania, KDKA and WVAU. Others I have heard are WHAS, WBT, WRVA, WOR, WTIC, WJSV, WLAC, WSM, WSB and WCKY. Does this answer the question?"

"I use for a ground a piece of water pipe," says Clarence Wakefield, Wiarton, Ont. "First I dug a hole and put a big tile upright in the ground. Then I drove the water pipe into the ground in the center of the tile. I put cement in the bottom and then filled the tile with water. I have heavy electric wire for ground wire. It is spirally wound around the water pipe, up the pipe, down the pipe, up the pipe again and into the set. I have it clamped to the water pipe. It works fine."

More Outlaws

Regarding outlaw stations, Meyer Tuchinsky, 3436 Filbert St., Philadelphia, Pa., writes: "If anyone asks about a station WIRE on 830, tell them there was such a station but no more. There's another outlaw in McKees Rocks, Pa., right now, using 840 and other channels and the call is WMKR. On January 3rd, WIRE came in on 720 at 4:20 a.m., then moved to 770, then to 790 and back to 780 where he remained until 5:00 a.m. EST."

W. D. Flagg, 1005 Northampton St., Holyoke, Mass., offers a correction of the slogan given in RADEX for CMHC. Mr. Flagg states: "You give it as, 'If you hear the koo of the Cuckoo, you are in Tuinucu.' As I get it over the air repeatedly, it comes in thus: "When you hear the coo of the Cuckoo you're in tune with Tuinucu.' Tuinuco is pronounced slowly and as if spelled "Tune-oo-coo."

"For the information of all who are troubled in various ways with long and short outside aerials, let me suggest switching to the good old hot water heating system," suggests H. R. Howlett, 9 Southview Ave., Toronto, Ont. "I have a wire from the radiator to my aerial post (no ground used) and defy all comers for reception results between 500 and 1500 kcys."

A Shut-In's Club

"Would you please ask your readers to write me?" request Fred D. Fisher, 434 N. Boots St., Marion, Ind. "I am a young man 21 years old and am paralyzed in my legs and one arm. I am starting a club for cripples and shut-ins like myself. Age limit six to sixty. The name is to be "The Shut-Ins of the World Radio Club." Have all the shut-ins get in touch with me please. Will you give us a boost?"

"XEFD on 1020 kcys., here in Tijuana, is not yet in operation," informs J. D. Ramos, P. O. Box 5, Tijuana, Mexico. "I called them up a few minutes ago and they told me that they were going on the air 'in two or three days.' It is rumored that Station XEFD, Tijuana, is to be financed by the Rev. Bob Schuler, of Los Angeles, who has recently been outlawed by the Federal Radio Commission."

"I use an RCA Victor R. A. E. 59 Combination," writes G. M. Rice, Belvidere, N. J., "by using a six-inch record which takes one and a half minutes to record, I take their talk and call letters at the end of the program, and then I play them whenever I wish. Received a letter from KFI in Los Angeles yesterday asking me to send them one which I had recorded from their program. Will send it out this week."

"I am using only a few feet of antenna (just about 800 feet, that's all)." writes Bruce P. Lundy, Jr., R. D. 2, Box 66, Jersey Shore, Pa. "But I have to use that much to cut down the noise I get from the high-powered lines which pass by the front of our house, and it just about does away with it entirely during the night, but I still have some trouble during the day. It sure works swell"

Wanted Reports Collect

"WAGM, Presque Isle, Maine, made a mistake the other night when they asked for phone calls 'collect'," says Samuel F. Owens, 233 Roberts Ave., Glenside, Pa. "They got one, anyway. I guess that call cost them a couple of dollars, but they were both surprised and glad to get the call. They didn't think they were reaching out this far."

"On January 24th," advises Rexford Newcomb, Jr., 605 W. Nevada St., Urbana, Ill., "KGCX gave an early Sunday morning DX all-request program. When anyone phoned in a request, they put their telephone receiver in front of the 'mike' so that the listener phoning in could hear his own voice coming over the radio a fraction of a second later."

Frank E. Switalski, 2819 Victoria Ave., Cincinnati, Ohio, sends us a letter he received from Station XER which graphically illustrates the high standard of ethics which guides that broadcaster. It reads: "We doubt if WSB increases their power to 50,000 watts. If they do, XER will increase to 150,000." Their slogan is "The Sunshine Station Between the Nations." If this be sunshine, give us darkness.

"I have noticed right along that the frequency changes and location changes that you publish are not wrong, but just previous to the actual change. In other words RADEX is so up-to-date that it is ahead of the changes," says Don Turner, Box 655, Taft, Calif.

Only Three Waves Then

"Speaking of reminiscences," reminisces T. J. Johnson, Drawer E. Bowlegs, Okla., "I dug out an old map which was the very latest in 1923. There were only three wave-lengths used by broadcasting stations then. Our local stations in Dallas were all silent on Wednesday nights to allow us to hear DX stations."

"Just a tip to the readers of RADEX," suggests Ralph H. Schiller, President, Transcontinental DX Club, Hawthorne, N. J. "If they send their reports of reception to XEQ, Eagle Broadcasting Co., Suite 1202, Mills Bldg., El Paso, Texas, this will save time and all reports of reception will be acknowledged with verification."

"I would like to join a DX club such as is run by the Newark News," suggests Rexford Newcomb, Jr., 605 W. Nevada St., Urbana, Ill., "but I could not have much chance to be a super-ace, as there's no station in the United States, Canada, Cuba or Mexico that is 2000 miles away from here."

Hungarian Programs

To the gentleman inquiring about Hungarian programs Arthur G. Regan, 120 Paris Ave., Brooklawn, Gloucester, N. J., replies as follows: "WOR has a Hungarian program at 7:30-8 p.m. EST on Wednesdays, and WDAS (formerly WELK) has a program of Hungarian songs with Hungarian orchestra at 9:45 p.m. EST Wednesdays."

The Director of Radio Service at Ottawa is good enough to advise us in answer to Rexford Newcomb's letter in February, that the mail address for CKOC is the Wentworth Radio Broadcasting Co., Ltd., Room 1120, Royal Connaught Hotel, Hamilton, Ont. It seems strange that Mr. Newcomb's

letters to Hamilton should have been returned.

WPOE, Patchogues, N. Y., is being deleted by the Radio Commission "for failure to make application for renewal of license." We are killing this station accordingly, but probably it will continue on the air "without benefit of Commission," the same as WHDL did. And WGM also.

"WJSV, about 40 miles from here, is loud and steady during the daytime, but at night it fades badly, and it uses 10,000 watts besides," reports Thomas Kelley, 27 Monumental Road, Dundalk, Md.

"In re: Chandler B. Stewart, page 23, January issue," postcards T. Kenneth Meadway, Route No. 1, Collegeville Pa., "that station with the rooster crowing is XEW, City of Mexico, 910 meters."

"KFBI sent me a very useful souvenir," says Louis Alexander, Jr., 10 South Ridgewood Ave., South Orange, N. J. But he'll have to go to Kansas to use it. It's a pass on all air lines owned, leased and operated by the owners of KFBI.

KSMR which was recently moved to Bakersfield with the call of KERN, advises F. Barker, Jr., 435 So. Marguerita Ave., Alhambra, Calif., that they have not been on the air for several weeks. We are not advised whether the new KERN is yet operating.

From Russell Heller, 42 N. 5th St., Emaus, Pa., "Tell Donald Brinkey that he heard station CMCY, Havana, on December 27th. I had this station on the 27th also and am waiting for verification."

"WHHN of Noonan, N. D., 1500 kcys., is off the air for good," advises O. Ingmar Oleson, Ambrose, N. D. "They did not obtain commercial license."

Betty's Gossip

(Continued from page 13)

time ago that they made their debut as broadcasters. In private life Burns and Allen are Mr. and Mrs. They first became acquainted nine years ago at Union Hill, N. J., when Burns was appearing in vaudeville with a partner, and Miss Allen was a member of an Irish repertoire company. His home was in New York, while she had come from San Francisco.

They had known each other but a short time when it was decided to form the team of Burns and Allen. As he wrote the material, their original act presented him as a comedian with the feminine half in the "straight" role. However, three years found the tables reversed with George playing the "straight man" for the young lady who was now his wife. It has remained this way ever since. In addition to playing in vaudeville throughout the country, the pair have been featured in several musical shows and have made twenty or more talkie shorts. Eddie Cantor terms this act the "best comedy team in vaudeville." Burns and Allen are featured with Guy Lombardo's orchestra over the Columbia network on Mondays at 10 p.m. EST.

Getting Rid of Noise

(Continued from page 2)

the rotor plates give grating sounds and sharp bursts of static. At times the set will howl or squeal. The hair-spring contact to the rotor plates may be loose or broken; grease may be on the bearings or wiping contact points. Clean the bearings and between the plates with cotton pipe cleaners to remove the accumulation of dust. The open backs of radio sets permit the entrance of quantities of unwanted dust.

Poor shielding of the cans covering tubes and coils may be responsible for hum, howls and squeals. There must be perfect grounding of these parts to the chassis at all times. Look for loose and poorly grounded contacts in all coil brackets when loud squeals and howls appear.

Filter condensers in powerpacks of electric sets will become defective and cause crackling and sputtering sounds, and the set may fail to operate at all. The obvious remedy is replacement of the troublesome unit.

Noise and distortion may come from a defective loud speaker. A cracked diaphragm or cone, or torn and imperfectly stretched material will cause the sound to be distorted. Rattling is due to poorly centered voice coil armatures in dynamic speakers.

Exhausted dry disc rectifiers of both A and B eliminators will cause excessive sputtering noises. Gassing storage batteries and B batteries with one or more corroded cells get very noisy and are very apt to be overlooked in the search for noise sources.

Defective Resistors

The by-pass condensers and resistances in electric sets cause sputtering and clicking noises. Open screen grid bypass condensers cause regenerative howls. Other crackling and frying sounds (not external static) are due to imperfect contacts between parts of the system having different potentials. This will occur when resistors are broken or defective and permit the current to pass at irregular intervals. Momentary short circuits; open grid bias resistors; short circuits across dust and dirt between terminals of high voltage condensers. chokes, jacks, etc., cause loud crackling sounds. Switches, rheostats, potentiometers, volume controls, plugs, jacks, and sockets, can all become noisy.

Blocking, the starting and stopping in a receiver, may be corrected by installing new grid condensers and leaks. Motorboating, with its characteristic "putt, putt," may be due to some regenerative feedback in the audio circuit and may be remedied by reducing the plate voltage—a complicated task in many cases for the novice. Regeneration howls and squeals occur in tuned radio frequency sets when the neutralizing condensers and coils get out of adjustment or repair.

Fluctuation in the 110-volt line voltage can cause annoying clicks in some sets when the receiver is tuned to high frequencies. Voltage surges and other interference noises can be eliminated by placing a pair of low resistance choke coils in each of the two wires leading to the set. Two fixed condensers of 1 mfd. capacity are connected in series between the two power wires but on the house side of the choke coils. A wire connecting the yoke between the two series condensers should be grounded. Such a compact filter device can be purchased and easily installed.

There are a number of devices sold to aid in noise suppression when that trouble is not caused by defective parts within the receiver. An aerial filter is said to prevent static noises and some interference; a tone control tunes out some of the unwanted stations and noises; an antenna adjusting coil assists tuning and checks some static; power line filters eliminate many of the line noises and interferences that enter the set over the lighting circuits: antenna selecting devices reduce interference between stations; substitute antennas tend to sharpen tuning; and special adapters for the new pentode tubes improve the qualities of reception by preventing many amplification noises.

Noise within a broadcast receiver due to defects and faulty apparatus cannot be overcome with these auxiliary devices, many of which have distinctive trade names that we cannot give here. Location, repair and replacement is the only remedy. And hum—the most baffling and annoying of all radio noises—is such an important subject that it will be the topic of separate article to be discussed next month.

Station KUKU

(Continued from page 6)

conducted a symphonic jazz orchestra and in this capacity one of his most remarkable accomplishments was an orchestration of "Yes, We Have No Bananas," which converted that lowly ditty into Ravel's Bolero.

Fluttering, palpitating, syrupy Mrs. Pennyfeather, who can solve anything from wrinkles to floor polish with perfect poise was perfected by Adeline Thomason through much experience in a stock company. Miss Thomason writes her own parts relating to the too-nice club woman and her ups and downs.

Mary McCoy is an excellent singer, appearing on many other programs. She sings on the American Album of Familiar Music program and was formerly on the Campbell's Soup Hour. Jack Arthur has sung for WOR as well as NBC. Eustice Wyatt is an English actor of wide experience.

"Making the Movies," a weekly series

burlesque sketches dealing with of events in a moving picture studio as imagined by Ray Knight, can be heard every Sunday at 9:45 p.m. EST over an NBC-WJZ network. Knight, already well known to listeners as the cuckoo comedian of nonsense and absurdity. prepares the scripts and plays the role of the moving picture director who "makes the movies." Mary McCoy, also of the cuckoos. is heard as the "movie Armbruster and his star." Robert orchestra supplies the musical numbers. This new program is sponsored by the Kelly-Springfield Tire Company.

On a Two Tube Set (Continued from page 3)

tubes, I have constructed it with the best of care, and I find it more sensitive than that of the factory type. The circuit is one especially for DX reception; others may say that reception from far corners of the world is done by multitube receivers. This may be true, but from my own DXing I find that it is also done by a good little set, careful DXing, and use of RADEX.

Their Time On the Air

Your	W	here Time	s Given as	
Zone	EST	CST	MST	PST
EST		Add 1 hr.	Add 2 hrs.	Add 3 hrs.
ČŠT	Subt 1 hr		Add 1 hr.	Add 2 hrs.
MST	Subt 2 hrs.	Subt. 1 hr.		Add 1 hr.
PST	Subt.3 hrs.	Subt.2 hrs.	Subt. 1 hr.	
Stale		City	Call K	cys. Watts
California	a Berl	kelev	Call K KRE 1	370 100
Sund	av. 10 a.m4	p.m.; 6:45-	9:45 p.m., P	ST.
Dails	/ 8-9 a.m.: 1	2-3 p.m.: 6-9	J D.M.	
Iowa	Boo ial DX progr	ne	KFGQ 1	310 100
Spec	ial DX progr	am. Tuesday	/s. 4-5 a.m.,	CST.
	Red	Oak	KICK I	420 100
Dail	v (ex. Sunday	7) 6 a.m1 p	.m.; 5-10 p.n	1., CST.
Maryland	i Bali	timore	WBAL 1	060 10000
Sunc	lay, 8 a.m7	30 p.m., ES	T.	
Mon	day, Wednes	day, Friday.	, 7:30 a.m4	p.m.
Tues	day, Thursd	ay, Saturday	7, 4-12 mid.	500 100
Michigan	Lan	apeer	WMFC 1	500 100 6 m m 1720
Dau	y (ex. Saturd	ay) 10 a.m	z p.m., a.au-	500 100 6 p.m.; 7:30-
10	undays on ti	01. 111 nm · T	hursdays off	at 6 pm)
Mantava	unuays on u	ianoll	KGEZ 1	310 100
Dail	v 9 am 0 n	m MST		
Now Jan	y, o a.mo p	enhath	WAWZ 1	350 250
Sund	iay, 6-9 a.m.	· 11-12·30 p.	m., 7:30-9 p	m. EST.
Mor	day, 6-9 a.m	.: 7:30-9 p.n).	
Tue	day 7.45-8.4	15 a.m. : 12 n	1:30 p.m.: '	Fest program
	6 a.m.	,	• •	• •
Wed	nesday, 6-9 a	.m.; 3-4 p.n	n.; 6-9 p.m.	
Thu	rsday, 6-9 a.	m.; 3-5:30 p.	.m.; 10:30-12	mid.
Frid	ay, 6-9 a.m.;	7:30-8:30 p	.m.	
Satu	rday, 7:45-8	:45 a.m.		
North D	akota Mi	not	KLPM	240 250
Sun	day, 9 a.m1	2 n.; 1:30-2:	30 p.m.; 5-8	p.m., CST.
Dai	y, 7 a.m1 p	.m.; 6-7:45 j	p.m.	

[30]

- State City Call Kcys. Watts College Station WTAW Texas 1120 500 Sunday, 11 a.m.-12 n., CST.
- Mon., Wed., Fri., 11 a.m.-12 n.; 8-9 p.m. consin Green Bay WHBY
- Green Bay Wisconsin 100 1200 Sunday, 10 a.m.-8 p.m., CST. Daily, 7 a.m.-10 p.m. CANADA
- British Columbia Vancouver CKFC 730 50VE9CS 6070 100 Sunday only, 10:45 a.m.-5:30 p.m.; 7:30-9 p.m., PST.
- (VE9CS on till 10:30 p.m.) Nova Scotia Halifax VCX 690 100 Daily, 8 a.m.-1:30 p.m. AST. (Atlantic time is one hour ahead of Eastern.)
- Newfoundland St. Johns VOAS 810 75 Daily (ex. Sunday) 11 a.m.-12 n.; 4-5:30 p.m., New-1
 - foundland time. (Saturdays also on from 7:45-9.30 p.m.)
 - (Newfoundland time is 11/2 hours ahead of Eastern.)

Reported by Readers

- Birmingham WBRC Alabama 930 500Sunday, 10 a.m.-11:30 p.m., CST.
- Daily, 7 a.m.-11 p.m. . of Col. Washington Dist. of Col. WOI 1310 100 Daily, 7 a.m.-1 p.m.; 3-9 p.m., EST.
- Pensacola WCOA Florida 1340 500 Daily, 8:30 a.m.-10 p.m., CST
- WDAE Tampa 1220 1000 Daily, 8 a.m.-12 mid., EST.
- Illinois Chicago WAAF 920 500 Daily, 6 a.m.-local sunset. CST.
 - WGES 1360 500 Sunday, 8-10:15 a.m.; 11:45 a.m.-1 p.m.; 3:30-7 p.m.; 11 p.m.-2 a.m., CST.
 - 11 p.m.-2 a.m., 004. Saturday, 8:30-11 a.m.; 3:30-7 p.m.; 11 p.m.-2 a.m. Balance of week, 8:30-11 a.m.; 3:30-8 p.m. Urbana WILL 890 2:
 - 250
 - Sunday, 9:30-10:30 a.m., CST.

 - Saturday, 11 a.m.-12:15 p.m. (First Saturday night of each month, 12 mid.-2 a.m.) Balance of week, 8-9 a.m.; 11 a.m.-12:15 p.m.; 5-6 p.m. Zion WCBD 1080 5000
- Sunday, 8:30-10:45 a.m.; 2:30-3:45 p.m., CST. Tuesday, 1-1:30 p.m. Thursday, 1:30-3 p.m. sachusetts Worcester WORC 1200 Massachusetts 100 Daily, 8:45 a.m.-12 mid., EST
- Minnesota Northfield KFMX 12501000 Sunday, 7-8 p.m., CST. Daily, 10:15-10:35 a.m. (Wed. and Fri., 8-9 p.m.)
 - 1250 1000
 - Daily 10:10-10:05 a.m. (Weak and Fill, J.# WCAL 122
 Sunday, 8:15-9:30 a.m.; 3-4 p.m., CST.
 Daily, 9:45-10:15 a.m. (Monday, 8-10 p.m.)
 St. Faul. WLB 125 1250 1000
 - Monday, 12:30-1 p.m.; 7-8 p.m., CST. Tuesday and Thursday, 8-9 p.m.
- Wednesday and Franslary, 65 p.m. Wednesday, 10:35-11:30 a.m.; 12:30-1 p.m. Friday, 12:30-1 p.m.; 4-5 p.m. VJersey Camden WCAM 12:
- New Jersey 1280 500 Sunday, 10:15 a.m.-12:30 p.m., EST. Sunday, 10:15 a.m.-12:30 p.m., E51, Monday, 11:30 a.m.-12 n.; 2-5 p.m.; 8-12 mid. Tuesday and Thursday, 2-5 p.m. Wednesday, 11:30 a.m.-12 n.; 2-5 p.m.; 9-12 mid. Friday, 11:30 a.m.-12 n.; 2-5 p.m.; 9-12 mid. v York Ithaca WEAI 1270
- New York 1000 Daily. ex. Sunday. 12 n.-1 p.m., EST. Daily, ex. Saturday and Sunday, 5-6 p.m. Utica WIBX 1200 100 Sunday, 10:50 a.m.-9 p.m., EST, Daily, 7 a.m.-10:30 p.m.
- Oregon Eugene KORE 1420 100 Sunday, 10 a.m.-9 p.m., PST. Daily, 7:45 a.m.-9 p.m.
- Pennsylvania York WORK 1000 1000 Daily, 6 a.m.-6:45 p.m., EST.
- Burlington WCAX Vermont 1200 100
 - Daily, ex. Sunday, 12 n.-1 p.m., EST. Monday, Wednesday, Fri., 6-9 p.m.
 - CUBA
 - Havana CMC 842 500
 - Daily (ex. Tuesday and Saturday). 7-11 p.m., EST CMCD 925 250
 - Daily, 12 n.-3 p.m.; 9 p.m.-12 mid., EST.
 - (Saturday on from 11:30 p.m.-3 a.m.)

Classified Index to Programs Time in Eastern Standard

BANDS

Carborundum, 9 p.m., Saturday. Pryor's, 9 p.m., Saturday.

CHILDREN

Lady Next Door. 4:30 p.m., Daily, except Sunday. Orphan Annie, 5:45 and 6:45 p.m., Daily, except Sunday. Raising Junior. 6 p.m., Daily, except Wednesday. Skippy, 5:15 p.m., Daily, except Sunday.

CONCERTS

- Howard Barlow. 11 p.m., Daily, except Sat. and Sun.
- Major Bowes, 11:30 a.m., Sunday.
- Cities Service. 8 p.m., Friday. Civic Concert, 8 p.m., Saturday.
- Civic Concert, 8 p.m., Saturday, Davey Tree, 4:30 p.m., Sunday, Walter Damrosch 1 p.m., Sunday, and 11 a.m., Friday, Familiar Musie, 9:15 p.m., Sunday, Golden String, 10:15 p.m., Sunday, L'Heure Exquise, 7 p.m., Sunday, Walter Logan, 1:45 p.m., Sunday, Old Singing Master, 10:15 p.m., Sunday, Welderf-Astoria 6 n.m. Daily excent Sunday,

- Waldorf-Astoria, 6 p.m., Daily, except Sunday.

DANCE BANDS

- Gus Arnheim, 12 mid., Tuesday. Ben Bernie, 9 p.m., Tuesday, 12 mid., Monday and Friday. Columbian, 10 p.m., Monday. Coon-Sanders, 12 mid., Wed., Thurs., Fri., Sat. Countess d'Orsay, 8:30 p.m., Saturday. Jeek Denny, 9 p.m. Suday.

- Jack Denny, 9 p.m., Sunday. Eddie Duchin, 12 mid., Wednesday and Sunday.
- Happy-Rose Orchestra, 10 p.m., Tues., Wed. and Sat. Isham Jones, 12:30 a.m., Saturday.
- Wayne King, 3 p.m., Sunday and 5:30 p.m., Wednesday, Howard Launin, 7:15 p.m., Daily, except Sat. and Sun. Baron Lee Orchestra, 11:45 p.m., Monday and Thursday.

- Guy Lombardo, 8:15 and 10 p.m., Monday; 12 mid. Thurs-Guy Lombardo, 815 and 10 p.m., Monday, 12 md. 1 uur day; 7:30 p.m., Saturday. Vincent Lopez, 11:30 p.m., Wednesday; 11 p.m., Friday. Lucky Strike. 10 p.m., Tuesday, Thursday, Saturday. Abe Lyman, 8:15 p.m., Tuesday, Thursday, Saturday. Maytag, 9 p.m., Monday. Geo. Olsen, 11:30 p.m., Yuesday, Thursday, Friday. Don Redman, 11:35 p.m., Sat.; 11:30 p.m., Wed. Joe Reichman, 12:30 a.m., Friday.

- Joe Reichman, 12:30 a.m., Friday.
- Freddie Rich, 7:15 p.m., Tuesday. Buddy Rogers' Orchestra, 12 mid., Tues.; 11:30 p.m., Sat Noble Sissle, 12:30 a.m., Monday. Hardel Strue 5:15 p.m. Wodwarday.
- Harold Stern, 6:15 p.m., Wednesday, Rudy Vallee, 8 p.m., Thursday, Club Valspar, 9:30 p.m., Saturday,

- Paul Whiteman, 10 p.m., Friday.

DIALOG

- Amos'n' Andy, 7 p.m., and 11 p.m., Daily, except Sunday. Big Time, 8 p.m., Wednesday. Clara, Lu and Em. 10:15 a.m., Daily, except Sat. and Sun. Phil Cook, 8:15 and 9:15 a.m., Daily, except Sunday. Easy Aces, 7:30 p.m., Mon., Wed. and Fri. (9:30 WGN). Gene and Glenn, 8 and 9 a.m., Daily, except Sunday. The Coldbarra 2 de a.m., Daily, except Sunday.

- The Goldbergs, 7:45 p.m., Daily, except Sunday. Jones and Hare, 7:45 p.m., and 12:30 a.m., Daily, except
- Saturday and Sunday. KUKU Club, 5:30 p.m., Saturday. Making Movies, Ray Knight, 9:45 p.m., Sunday.

- Myrt and Marge, 7 and 10:45 p.m., Daily, except Saturday and Sunday
- O'Leary Irish Minstrels, 7 p.m., Saturday. Rav Perkins, 6:30 p.m., Tuesday.

- Real Folks, 5 p.m., Sunday. Royal Vagabonds, 6:30 p.m., Monday, Wednesday, Friday. Sinclair Weiner Minstrels, 9 p.m., Saturday.
- [31]

Sisters of Skillet, 8:45 p.m., Tuesday, Thursday, Friday. Stebbins Boys, 7:30 p.m., and 12:45 a.m., Daily, Except Saturday and Sunday.

Col. Stoopnagle and Budd., 8:45 p.m., Sun., Mond., Wed. Tastyeast Jesters, 7:15 p.m., Monday and Saturday. Three Bakers, 7:30 p.m., Sunday.

DRAMATIC

DRAMATIC Arabesque, 9 p.m., Monday, Blue Coal Revue, 5:30 p.m., Sunday, Canada's Mounted, 10 p.m., Monday, Carcless Love, 12:30 p.m., Sunday, Orime Club, 9:30 p.m., Tuesday and Wednesday, Danger Fighters, 8 p.m., Saturday, First Nighter, 9:30 p.m., Saturday, First Nighter, 9:30 p.m., Sturday, Household Finance, 9 p.m., Tuesday, "K-7," 6:30 p.m., Shurday, Love Story, 9:30 p.m., Thursday, Moonehine and Honeysuckle, 2:30 p.m., Sunday,

Moonshine and Honeysuckle, 2:30 p.m., Sunday.

Rin-Tin-Tin, 8:15 p.m., Thursday

Sherlock Holmes, 9 p.m., Wed.; 9:30 p.m., Thurs.; 12 mid. Mon

Silver Flute, 1:30 p.m., Sunday, Soconyland, 8 p.m., Monday, Today and Yesterday, 8:30 p.m., Friday, True Story, 8:30 p.m., Tuesday.

ORGAN

Jesse Crawford, 11:15 p.m., Wed., 11:30 p.m., Sun., Mon.; 11 p.m., Tues., Thurs., Sat. Ann Leaf, 3 and 9:30 p.m., Sun.; 3:15 and 9:30 p.m., Wed. Melo-Clarion Twins, 8:15 p.m., Wednesday.

PIANO

Fray-Braggiotti, 8 p.m., Saturday. Ernest Hutcheson, 10:45 p.m., Sunday.

POPULAR PROGRAMS

A. & P. Gypsies, 9 p.m., Monday; 10 p.m., Thursday. A. & P. Gypsies, 9 p.m., Monday, ID Armour Program, 9:30 p.m., Friday. Beau Bachelor. 10 p.m., Friday. Big Six, 9 p.m., Thursday. Bright Spot, 2:15 p.m., Sunday. Buick Revelers, 9:45 p.m., Sunday. Chase & Sanborn, 8 p.m., Sunday. Classes (Disk 9 p. m. Friday. Cliquot Chub, 9 p.m., Friday. Coca Cola, 10 p.m., Wednesday. Collier's Hour. 8:15 p.m., Sunday. Contented Program, 8 p.m., Monday. Enna Jettick. 8 p.m., Sunday. Evening in Paris, 9:30 p.m., Monday. Farm and Home, 12:30 p.m., Daily, except Sunday. Evening in Faris, 9:30 p.m., Monday.
Farm and Home, 12:30 p.m., Daily, except Sunday.
Priendly Five, 9:45 p.m., Friday.
Jack Frostilla Rehearsal, 9:15 p.m., Monday.
Frostilla Rehearsal, 9:15 p.m., Monday.
Fullet Man, 9:30 p.m., Tuesday.
The Gauchos, 11:30 p.m., Sunday.
G.E. Circle, noon Daily, except Saturday and Sunday.
Geardine, 8:45 p.m., Tuesday.
Gody ear, 8:30 p.m., Wednesday.
God Medal, 9 p.m., Tuesday.
God Medal, 9 p.m., Suday.
Hind's Romance, 7:15 p.m., Thursday.
Hindra Komance, 7:15 p.m., Thursday.
International Revue, 10:30 p.m., Sunday.
International Revue, 10:30 p.m., Sunday.
Manbattan Screnaders, 7:15 p.m., Thursday.
Maxwell House, 7:15 and 11:15 p.m., Mon., Wed., Fri; 9:30 p.m., Thursday.
Motioliol, 9:30 p.m., Wednesday.
Motioliol, 9:30 p.m., Wednesday.
Math Satisfies, 10:30 p.m., Sunday.
Math Satisfies, 10:30 p.m., Tuesday.
Motioliol, 9:30 p.m., Wednesday.
Mastel's Portex, 5:13 p.m., Tuesday.
Motioliol, 9:30 p.m., Wednesday.

10 p.m., Wed. and Sat. Nestle's Program, 8 p.m., Friday. Parade of States, 9:30 p.m., Monday. Pennzoil Parade, 8 and 11:30 p.m., Sunday.

Pillsbury Pageant, 9 p.m., Friday.

Pond's Program, 9:30 p.m., Friday.

Reis & Dunn, 6:15 p.m., Tuesday and Thursday RKO Theatre, 10:30 p.m., Friday. San Felice. 9:45 p.m., Monday and Wednesday. Sheaffer Revue, 4:30 p.m., Sunday. Simoniz Guardsmen, 5:30 p.m., Sunday. Smith Bross, 8:30 p.m., Friday, 9:30 p.m., Saturday. Society's Playboy, 10:30 p.m., Wednesday. Sylvanians, 7:45 p.m., Wednesday. To the Ladies, 9:30 p.m., Friday. Trumpeters, 10 p.m., Thursday. Frampeters, 10 p.m., 1 hursday.
Voice of Thousand Shades, 10 p.m., Tuesday.
Waves of Melody, 10:30 p.m., Monday and Friday.
Willys-Overland. 7 p.m., Sunday.
Yardley Program, 2 p.m., Sunday.
Yeast Foamers, 2:30 p.m., Sunday.

OUARTETTES

Bayuk Stags, 9:15 p.m., Sunday, Bayuk Stags, 9, 19 J. m., Suhday, Four Clubmen, 8:30 p.m., Monday. Dixie Spirituals, 8 p.m., Thursday, Eton Boys, 6 p.m., Sunday, Heel Huggers, 8:30 p.m., Tuesday, Humber Jacks, 7 p.m., Monday and Thursday, Willy Breichers, 9 p.m., Monday and Thursday, Mills Brothers, 9 p.m., Monday and Thursday.

RELIGIOUS

Cathedral Hour, 1 p.m., Sunday. Catholic Hour, 6 p.m., Sunday. Chicago Knights, 5:30 p.m., Sunday. Church of the Air, 2:30 p.m., Sunday. Dr. Fosdick, 5 p.m., Sunday. Hymn Sing, 7 p.m., Tuesday. National Youth Conference, 3 p.m., Sunday. Seth Parker, 10:45 p.m., Sunday.

SINGERS

Ben Alley, 11:45 a.m., Daily, except Wed., Sat., Sun.

Den Aney, 11:30 a.m., Daily, except Wed., Sat., Sun.
Belle Baker, 9 p.m., Sunday.
Irene Beasley, 9:15 p.m., Thursday; 6 p.m., Sunday.
Connie Boswell, 6 p.m., Wednesday; 5:45 p.m., Saturday.
Boswell Sister, 10:30 p.m., Monday and Thursday.
Bing Crosby, 6:45 p.m., Mon., Wed., Fri.; 11:45 p.m., Thurs.

Vaughn de Leath, 6:15 p.m., Monday; 8:45 p.m., Saturday. Morton Downey. 7:45 and 11:30 p.m., Daily, except Sun. Ruth Etling, 10:00 p.m., Wednesday and Saturday. Sylvia Froos, 7:30 p.m., Tuesday and Thursday. Alex Gray, 10:30 p.m., Tuesday and Friday. Tito Guizar, 11:30 p.m., Sun.; 5 p.m., Thurs.; 9:30 p.m., Dechuar, 11:30 p.m., Sun.; 5 p.m., Thurs.; 9:30 p.m.,

Friday

Elsie Janis, 7:15 p.m., Wednesday and Friday.

Elsie Janis, 7:15 p.m., Wednesday and Friday. Arthur Jarrett, 10:45 p.m., Thursday and Saturday. Alice Joy, 7:30 and 11:15 p.m., Daily, except Sunday. Modern Male Chorus, 10:15 p.m., Tuesday. Pickens Sisters, 10:45 p.m., Daily, except Sat. and Sun. Salon Singers, 7 p.m., Friday. Sanderson-Crumit, 8 p.m., Tuesday; 9 p.m., Thursday. Singing Sam, 8:15 p.m., Monday, Wednesday and Friday. Kate Smith, 8:30 p.m., Monday, Wednesday and Friday. Kate Smith, 8:30 p.m., Monday, Wednesday and Friday.

Sons of Eli, 2 p.m., Sunday

Street Singer, 10:45 p.m., Mon., Wed.; 12:45 p.m., Sun.; 9 p.m., Fri.

Lawrence Tibbett. 8:30 p.m., and 11:30 p.m., Monday.

TALKS

TALKS Believe It or Not, 7:15 p.m., Wednesday and Friday. Halsey-Stewart, 9 p.m., Wednesday. Hoosier Editor, 8:30 p.m., Saturday. Kaltenborn, 6 p.m., Monday. David Lawrence, 9 p.m., Sunday and Thursday. Great Personalitics, 9:30 p.m., Tuesday. Political Situation, 7 p.m., Saturday. Political Situation, 7 p.m., Saturday. Radio in Education, 7 and 8:30 p.m., Saturday. Nellie Revell, 11 p.m., Wednesday. Safeguard Society, 7:15 p.m., Saturday. Margaret Santry, 8 p.m., Daily, except Sat. and Sun. Lowell Thomas, 6:45 p.m., Daily, except Sat. and Sun. Travelog. 4 p.m., Sunday Travelog. 4 p.m., Sunday Count Von Luckner, 9:30 p.m., Sunday.

[32]

WHAT'S ON THE AIR TONIGHT?

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

COLUMBIA (C)_____WABC

NATIONAL, Red (R) WEAF

NATIONAL, Blue (B) WJZ

Dial	Call	Dial
	Dial	Dial Call

MONDAY

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

WEIN WCAE WCSH WEAF WEEL WFI WFLA WGY WIS WJAR WJAX WPTF WRC WRVA WSAI WTAG WTAM WTIC WWJ WWNC

E-8:15 a.m., C-7:15, M-6:15, P-5:15 B — Phil Cook, Quaker Man KDKA WBAL WBZA WGAR WJR WJZ WLW

E-8:30 a.m., C-7:30, M-6:30, P-5:30 R - Cheerio

WCAE WCFL WCKY WCSH WDAF WEAF WEEI WFBR WFI WFLA WFI WHAS WIS WGY WIOD WJAR WJAX WKY WOAI WOW WRVA WSB WSM WJDX WPTF WRC WSMB WTAG WTAM WTIC WWJ

E-9:00 a.m., C-8:00, M-7:00, P-6:00 R — Gene and Glenn KFYR KPRC KS KFYR KPRC KSD KSTP KVOO WAPI WDAF WDAY WEBC WFAA WHAS WHO WIBA WJDX WKY WLS WMC WOAI WOC WOW WSB WSM

WSMB WTAM WTMJ E-9:15 a.m., C-8:15, M-7:15, P-6:15

WREN WSB WSM WSMB WTMJ

E-10:15 a.m., C-9:15, M-8:15, P-7:15 B — Clara, Lu and Em KDKA KFYR KOA KDKA KFYR KOA KOIL KPRC KSL KVOO KWK WAPI WBAL WBAP WDAY WEBC WFLA WGAR WHAM WHAS WIBA WIOD WIS WJAX WJDX WJR WJZ WKY WJAX WJDA WJR "JZ "RA WMAQ WMC WOAI WPTF WREN WRVA WSB WSM WSMB WTMJ WWNC

E-11:45 a.m., C-10:45, M-9:45, P-8:45 C – Ben Alley, Tenor CFRB KDYL KFH KFJF KLZ KMBC KMOX KOH KSCI KTSA KVOR WABC WACO WBCM WBT WCAH WCAO WCAU WDBO WDRC WEAN WFBL WHEC WHP WIBW WISN WJAS WKBN WKBW WLAP WLBW WLBZ WMAL WMT WNAC WOKO WORC WPG WQAM WREC WSPD WTAQ WTAR WTOC WWVA WXYZ

E-12:00, C-11:00, M-10:00, P-9:00 R-D General Electric Circle KFI KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KTAR KTHS KVOO WAPI WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WENR WFAA WFBR WFLA WGY WIBA WIOD WIS WJAR WJAX WJDX WKY WLIT

Call	Dial	Call	Dial

WMC WOAI WOW WPTF WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ

E-12:30 p.m., C-11:30, M-10:30, P-9:30 B - Farm and Home Hour

KDKA KFYR KOA KOIL KPRC KSTP KTHS KVOO KWK KYW WAPI WBAL WBZA WCKY WDAF WAPI WBAL WBZA WCKY WDAF WDAY WEBC WFLA WGAR WHAM WHAS WHO WIBA WIOD WJAX WJDX WJOX WJW WWC WOC WOW WPTF WRC WREN WRVA WSB WSM WSMB

E-4:30 p.m., C-3:30, M-2:30, P-1:30 R — Lady Next Door WBEN WCSH WEAF WEEI WENR WFBR WJAR WRC WTAG WTAM WWJ

E-5:15 p.m., C-4:15, M-3:15, P-2:15 R — Skippy. Children's Program WBEN WCAE WCSH WEAF WEEI WFBR WGY WJAR WLIT WRC WSAI WTAG WTAM WTIC WWJ

E-5:45 p.m., C-4:45, M-3:45, P-2:45 B — Little Orphan Annie WBAL WFLA WGAR WHAM WIOD WJAX WJZ WLW WPTF WRVA

E-6:00 p.m., C-5:00, M-4:00, P-3:00 B — Raising Junior. See Sunday. R - Waldorf-Astoria Orchestra

WRC WSM WTAM

WRC WSM WTAM C — Current Events, Kaltenborn KFH KFJF KOH KRLD KSCJ KTRH KVOR WAAB WABC WACO WADC WBT WDAE WDBO WDRC WFBL WHP WKRC WLAP WLBW WLBZ WMAL WOKO WORC WQAM WREC WSPD WTAQ WTAR WTOC

E-6:15 p.m., C-5:15, M-4:15, P-3:15 — Vaughn de Leath **K**FJF KFJF KOH KRLD KSCJ KVOR WAAB WABC WACO WADC WBRC WAAD WABC WABC WABC WABC WBT WCAO WDAE WDBO WDRC WFAN WFBL WGR WHEC WHK WHP WIP WISN WLBW WLBZ WMAL WOKO WORC WQAM WREC WSPD WTAQ QTAR WTOC WWVA

E-6:30 p.m., C-5:30, M-4:30, P-3:30 B - Royal Vagabonds, Ward Wilson KOIL KWK WAPI WBAL WHAM WHAS WJZ WLW WMAQ WOAI WMAQ WOAI WREN WSB WTMJ

E-6:45 p.m., C-5:45, M-4:45, P-3:45

C — Bing Crosby CFRB KFAB KFH KFJF KLZ KMOX KOH KRAD AFA KIJI ALZ KAWA KOH KRLD KYOR WAAB WABC WACO WADC WBBM WBCM WBIG WBRC WBT WCAH WDBJ WDOD WDSU WFAN WFBL WFBM WGL WHEC WHP WIP WISN WJAS

WKBN WKBW WLAC WLAP WLBW WLBZ WMT WOKO WQAM WREC WSBT WTAQ WTOC WWVA

B - Lowell Thomas, Literary Digest KDKA WBBL WBZA WHAM WJZ WLW

B — Little Orphan Annie KFYR KOIL KPRC KSTP KWK WDAY WEBC WENR WKY WOAI

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Myrt and Marge KMOX WABC WADC WCAO WCAU WDRC WFBL WGR WJAS WKRC WMAL WNAC WOKO WSPD WWVA

R - Vermont Lumber Jacks

R — Vermont Lumber Jacks WBEN WCAE WCSH WEAF WEEI WENR WFBR WGY WJAR WLIT WSAI WTAG WTIC WWJ B — Pepsodent, Amos 'n' Andy CFCF CKGW KDKA WBAL WBZA WCKY WFLA WGAR WHAM WIOD

WJAX WJR WJZ WLW WPTF WRC

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Maxwell House Program WABC WADC WBT WCAO WCAU

WDAE WDBJ WDBO WDRC WEAN WDAE WDBJ WDBO WDRC WEAN WFBL WGR WJAS WKRC WMAL WNAC WOKO WQAM WSPD WTAR WTOC

R - Campbell, Howard Lannin Orch. CFCF CKGW WBEN WCSH WDAF WEAF WENR WFBR WGY WHO WJAR WLIT WOC WOW WRC WSAI WTAG WTAM WWJ

B — Tasiyeast Jesters KDKA WBAL WBZA WCKY WGAR WJZ WREN

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

C — Easy Aces KMBC KMOX WABC WCAO WCCO WPBM WGR WHK WJAS WKRC WMAL WNAC WOKO WCAU

N MAL WNAC WORD WCAU R — Prince Albert, Alice Joy KECA KFYR KGA KJR KOA KPO KSL KSTP KTAR WBEN WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFLA WGY WIBA WIO WIS WJAR WJAX WKY WLIT WOAI WPTF WRC WRVA WSAI WTAG WTAM WTMJ WWJ WWNC B — Swift, Stebbins Boys KOIL KSTP KWK W

WBAL WBZA WENR WFAA WGAR WHAM WJZ WKY WMC WOAI WREN WSB WSM WSMB

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C -- Camel, Morton Downey

C -- Cannel, Morton Downey KFH KFJF KLRA KMBC KMOX KRLD KSCJ KTRH WABC WACO WADC WBIG WBRC WBT WCAH WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WGR WGST WHEC WHK WHP WIBW WISN WJAS WKRC WLAC WLAP WLBZ WMAL WMT WNAC WNAX WNOX WMT WNAC WNAX WNOX WOKO

WORC WQAM WREC WSPD WTAR WTOC WWVA WXYZ

R — The Goldbergs WBEN WCAE WCSH WDAF WEAF WENR WGY WHO WJAR WOC WOW WSAI WTAM WWJ

B — Jones and Hare

KDKA KOIL KPRC KWK WBAL WFAA WFLA WGAR WHAM WHAS WIS WJAX WJDX WJZ WKY WMAQ WMC WPTF WREN WSB WSM WSMB WWNC

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Bath Club, Margaret Santry KMBC KMOX WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WGR WGST WHK WISN WJAS WKRC WMAL WNAC WOKO WSPD WXYZ

R — Soconyland Sketches WBEN WCSH WEEI WGY WJAR WTAG WTIC WEAF

B — The Contented Program CKGW KOIL KPRC KWK KYW WBAL WCKY WDAY WFLA WHAS WIBA WIOD WJAX WJR WJZ WREN WRVA WSB WTMJ WWNC

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Singin Sam, Barbasol Man KMBC KMOX WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WHK WJAS WKBW WKRC WMAL WNAC WOKO WSPD

C – Guy Lombardo and Orchestra KLRA WBIG WBRC WBT WDAE WDBJ WDBO WDOD WDSU WFIW WGST WLAC WODX WPG WQAM WREC WTAR WTOC

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — La Palina, Kate Smith KMBC KMOX WABC WADC WBCM

WCAH WCAO WCAU WCCO WFBL WFBM WGN WGR WHEC WHK WISN WJAS WKRC WLAP WMAL WSPD WXYZ

C - Four Clubmen, Quartette KSCJ WAAB WBCM WDAE WDRC

R - Firestone, Lawrence Tibbett CFCF CKGW KPRC KSD KTHS KVOO WBEN WCAE WCSH WDAF WEAF WEEI WFAA WFBR WFLA WGY WHAS WHO WIOD WIS WGY WHAS WIDX WKY WJAR WJAX WJDX WKY WOAI WOC WLIT WMAQ WMC WRC WRVA WOAI WSAI WOW WSB WSM WSMB WTAG WTAM WTIC WWJ

WIMD WIAM WIAM WIAM WIC WWS B \rightarrow Death Valley Days KDKA KFI KFSD KFYR KGO KGW KHQ KOA KOIL KOMO KSL KSTP KTAR KWK WBAL WBZA WCKY WEBC WGAR WHAM WIBA WJZ WLS WREN

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C-Col. Stoopnagle and Budd CFRB KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WGR WHK WJAS WNAC WOWO WSPD WXYZ

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Vapez, Mills Bros. KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHK WJAS WKBW WKRC WMAL WNAC WOKO WOWO WSPD WXYZ C — Arabesque, Desert Play WBCM WBRC WBT WDAE WDBO WQAM WREC WTAR WTOC

KSD WBEN WCAE WCSH WDAF WEAF WEEI WGY WHO WJAR WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

WAA WIAM WIAM WIC WW B-Maying Orchesita KDKA KYI KFYR KGO KGW KHQ KOA KOMO KPRC KSL KSTP KVOO KWK WBAL WBZA WDAY WEBC WFAA WGAR WHAM WJR WJZ WKY WLS WMC WOAL WREN

E-9:15 p.m., C-8:15, M-7:15, P-6:15 C — Frostilla Broadcast Rehearsal CFRB KNOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WJAS WKBW WKRC WMAL WNAC WOKO WOWO WRR WSPD WXYZ

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

C-Bourjois, Evening in Paris KMBC KMOX WABC WADC WBT WCAO WCAU WEAN WFBL WGN WHEC WHK WJAS WKBW WKRC WMAL WMT WNAC WOWO WSPD R - Parade of the States

R — Parade of the States KFI KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP WBEN WCAE WCSH WDAF WEAF WEEI WENR WFAA WGY WHAS WHO WJAR WJAX WKY WLIT WMC WOAI WOC WOW WRC WSAI WSB WSM WTAG WTAM WTIC WTMJ WWJ PS. Storie Wwwy's Name

B — Story of Women's Names KOIL KWK WBAL WGAR WHAM WJR WJZ WLW WREN KYW

E-9:45 p.m., C-8:45, M-7:45, P-6:45 B — San Felice, Bob Nolan KDKA KOIL WBAL WGAR WHAM

WJR WJZ WMAQ WREN

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C — Robert Burns, Lombardo

C - Kobert Burns, Lomdaroo KDYL KFJF KFPC KFRC KHJ KLZ KMBC KMOX KOIN KOL KRLD KTRH KTSA WABC WADC WBBM WCAO WCAU WCCO WDRC WEAN WFBL WFBM WHK WJAS WKBW WKRC WMAL WNAC WOWO WSPD WXYZ

C - The Columbians, Freddie Rich WBCM WBRC WBT WDBO WREC

WTAR WTOC

R ---- National Radio Forum

KFSD KFYR KGHL KGIR KGO KGW KOMO KPRC KSD KSL KGW KOMO KPRC KSD KŠL KSTP KTAR WBAP WBEN WCAE WCSH WDAY WEAF WEBC WEEI WENR WFLA WGY WHAS WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMC WOC WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ WWNC B - Wib Cond's Mounted

B — With Canada's Mounted KDKA KWK WBAL WBZA WGAR WHAM WJR WJZ WLW WMAQ WREN

WHEN E-10:30 p.m., C-9:30, M-8:30, P-7:30 C-Music That Satisfies RDYL KFH KFJF KFPY KFRC KGB KHJ KLRA KLZ KMBC KMOX KOH KOIN KOL KSCJ KTRH KTSA WAAB WABC WACC WADC WBBM WBCM WBRC WBT WCAH WCAO WCOU WCCO WDAE WDBJ WDBO WDOD WDCC WDSU WEAN WFBL WFBM WGST WHEC WHK WHP WIBW WISN WJAS WKBC WLAC WLBW WLBZ WMAL WMT WNAX WNOX WOKO WORC WOWO WFG WQAM WREC WRP WPG WQAM WREC WRR WSPD WTAR WTOC WXYZ

R — Mr. Bones and Company WBEN WCAE WCSH WEAF WEEI WENR WFBR WFLA WGY WHO WIS WJAR WLIT WOC WRC WSAI WTAG WWJ WWNC

B — Waves of Melody CFCF CKGW KDKA KOIL KWK KYW WBAL WBZA WCKY WGAR WHAM WJR WJZ WREN

E-10:45 p.m., C-9:45, M-8:45, P-7:45 C — Street Singer

C-Street Singer CFRB KFH KGB WAAB WABC WADC WBRC WBT WCAO WCAU WDAE WBBO WDRC WEAN WFBL WHEC WHP WJAS WKBW WLBZ WMAL WMT WOKO WORC WPG WQAM WREC WTAR WTOC

C

AM WREC ... - Myrt and Marge - Myrt and Marge - Myrt AFRC KHJ - WBRM W KDYL KFPY KFRC KHJ KLZ KMBC KOIN KOL WBBM WCCO WLAP WXYZ

B - Pickens Sisters

KDKA KWK WBAL WJR WJZ E-11:00 p.m., C-10:00, M-9:00, P-8:00

E-11:00 p.m., C-10:00, M-9:00, P-8:00 E-11:00 p.m., C-10:00, M-9:00, P-8:00 C — Howard Barlow Symphony CFRB KDYL KFAB KFH KFJF KFPY KLRA KLZ KMBC KOH KOIN KOL KTSA KVOR WAAB WABC WACO WACO WACO WORC WBT WCAH WCAO WCCO WDAE WBT WCAH WCAO WCCO WDAE WBT WCAH WCAO WCO WDAE WFAN WFBL WFBM WHEC WHP WIBW WIP WISN WKBH WKBN WKBW WLAC WLAP WLBW WLBZ WMBD WAT WNAX WNOX WOKO WORC WOWO WQAM WREC WSBT WSPD WTAR WTOC WXYZ B — Pepsodent, Amos 'n 'Andy

WSPD W TAR W FUC W XYZ B -- Pepsodent, Amos'n' Andy KFI KFSD KGO KGW KHQ KOA KOIL KOMO KPRC KSL KSTP KTHS KWK WBAP WDAF WEBC WENR WHAS WIBA WJDX WKY WMAQ WMC WOAI WREN WSB WSM WSMB WTMJ

E-11:15 p.m., C-10:15, M-9:15, P-8:15 C — Maxwell House Program KFAB KFH KFJF KLRA KMBC KMOX KTRH KTSA WACO WBRC WCCO WDOD WFIW WGN WGST WLAC WLAP WNOX WOWO WREC WRR

WAR **R** — Prince Albert, Alice Joy KECA KEX KGA KGIR KJR KOA KPO KPRC KSD KTAR KTHS WAPI WBAP WENR WHAS WHO WJDX WMC WOC WOW WSB WSM

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Camel, Morton Downey KDYL KFPY KLZ KOH KOIN KOL KTSA WGN WOWO

R – Jesse Crawford, Organ KSD WCKY WEAF WJAR WRC WSM WTIC WWJ

R — Firestone, Lawrence Tibbett KFI KFSD KFYR KGHL KGIR KGO KGU KGW KHQ KOA KOMO KSL KTAR WEBC WIBA WTMJ

B - Jane Froman and Orchestra KOIL KPRC WBAL WENR WJZ WREN

E-11:45 p.m., C-10:45, M-9:45, P-8:45

R — Baron Lee and Orchestra KSD WBEN WCKY WEAF WEEI WGY WJAR WMAQ WRC WTIC WWJ

E-12:00 m., C-11:00, M-10:00, P-9:00 C — Ben Bernie, Orchestra KDYL KFH KLZ KOH KSCJ KTRH KVOR WABC WCAU WCCO WEAN

Monday-Continued

WFBL WHP WIBW WISN WKBN WKBW WKRC WLAP WLBW WMT WNAC WNAX WOKO WSPD R — Sherlock Holmes

KFI KFSD KGO KGW KHQ KOA KOMO KSL KTAR

E-12:30 a.m., C-11:30, M-10:30, P-9:30 C – Noble Sissle, Park Central Orch KDYL KFH KLZ KMBC KOH KSCJ KTRH KVOR WABC WCAU WCCO WEAN WFBL WHP WIBW WISN WKBN WKBW WLAP WLBW WNAC WNAX WOKO WSPD

B -Jones and Hare KFI KFSD KGO KGW KHQ KOA KOMO KSL KTAR

E-12:45 p.m., C-11:45, M-10:45, P-9:45 B — Swift, Stebbins Boys KFI KGO KGW KHQ KOMO KSL

TUESDAY

E-8:30 a.m., C-7:00, M-6:00, P-5:00 R - Gene and Glenn, See Monday

E-8:15 a.m., C-7:15, M-6:15, P-5:15 B - Phil Cook, See Monday

E-8:30 a.m., C-7:30, M-6:30, P-5:30 R — Cheerio, See Monday

E-9:00 a.m., C-8:00, M-7:00, P-6:00 B — Phil Cook, See Monday R — Gene and Glenn, See Monday

E-10:15 a.m., C-9:15, M-8:15, P-7:15 B - Clara, Lu and Em, See Monday

E-11:45 a.m., C-10:45, M-9:45, P-8:45 C - Ben Alley, See Monday

E-12:00 m., C-11:00, M-10:00, P-9:00 R - General Electric, See Monday

E-12:30 p.m., C-11:30, M-10:30, P-9:30 B — Farm and Home, See Monday

E-4:30 p.m., C-3:30, M-2:30, P-1:30 R — Lady Next Door, See Monday

E-5:15 p.m., C-4:15, M-3:15, P-2:15 R - Skippy, See Monday

E-5:45 p.m., C-4:45, M-3:45, P-2:45 B — Orphan Annie, See Monday

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C — Art Jarrett, Freddie Rich, Orchestra C— Arl Jarrett, Freddie Rich, Urchesira CFRB KFJF KJZ KOH KSCJ KTRH KVOR WAAB WABC WACO WADC WBBM WBRC WBT WCAH WCCO WDAE WDBO WFRL WHP WKRC WLAP WLBW WLBZ WMAL WCKO WORC WQAM WIREC WTAQ WTAR WTOC

B - Raising Junior, See Sunday

R - Waldorf Orchestra, See Monday

E-6:15 p.m., C-5:15, M-4:15, P-3:15 C — Reis and Dunn

CFRB KFH KFJF KMOX KOH KSCJ KTRH KVOR WAAB WABC WACO WADC WBRC WBT WCAO WCCO WDAE WDBO WFBL WGR WHP WISN WLAP WLBW WLBZ WMAL WOKO WORC WQAM WREC WTAQ WTAR WTOC WWVA

E-6:30 p.m., C-5:30, M-4:30, P-3:30 B — Ray Perkins, Old Topper KGO KGW KHQ KOA KOIL KOMO KSL KWK WBZA WGAR WHAM WJZ WLW WMAQ WREN

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

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Myrt and Marge, See Monday

B - Amos 'n' Andy, See Monday R — Mid-Week Hymn Sing KEX KGA KGIR KJR KOA KPO KSTP KTAR WEAF WFI WJDX WSAI WSB WSM WTAG WTIC

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Freddie Rich and Orchestra WCCO WFBM WGN WGR WJAS WKRC WMAL WNAC WOKO WJAS R - Campbell-Lanin, See Monday

E-7:30 p.m., C-6:30, M-5:30, P-4:30 R - Alice Joy, See Monday C — Richman Bros, Sylvia Froos KMBC KMOX WAAB WABC WADC WBBM WCAU WCCO WFBL WFBM WGR WHK WISN WJAS WKBN WLAP WSPD WWVA WXYZ B — Stebbins Boys, See Monday

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Morton Downey, See Monday R — The Goldbergs, See Monday B - Jones and Hare, See Monday

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Bath Club, See Monday R — Blackstone, Sanderson-Crumit KSD KSTP KYW WBEN WCAF WCSH WDAF WEAF WEBC WEEI WFI WGY WHO WJAR WOC WOW WRC WSAI WTAG WTAM WTIC

E-8:15 p.m., C-7:15, M-6:15, P-5:15 E-8:19 p.m., C-7:15, M-6:15, P-5:15 C-Sterling, Abe Lymar's Band KFJF KMBC KMOX WABC WADC WCAO WCAU WCCO WDRU WCAO WCAU WCCO WDRU WEAN WFBM WGN WGR WGST WHK WJAS WKRC WMAL WNAC WRDC WSPD WXYZ

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Kate Smith, See Monday

R - True Sintin, See Monday R - True Siory, Mary and Bob WBEN WCSH WDAF WEAF WEEI WFBR WFI WGY WHAS WHO WIOD WJAR WJDX WMC WOC WOW WRC WSAI WSM WSMB WTAG WTAM WTIC WWNC

B – Heel Hugger Harmonies KFI KFSD KGW KHQ KOA KOIL KOMO KPO KSL KTAR WHAM WJZ WLS WREN

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C – Gerardine, Ed Sullivan KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBM WGN WGR WHK WJAS WKRC WMAL WNAC WOWO WSPD WXYZ

B – Sisters of the Skillet KDKA KFYR KOIL KPRC KSTP KVOO KWK WBAP WBZA WDAY WHAM WIBA WJZ WKY WLS WOAI WREN

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Ben Bernie, Orchestra KDYL KFH KFJF KFPY KFRC

KDYL KFH KFJF KFPY KFRC KHJ KLZ KMBC KOIN KOL KTSA WABC WADC WBRC WBT WCAO WCAU WCCO WDRC WDSU WEAN WGN WHK WJAS WKBN WKBW WKRC WLAC WMAL WNAC WOWO WRR WSPD WXYZ KTRH

R — McKesson Musical Magazine KFI KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KTAR KTHS KVOO WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WHAS WHAS WHAT WFI WFLA WGY WHAS WHO WIOD WIS WJAR WJAX WJDX WKY WLS WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ B - Household Finance KDKA KWK WBAL WBZA WHAM

WJR WJZ WMAQ WREN

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

C-Eno Crime Club CFRB KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHK WJAS WKBW WKRC WMAL WNAC WOWO WSPD WXYZ

R - The Fuller ManKFI KGO KGW KHQ KOA KOMO KSD KSL KSTP KYW WBAP WBEN WCAE WCSH WDAF WEAF WEBC WEEI WFI WGY WHO WJAR WKY WEEN WFI WGY WHO WJAR WKY WOAI WOC WOW WRC WSAI WSB WTAG WTAM WTIC WTMJ WWJ B — Great Personalities, Frazier Hunt KDKA KOLL KWK WBAL WBZA WENR WGAR WHAM WJR WJZ WIW WREA WDEA WDAY

WLW WREN WRVA

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C-Voice of Thousand Shades C — Voice of Thousand Shades CFRB CKAC KDB KDYL KERN KFBK KFRC KHJ KLZ KMBC KMJ KMOX KOIN KOL KSCJ KTRH KWG WAAB WABC WBBM WBT WCAH WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGST WHEC WHK WHP WISN WJAS WKBW WKRC WLAP WMAL WMT WOCO WYYZ.

WEBW WERC WLAP WMAL WMT WORO WXYZ R-Lucky Strike, Walter Winchell KFI KFSD KFYR KGO KGW KHO KOA KOMO KPRC KSD KSL KSTP KTAR WAPI WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WENR WFAA WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMC WOAI WOC WRC WRCA WYA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ WWNC B - Happy-Rose Orchesta

B - Happy-Rose Orchestra

CFCF CKGW KDKA KOIL KWK WBAL WCKY WGAR WHAM WJR WJZ WMAQ WREN

E-10:15 p.m., C-9:15, M-8:15, P-7:15 C-Society's Playboy CFRB CKAC KMBC KMOX KRLD KTRH WAAB WABC WADC WBBM WBT WCAO WCAU WCCO WDRC WFBL WFBM WGST WHK WJAS WKBW WKRC WLAP WMAL WOKO WOWO WSPD WXYZ

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C — Music That Satisfies, See Monday B --- Paris Night Life

KDKA KOIL KYW WBZA WCKY WGAR WHAM WJZ WREN

E-10:45 p.m., C-9:45, M-8:45, P-7:45 C — Myrt and Marg, See Monday C

Funnyboners CFRB KLRA WAAB WABC WADC WBIG WBRC WBT WCAO WDAE WDBJ WDOD WDRC WDSU WHEC WHP WJAS WKBW WLBW WLBZ WMAL WNOX WODX WOKO WORC WPG WQAM WREC WTAR WTOC B - Pickens Sisters, See Monday

E-11:00 p.m., C-10:00, M-9:00, P-8:00 B — Amos 'n' Andy, See Monday - Amos'n' Anay, See Monday - Howard Barlow, See Monday - Jesse Crawford, Organ MEAP WEI WIOD WJAR WRC С Ř-WEAF WTIC

E-11:15 p.m., C-10:15, M-9:15 P-8:15 R - Alice Joy, See Monday

Tuesday-Continued E-11:30 p.m., C-10:30 M-9:30, P-8:30 C-George Olsen, Orchestra WAAB WABC WBCM WBRC WBT WCAO WCAU WDAE WDBO WDRC WLBZ WMAL WORC WQAM WREC WTAR WTOC - Morton Downey, See Monday E-12:00 m., C-11:00, M-10:00, P-9:00 - Gus Arnheim and Orchestra C — Gus Arnheim and Orchestra KDYL KFAB KFJF KLZ KMBC KMOX KOH KOIN KSCJ KVOR WABC WCAU WCCO WEAN WFBL WHP WIBW WISN WKBN WKBW WKRC WLAP WLBW WMAL WMBD WMT WNAC WNAX WOKO WSPD E-12:05 p.m., C-11:05, M-10:05, P-9:05 R — Buddy Rogers Orchestra KOA KSD KVOO WEAF WSMB WTIC WSM E-12:30 p.m., C-11:30, M-10:30, P-9:30 B - Jones and Hare, See Monday E-12:45 p.m., C-11:45, M-10:45, P-9:45 B - Stebbins Boys, See Monday

WEDNESDAY

E-8:00 a.m., C-7-00, M-6:00, P-5:00 R — Gene and Glenn, See Monday E-8:15 a.m., C-7:15, M-6:15, P-5:15 B - Phil Cook, See Monday E-8:30 a.m., C-7:30, M-6:30, P-5:30 R — Cheerio, See Monday E-9:00 a.m., C-8:00, M-7:00, P-6:00 R - Gene and Glenn, See Monday E-9:15 a.m., C-8:15, M-7:15, P-6:15 B - Phil Cook, See Monday E-10:15 a.m., C-9:15, M-8:15, P-7:15 B - Clara, Lu and Em, See Monday E-12:00 m., C-11:00, M-10:00, P-9:00 R - General Electric, See Monday E-12:30 p.m., C-11:30, M-10:30, P-9:30 B - Farm and Home, See Monday E-3:15 p.m., C-2:15, M-1:15, P-12:15 C — Ann Leaf and Ben Alley CFRB KDYL KFBK KFJF KFPY KFRC KGB KHJ KLRA KLZ KMBC KMOX KOIN KOL KRLD KTRH KTSA KVI WABC WADC WBRC WCAH WCAO WCAU WCCO WDBJ WCAH WCAO WCAU WCCO WDBJ WDRC WDSU WEAN WFBL WFBM WGN WGR WGST WHK WHP WISN WJAS WKBN WKRC WLAC WLAP WMAL WNAC WORC WORC WOWO WPG WREC WSPD WTAR WWWA WYY? WWVA WXYZ E-4:30 p.m., C-3:30, M-2:30, P-1:30 R — Lady Next Door, See Monday E-5:15 p.m., C-4:15, M-3:15, P-2:15 R — Skippy, See Monday E-5:45 p.m., C-4:45, M-3:45, P-2:45 B — Orphan Annie, See Monday E-6:00 p.m., C-5:00, M-4:00, P-3:00 R — Waldorf Orchestra, See Monday B - Music Treasure Box KFYR KTHS WBAL WENR WHAM WJDX WJZ WRC WREN WSB WSM E-6:15 p.m., C-5:15, M-4:15, P-3:15 C — Harold Stern's Orchestra KFH KFJF KMOX KOH KRLD KSCJ C-5:15, M-4:15, P-3:15 KTRH KFJF KMOX KOH KRLD KSCJ KTRH KVOR WAAB WABC WACO WADC WBRC WBT WDAE WDBO WDRC WEAN WFAN WFAL WGR WHEC WHP WIP WISN WLAP WLBW WLBZ WMAL WOKO WORC WCAN WREC WSPD WTAQ WTAR WTOC WWVA

E-6:30 p.m., B - Royal Vagabonds, See Monday E-6:45 p.m., C-5:45, M-4:45, P-3:45 B — Lowell Thomas, See Monday B — Orphan Annie, See Monday C - Bing Crosby, See Monday E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Myrt and Marge, See Monday B — Amos 'n' Andy, See Monday E-7:15 p.m. C-6:15, M-5:15, P-4:15 R — Campbell-Lanin, See Monday C - Maxwell House, See Monday B — Esso Program, Elsie Janis KDKA WBAL WBZA WHAM WIS WJZ WLW WPTF WRVA WWNC E-7:30 p.m., C-6:30, M-5:30, P-4:30 - Easy Aces, See Monday - Reis and Dunn KLRA WBIG WBRC WBT WDAE WDBJ WDBO WDOD WDSU WFIW WGST WLAC WNOX WODX WTAR WTOC R - Alice Joy, See Monday R - Stebbins Boys, See Monday E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Morton Downey, See Monday - The Goldbergs, See Monday R. B - Jones and Hare, See Monday E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Bath Club, See Monday The second secon E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Singin' Sam, See Monday C — Singin' Sam, See Monday B — Melo-Clarions, Twin Organs KFYR KOA KOIL KPRC KSL KSTP KVOO KWK KYW WBAL WBAP WB2A WCKY WDAY WEBC WFAA WFLA WGAR WHAM WHAS WIBA WIOD WJAX WJDX WJR WJZ WKY WMC WOAI WREN WRVA WSB WSM WSMB WTMJ WWNC E-8:30 p.m., C-7:30, M-6:30, P-5:30 C - Kate Smith, See Monday - Goodyear R — Goodyear KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KVOO KYW WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFLA WGY WHAS WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLIT WMC WOAI WOC WOW WRC WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ WWNC WAS Krest Made Mampate B — Jack Frost, Melody Moments KDKA WBAL WGAR WHAM WJR WJZ WLS WLW

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C — Col. Stoopnagle, See Monday

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Gold Medal Fast Freight

C - Gold Medal rast Freight KFH KMBC KMOX KSCJ WABC WADC WCAO WCAU WCCO WDBJ WDRC WEAN WFBL WFBM WGN WHK WJAS WKBW WKRC WMAL WMT WNAC WOKO WOWO WSPD WMT WNAC WORD WORD WSPD R — Hales-Stewart Program CKGW KFI KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KVOO KYW WBEN WCAE WCSH WEAF WEEI WFBR WGY WHAS WHO WJAR WJAX WLIT WMC WOAI WCC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTML WWS WTAM WTMJ WWJ B - Sherlock Holmes

KDKA KWK WBAL WBZA WGAR WHAM WJR WJZ WLW WMAQ

C-5:30, M-4:30, P-3:30 E-9:30 p.m., C-8:30, M-7:30, P-6:30 Vagabonds, See Monday C — Crime Club, See Tuesday

C — Ann Leaf at the Organ KFRC KSCJ WBCM WBRC WBT WDAE WDBO WPG WQAM WREC WTAR WTOC

R — Mobiloil Concert KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KVOO WBEN WCAE WCSH WDAF WDAY WEAF WEAE WOSH WDAT WDAT WEAF WEEI WFAA WFBR WFLA WGY WHAS WHO WIOD WIS WJAR WJAX WJDX WKY WLIT WMAQ WMC WOAI WOCC WOW WPTF WRCC WRVA WSAI WSB WSM WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WWJ B - Story of Women's Names, See Mon.

E-9:45 p.m., C-8:45, M-7:45, P-6:45 B - San Felice. See Monday

E-10:00 p.m., C-9:00, M-8:00, P-7:00 - Music Satisfies, Ruth Etting С

KDB KDYL KERN KFBK KFJF KFPY KFRC KGB KGMB KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOY KSCJ KTRH KOH KOIN KOL KOY KSCJ KTRH KTSA KVOR KWG WAAB WABC WACO WADC WBBM WBCM WBIG WERC WBT WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WFIW WGST WHEC WHK WHP WIBW WISN WJAS WKBH WKBW WKEC WLAC WLAP WLBW WKRC WLAC WLAP WLBW WLBZ WMAL WMBD WMT WNAX WNOX WOKO WORC WOWO WPG WQAM WREC WRR WSPD WTAR WTOC WXYZ

R — Coca Cola KFI KFSD KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KFI KFSD KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP WAPI WBAP WBEN WCAE WCSH WDAF WEAF WEBC WEEI WENR WFBR WFLA WGY WHAS WHO WIOD WIS WJAR WJAX WJDX WLIT WAC WOAI WOC WOW WRC WSAI WSB WSM WSMB WTAG WTAM WMI WWNC WTAM WTMJ WWJ WWNC

B — Happy-Rose Orchestra, See Tues.

E-10:15 p.m., C-9:15, M-8:15, P-7:15 C - Modern Male Chorus KLRA WBIG WBRC WBT WDAE WDBJ WDBO WDOD WDSU WFIW WGST WLAC WNOX WPG WREC WTAR WTOC

E-10:30 p.m., C-9:30, M-8:30, P-7:30 R - NBC Artists Program K - NBC Artists Frogram CFCF CKGW KGO KOA KSD KSTP WBEN WCAE WCSH WEAF WENR WFBR WGY WHO WJAR WOAI WOC WOW WRC WTAG WTAM WWJ WWNC

B — Hollywood Nights

KDKA KOIL KWK KYW WBAL WBZA WCKY WGAR WHAM WJR WJZ WREN

C — Manhattan Serenaders

C — Manhaltan Serenaders CFRB KDYL KFBK KFJF KFPY KLRA KLZ KMOX KTSA KVOR WABC WADC WBCM WBRC WBT WCAH WCAO WCCO WDAE WDBJ WDOD WDRC WDSU WEAN WFBM WHP WIBW WISN WISN WIAS WKBH WKBW WLBW WLBZ WMAL WMBD WMT WNAX WOKO WORC WOWO WQAM WREC WSBT WTAR WTOC WXYZ

E-10:45 p.m., C-9:45, M-8:45, P-7:45 C — Street Singer, See Monday C — Myrt and Marge, See Monday

B - Pickens Sisters, See Monday

Wednesdav—Continued E-11:00 p.m., C-10:00, M-9:00, P-8:00 R — Nellie Revell KSD WEAF WGY WJAR WOW WRC WTAM WWJ B — Amos 'n' Andy, See Monday C - Howard Barlow, See Monday E-11:15 p.m., C-10:15, M-9:15, P-8:15 R — Alice Joy, See Monday C — Maxwell House, See Monday E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Don Redman, Orchestra WAAB WABC WBCM WBRC WBT WCAO WCAU WDAE WDBO WDRC WLBZ WMAL WORC WPG WQAM WREC WTAR WTOC C --- Morton Downey, See Monday R – Vincent Lopez, Orchestra KFYR KPRC WAPI WBEN WCFL WCKY WEAF WGY WIBA WJAR WOW WRC WTMJ WWJ E-12:00 m., C-11:00, M-10:00, P-9:00 C — Eddie Duchin, See Sunday E-12:05 a.m., C-11:05, M-10:05, P-9:05 **R** — Coon-Sanders, Orchestra KFSD KHQ KOA WAP WENR WGY WRC WSB WAPI WEAF E-12:30 p.m., C-11:30, M-10:30, P-9:30 B — Jones and Hare, See Monday E-12:45 p.m., C-11:45, M-10:45, P-9:45 B — Stebbins Boys, See Monday THURSDAY E-8:00 a.m., C-7:00, M-6:00, P-5:00 R - Gene and Glenn, See Monday E-8:15 a.m., C-7:15, M-6:15, P-6:15 B - Phil Cook, See Monday E-8:30 a.m., C-7:30, M-6:30, P-5:30 R - Cheerio. See Monday E-9:00 a.m., C-8:00, M-7:00, P-6:00 R — Gene and Glenn, See Monday E-9:15 a.m., C-8:15, M-7:15, P-6:15 B — Phil Cook, See Monday E-10:15 a.m., C-9:15, M-8:15, P-7:15 B - Clara, Lu and Em, See Monday E-11:45 a.m., C-10:45, M-9:45, P-8:45 C - Ben Alley, See Monday E-12:00 m., C-11:00, M-10:00, P-9:00 R — General Electric, See Monday E-12:30 p.m., C-11:30, M-10:30, P-9:30 B - Farm and Home, See Monday E-4:30 p.m., C-3:30, M-2:30, P-1:30 R — Lady Next Door, See Monday E-5:15 p.m., C-4:15, M R — Skippy, See Monday M-3:15, P-2:15 E-5:45 p.m., C-4:45, M-3:45, P-2:45 B - Orphan Annie, See Monday E-6:00 p.m., C-5:00, M-4:00, P-3:00 R — Waldorf Orchestra, See Monday B — Raising Junior, See Sunday - Connie Boswell C CFRB KFH KFJF KLZ KOH KRLD WOR WAAB WABC WACO WADC WBCM WBIG WBRC WBT WCAH WDAE WDBJ WDOD WDRC WDSU WFAN WFBL WGL WGN WHEC WHP WIP WISN WJAS WKBH WLAC WLAP WLBW WLBZ WMBD WOKO WORC WQAM WREC WSBT WTAQ WTOC E-6:15 p.m., C-5:15, M-4:15, P-3:15 C — Reis and Dunn, See Tuesday B - Orphan Annie, See Monday E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Myrt and Marge, See Monday

R — Lumber Jacks, See Monday B — Amos 'n' Andy, See Monday E-7:15 p.m. C-6:15, M-5:15, P-4:15 R — Campbell-Lanin, See Monday B - Hind's Romance Exchange KDKA KOIL KVOO WAPI WBAP WBZA WENR WHAS WJDX WJZ WMC WOAI WREN WSB WLW WSM WSMB E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — Richman Bros., See Tuesday B — Stebbins Boys, See Monday R — Alice Joy, See Monday E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Morton Downey, See Monday R -- The Goldbergs, See Monday B - Jones and Hare, See Monday E-8:00 p.m., C-7:00, M-6:00, P-5:00 C --- Bath Club, See Monday R — Fleischmann, Rudy Vallee CFCF CKGW KFI KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KTAR WBAP WBEN WCAE WCSH WDAF WEAF WEBC WEEI WFBR WFI WFLA WGY WHAS WHOS WIOD WJAR WJAX WJDX WKY WMAQ WMC WOAI WOC WOW WMAQ WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ B - Dixie Singers KDKA KOIL KWK WBAL WBZA WCKY WGAR WHAM WJZ WLS WREN WRVA E-8:15 p.m., C-7:15, M-6:15, P-5:15 C - Abe Lyman, See Tuesday B -Rin Tin Tin Thriller KDKA KOIL KWK WBZA WGAR WHAM WJZ WLS WLW WREN E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Kate Smith, See Monday E-8:45 p.m., C-7:45, M-6:45, P-5:45 C-Angelo Patri, Your Child, See Sun. B-Sisters of Skillet. See Tuesday E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Mills Bros., See Monday B — Blackstone, Sanderson-Crumit KDKA WBAL WBZA WCKY WHAM WJZ R — Big Six of the Air KFI KFSD KFYR WGHL KGIR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KTAR KTHS WAPI WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR "DAT WEAF WEBC WEEI WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMAQ WMC WOAT WOC WOW WPTF WRC WRVA WSAI WSB WSM WSMB WTAM WTIC WTMJ WWJ WWNC E9:15 p.m., C-8:15, M-7:15, P-6:15 C-Irene Beasley, Freddie Rich KMBC KMOX WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WGN WHK WJAS WKBW WKRC WMAI WMAC WORD WGND WMAL WNAC WOKO WOWO WSPD WXYZ E-9:30 p.m., C-8:30, M-7:30, P-6:30 E-9:30 p.m., C-8:30, M-(7:30, P-9:30 C - Love Story Hour KMBC KMOX WABC WADC WBBM WCA0 WCAU WDRC WEAN WFBL WCA WHK WJAS WKBW WKRC WMAL WNAC WOWO WSPD WXYZ R — Sherlock Holmes CFCF CKGW KSD WBEN WCAE WCSH WDAF WEAF WEEI WENR WFI WGY WHO WJAR WOC WOW

WRC WSAI WTAG WTAM WTIC B — Maxwell House Ensemble KDKA KFI KFSD KGO KGW KHQ KOA KOIL KOMO KPRC KSL

KSTP KTAR KWK KYW WAPI WBAL WBAP WBZA WEBC WFLA WGAR WHAM WHAS WIOD WJAX WJDX WJA WYZ WKY WAC WOAI WREN WRVA WSB WSM WSMB WTMJ WWNC E-10:00 p.m., C-9:00, M-8:00, P-7:00 C-H.S.M. Trumpeters KFJF KLZ KMBC KMOX KRLD WAAB WABC WADC WBBM WCAO WCCO WDRC WDSU WEAN WFBL WGST WHK WJAS WKBW WKRC WLAP WMAL WMT WOWO WSPD R - Lucky Strike, See Tuesday **B** — **A. & P. Gypsies** KDKA KWK WBAL WBZA WGAR WHAM WJR WJZ WLW WMAQ E-10:30 p.m., C-9:30, M-8:30, P-7:30 C — Music Satisfies, See Monday B - Paris Night Life, See Tuesday E-10:45 p.m., C-9:45, M-8:45, P-7:45 C -- Myrt and Marge, See Monday - Arthur Jarrett C — Arthur Jarrett KLRA WAAB WABC WADC WBIG WBRC WBT WCAO WDAE WDBJ WDDD WDRC WEAN WFAN WFBL WHEC WHP WIP WJAS WKBN WKBW WLAC WLBW WLBZ WMAI, WODX WOKO WORC WQAM WREC WTAR WTOC B — Pickens Sisters, See Monday E-11:09 p.m., C-10:00, M-9:00, P-8:00 B — Ames'n' Andy, See Monday C — Howard Barlow, See Monday R — Jesse Crawford, See Tuesday E-11:15 p.m., C-10:15, M-9:15, P-8:15 R - Alice Joy, See Monday E-11:30 p.m., C-10:30, M-9:30, P-8:30 C - Geo. Olson, Orchestra, See Tuesday C - Morton Downey, See Monday E-11:45 pm, C-10:45, M-9:45, P-8:45 C-Bing Crosby KDYL KFAB KFPY KLRA KLZ KMBC KOH KOIN KOL KVOR WAAB WABC WADC WBCM WBRC WBT WCAH WCAO WCAU WDAE WDBJ WODD WDRC WDSU WEAN WFBL WFBM WGL WHK WHP WFDM WEBW WKDC WFBL WFBM WGL WHK WHP WIBW WISN WKBN WKBW WKRC WLAC WLAP WLBW WLBZ WMAL WMBD WMT WNAX WNOX WODX WOKO WORC WPG WQAM WREC WSBT WSPD WTAR WTOC WXYZ R - Baron Lee and Orchestra, See Mon. E-12:00 m., C-11:00, M-10:00, P-9:00 E-12:00 m., C-11:00, M-10:00, P-9:00 C - Guy Lombardo, Rogal Canadiana KDYL KFH KGB KLZ KMBC KSCJ KTRH KVOR WABC WCAU WCCO WEAN WFBL WHK WHP WISN WKBN WKBW WKRC WLAP WLBW WMT WNAC WNAX WOKO E-12:05 a.m., C-11:05, M-10:05, P-9:05 R - Coon-Sanders, See Wednesday E-12:30 p.m., C-11:30, M-10:30, P-9:30 C-Joe Reichman and Orchestra C – Joe Reichman and Officiesua KDYL KGB KLZ KMBC KOH KVOR WABC WBBM WCAU WCCO WEAN WFBL WFBM WGL WIBW WISN WKBN WKBW WLAC WLBW WMBD WMT WNAC WNAX WOKO WCDT WSBT WSPD B - Jones and Hare, See Monday E-12:45 p.m., C-11:45, M-10:45, P-9:45 B - Stebbins Boys, See Monday

FRIDAY

E-8:00 a.m., C-7:00, M-6:00, P-5:00 R - Gene and Glenn, See-Monday

E-8:15 a.m., C-7:15, M-6:15, P-5:15 B — Phil Cook, See Monday

Friday-Continued E-8:30 a.m., C-7:30, M-6:30, P-5:30 R — Cheerio, See Monday E-9:00 a.m., C-8:00, M-7:00, P-6:00 R - Gene and Glenn, See Monday E-9:15 a.m., C-8:15, M-7:15, P-6:15 B - Phil Cook, See Monday E-10:15 a.m., C-9:15, M-8:15, P-7:15 - Clara, Lu and Em, See Monday B -E-11:45 a.m., C-10:45, M-9:45, P-8:45 C - Ben Alley, See Monday E-12:00 m., C-11:00, M-10:00, P-9:00 R — General Electric, See Monday E-12:30 p.m., C-11:30, M-10:30, P-9:30 B - Farm and Home, See Monday E-4:30 p.m., C-3:30, M-2:30, P-1:30 R — Lady Next Door, See Monday E-5:15 p.m., C-4:15, M-3:15, P-2:15 R — Skippy See Monday E-5:45 p.m., C-4:45, M-3:45, P-2:45 B -- Orphan Annie, See Monday E-6:00 p.m., C-5:00, M-4:00, P-3:00 R - Waldorf Orchestra, See Monday B - Raising Junior, See Sunday E-6:30 p.m., C-5:30, M-4:30, P-3:30 B - Royal Vagabonds, See Monday E-6:45 p.m., C-5:45, M-4:45, P-3:45 B — Lowell Thomas, See Monday B — Orphan Annie, See Monday C — Bing Crosby, See Monday E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Myrt and Marge, See Monday Amos 'n' Andy, See Monday R R Salon Singers KFSD KFYR KGHL KGO KOA KOMO KTAR WCFL WCSH WEAF WFBR WJAR WWJ E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Maxwell House, See Monday B — Esso Program, See Wednesday - Campbell-Lanin, See Monday R -E-7:30 p.m., C-6:30, M-5:30, P-4:30 R — Alice Joy, See Monday C - Easy Aces, See Monday B - Stebbins Boys, See Monday E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Morton Downey, See Monday R — The Goldbergs, See Monday - Jones and Hare, See Monday R E-8:00 p.m., C-7:00, M-6:00, P-5:00 C - Bath Club, See Monday R - Cities Service Orchestra R — Chies Service Urchestra CKGW KECA KGO KGW KHQ KOA KOMO KSD KSL KSTP KTHS KYW WBEN WCAE WCSH WDAF WEAF WEBC WEEI WFAA WGY WHO WJAR WKY WLIT WOAI WOC WOW WRC WSAI WTAG WTAM WTIC WTMJ WWJ KPRC B – Nestle's Program KDKA KOIL KWK WBAL WBZA WCKY WGAR WHAM WJR WJZ WLS WREN E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Singin' Sam, See Monday - Modern Male Chorus KGB KLRA WBRC WBT WDAE WDBJ WDBO WDOD WLAC WNOX WPG WQAM WREC WTAR WTOC E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Today and Yesterday, Drama KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WGR WHK WJAS WKRC WMAL WNAC WOKO WOWO WSPD WXYZ B -- Smith Bros., Trade and Mark WBAL WGAR WJR WJZ WLS WLW

E-8:45 p.m., C-7:45, M-6:45, P-5:45 B — Sisters of Skillet, See Tuesday

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Pillsbury, Arthur Tracy KFJF KMBC KMOX WABC WADC WBT WCAO WCAU WCCO WDBJ WDRC WEAN WFBL WGN WGST WHK WJAS WKBW WKRC WMAL WNAC WOKO WORC WOWO WREC WRR WSPD WTAR WXYZ R - Cliquot Club

KSD WBEN WCAE WCSH WDAF WEAF WEEI WGY WHO WJAR WLIT WLS WOC WOW WRC WSAI WTAG WTIC WWJ

B - Friendship Town CFCF CKGW KD CFCF CKGW KDKA KFI KFSD KFYR KGO KGW KHQ KOA KOIL KOMO KPC KSL KSTP KTAR KWK KYW WAPI WBAL WBZA WDAY WEBC WFLA WGAR WHAM WHAS WIBA WIOD WIS WIBA WIOD WIS WJDX WJR WJZ WKY WMC WOAL WREN WRVA WSB WSM WSMB WTMJ WWNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 - To the Ladies WCAO WCAU WCCO WDRC WADC WFBL WGN WGST WHK WJAS WFBL WGN WGST WHK WJAS WKBW WKRC WMAL WNAC WOKO WOWO WSPD WXYZ

R - Pond's Program, Leo Reisman KSD WBEN WCAE WCSH WDAF WEAF WENR WFBR WGY WHO WJAR WLIT WOC WOW WRC WSAI WTAG WTAM

B --- Armour Program KDKA KFI KGO KGW KHQ KOA KSL KBZA KOIL KOMO KPRC KSL KWK KYW WAPI WBAL WEBC WFAA WGAR WHAM WHAS WIOD WJAX WJDX WJR WJZ KWY WLW WMC WOAI WREN WRVA WSB WSM WSMB WTMJ

C-8:45, M-7:45, P-6:45 E-9:45 p.m., C - Friendly Five Footnotes KFJF KLZ KMBC KMOX KRLD WABC WBT WCAO WCAU WCCO WDRC WDSU WEAN WFBL WGN WHK WJAS WKBW WKRC WLAC WMAL WMT WNAC WNOX WREC

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

C—Beau Bachelor KDB KDYL KERN KFBK KFJF KFPY KFRC KHJ KLZ KMJ KMOX KOIN KOL KRLD KWG WAAB WABC WADC WBBM WBT WCAO WCAU WCCO WDRC WEAN WFBL WHK WJAS WKBW WKRC WMAL WOKO WOWO WREC WSPD WXZY R — Sampler Orchestra, Andy Sannella KSD WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WHO WJAR WLIT WOC WOW WRC WSAI WTAG WTAM WWJ

B - Paul Whiteman's Chieftains KDKA KFI KFSD KFYR KHQ KOA KOIL I KGO KGW KHQ KOMO KPRC KSL KSTP KTAR KVOO KWK WBAL WBAP WBZA WCKY WDAY WEBC WENR WFLA WGAR WHAM WHAS WIOD WJAX WJDX WJR WJZ WKY WMC WOAI WREN WRVA WSB WSM WSMB WTMJ

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C - Music Satisfies, See Monday **RKO** Theatre of the Air R

KFI KFSD KFYR KGO KGW KHQ KOA KOMO KSD KSL KTAR WBEN WCAE WCSH WDAY WEAF WEEI WENR WFBR WFLA WGY WHAS WHO WIBA WIOD WJAR WJAX WJDX WKY WLIT WMC WOAI WOC WOW WRC WRVA WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ

B - Waves of Melody, See Monday,

E-10:45 p.m., C-9:45, M-8:45, P-7:45 C — Myrt and Marge, See Monday B — Pickens Sisters, See Monday

E-11:00 p.m., C-10:00, M-9:00, P-8:00 R — Vincent Lopez and Orchestra KSD WBEN WCFL WCKY WDAF WEAF WEEI WIOD WJAR WOW WRC WTAM WWJ WWNC C

- Howard Barlow, See Monday - Amos 'n' Andy, See Monday R

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

R - Alice Joy. See Monday

C - Maxwell House, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — George Olsen, See Tuesday

C - Morton Downey, See Monday

E-12:00 m., C-11:00, M-10:00, P-9:00 C-Ben Bernie, See Monday

E-12:05 a.m., C-11:05, M-10:05, P-9:05 R - Coon-Sanders, Orch., See Wed.

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

- Isham Jones and Orchestra C-ISNAIII JOIRES AND CITIESMA KDYL KFPY KGB KLZ KMBC KOII KVOR WABC WCAU WCCO WEAN WFBL WFBM WGL WHK WIBW WISN WKBN WKBW WKRC WLAP WLBW WMAL WMBD WMT WNAC WNAX WOKO WSBT WSPD

B - Jones and Hare, See Monday

E-12:45 p.m., C-11:45, M-10:45, P-9:45 B — Stebbins Boys, See Monday

SATURDAY

E-8:00 a.m., C-7:00, M-6:00, P-5:00 R — Gene and Glenn, See Monday

E-8:15 a.m., C-7:15, M-6:15, P-5:15

B - Phil Cook, See Monday

E-8:30 a.m., C-7:30, M-6:30, P-5:30 R - Cheerio, See Monday

E-9:00 a.m., C-8:00, M-7:00, P-6:00 R — Gene and Glenn, See Monday

E-9:15 a.m., C-8:15, M-7:15, P-6:15 B - Phil Cook, See Monday

E-12:30 p.m., C-11:30, M-10:30, P-9:30 B - Farm and Home. See Monday

E-4:45 p.m., C-3:45, M-2:45, P-1:45 R — Lady Next Door, See Monday. 4:30

E-5:15 p.m., C-4:15, M-3:15, P-2:15 R — Skippy, See Monday

E-5:30 p.m., C-4:30, M-3:30, P-2:30 R — Station KUKU

WBEN WCAE WCSH WDAF WEAF WFBR WGY WHO WJAR WLIT WOC WOW WRC WTAG WTAM WTMJ

E-5:45 p.m., C-4:45, M-3:45, P-2:45 C -- Connie Boswell

C-Conne boswei CFRB KDYL KFBK KFH KFJF KGB KLRA KLZ KMBC KMOX KOH KOIN KVI KVOR WAAB WABC WBCM WBIG WBRC WBT WCAH WCAO WCAU WCCO WDAE WCAH WCAO WCAU WCGO "Day WDOD WDRC WDSU WFBL WGL WHEC WHP WIBW WISN WJAS WKRH WKBN WKBW_WKRC WKBH WKBN WKBW WKAS WLAC WLAP WLBW WLBZ WMT WOKO WORC WPG WREC WSBT WSPD WTAQ WTAR WTOC WWVA B - Orphan Annie, See Monday

E-6:00 p.m., C-5:00, M-4:00, P-3:00 R - Waldorf Orchestra, See Monday B - Raising Junior, See Sunday

E-6:45 p.m., C-5:45, M-4:45, P-3:45 C — Leon Belasco and Orchestra KFAB KFBK KFH KFJF KFRC KGB KHJ KLZ KOH KOL KSCJ KVI KVOR WAAB WABC WBCM WBIG WBT WCAH WCAO WDBJ WDOD WDSU WFBL WFBM WFIW WGST WHP WIBW WISN WJAS WGST WHP WIBW WISN WJAS WKBN WKBW WLAC WLAP WLBW WLBZ WMBD WMT WNOX WOKO WORC WREC WSPD WTOC WXYZ E-7:00 p.m., C-6:00, M-5:00, P-4:00 C - Political Situation in Washington KDYL KFBK KFH KFJF KFRC KGB KHJ KMBC KMOX KOH KSCJ KVI KVOR WABC WADC WBCM WBIG WBT WCAH WCAO WCAU WDAE WDBJ WDBO WDOD

WDRC WDSU WEAN WFBL WFBM WGR WGST WHEC WHP WIBW WGR WGST WHEC WHP WIBW WJAS WKBH WKBN WKRC WLAC WLAP WLBW WLBZ WMAL WMT WNAC WNAX WQAM WREC WTAR WTOC WWVA WXYZ B — Amos'n' Andy, See Monday D O'Lor's Hist Mineted

R — O'Leary's Irish Minstrels KEX KGA KJR KOA KPO WEAF WEEI WKY WSB WTAG WTIC

WW.I

E-7:15 p.m., C-6:15, M-5:15, P-4:15 R — Laws That Safeguard Society KEVR KGA KJR WS That Sateguard SGA KJR KFSD KFYR KGA KJR WAPI R — Laws That Sateguard Society KECA KFSD KFYR KGA KJR KOA KPO KTAR KTHS WAPI WBEN WCSH WDAY WEAF WEBC WENR WFI WFLA WHO WIOD WJAR WJAX WJDX WOC WOW WPTF WRVA WSAL WTAG WTIC - Tastyeast Jesters, See Monday B -

E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — Bright Spot, Guy Lombardo KMBC KMOX WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WGN WGR WHK WJAS WKRC WGN WGR WHK WJAS WKRC WMAL WNAC WOKO WSPD WXYZ - Alice Joy, See Monday R-

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Morton Downey, See Monday R - The Goldbergs, See Monday

E-8:00 p.m. C-7:00, M-6:00, P-5:00 C - Fray and Braggiotti, Pianiats CFRB KDYL KFAB KFH KWJF KFRC KGB KHJ KLRA KMBC KOH KOL KRLD KSCJ KVI KVOR WABC WADC WBCM WBIG WBT WCAH WCAO WCAU WDAE WDBJ WDB0 WDOD WDRC WDSU WFBL WFBM WGR WGST WHEC WHP WIBW WISN WJAS WKBN WKRC WLAC WLAP WLBW WLBZ WMT WLAC WLAP WLBW WKBN WKRC WNAC WNAX WOKO WPG WREC WSPD WTAQ WTAR WTOC WWVA WXYZ KFBK

R - Civic Concerts

K-CURCORCEPTS CKGW KSD WCAE WCSH WDAF WEAF WFBR WFI WHO WIOD WIS WJAR WJAX WMAQ WOC WOW WRC WTIC WWJ WWNC

B — Danger Fighters KDKA KFI KFSD KFYR KGO KGW KHQ KOA KOIL KOMO KPRC KSL KSTP KTAR KWK WAPI WBAP WCKY WDAY WEBC WHAM WIBA WJDX WJ4 WMC WOAI WREN WHAS WJZ WK WLS WMC WSB WSM WSMB WTMJ

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Abe Lyman, See Tuesday

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

CFRB KDYL KFH KFJF KFPY KGB KHJ KLZ KMBC KMOX KGB KHJ KLZ KMBC KMOX KOH KRLD KSCJ KTSA KVOR WABC WADC WBRC WBT WCAH WCAO WCAU WCCO WDAE WDBO WEAN WFBL WGR WHEC WHP WIBW WISN WJAS WKBN WLAP WLBW WLBZ WMAL WMT WNAC WNAX WOKO WORC WPG WQAM WREC WTAQ WTAR WTOC WWVA R — Radio in Education

KFI KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KTAR KYW WBEN WCAE WCSH WDAF WDAY WEAF WEAE WESH WDAY WDAY WEAF WEBC WEEI WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WJAR WJAX WJDX WKY WMC WOC WOW WRC WIVA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ WWNC WIS

B - Dance, Countess D'Orsay B — Dance, Countess D'Orsay CFCF CKGW KDKA KWK WBAL WBZA WGAR WHAM WJR WJZ WLW WMAQ WREN E-8:45 p.m., C.7:45, M-6:45, P-5:45 C — Vaughn De Leath UPVU WEAR WERK WERK FEIL FEIL

KDYL KFAB KFBK KFH KFJF KFPY KGB KHJ KLRA KLZ KMOX KEJF KOH KVI KVOR WABC WADC WBCM WBIG WBRC WBT WCAH WCAO WCAU WCCO WDAE WDBJ WDOD WDRC WDSU WEAN WFBL WFBM WGR WHEC WHK WHP WIBW WISN WJAS WKEN WLAC WLAP WLBW WLBZ WMAL WMT WNAC WNOX WORC WOWO WPG WQAM WREC WSBT WTAR WTOC WXYZ WOKO WXYZ WOKO

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

KMOX WAAB WABC WCAU WGN WHK WKBW WXYZ

WHAT WARDW WATZ R - Goodyear, Pryor's BandKFI KFSD KFYR KGHL KGIR KGOKGW KHQ KOA KOMO KPRC KSDKSL KSTP KTAR KYW WAPIWBAP WBEN WCAE WCSH WDAFWDAY WFAF WEBC WEEI WPBFWDAY WFAF WEBC WEEI WPBFWFLA WGY WHAS WIOD WIS WJAR WHAS WHO WFI WJAX WIBA WJDX WKY WMC WOAI WOC WOW WRC WRVA WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ

B — Sinclair Weiner Minstrels KDKA KOIL KWK WBAL WGAR WHAM WJZ WLW WREN

E-9:30 p.m., C-8:30, M.7:30, P-6:30 C-Smith Bros., Trade and Mark KFH KFJF KLZ KMBC WAAB WABC WADC WCAO WCAU WCCO WDRC WEAN WGN WGST WHEC WHK WHP WJAS WKBW WKRC WLAP WLBZ WMT WOWO WSPD

WLAI WLBZ WAI WOWO WSPD R - Club Valspar CFCF CKGW KSD WBEN WCAE WCSH WDAF WEAF WEEI WFBR WCSH WDAF WEAF WEA WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

- First Nighter B -

B – FIRST WERTER KDKA KFI KFSD KFYR KGO KGW KHQ KOA KOIL KOMO KSL KSTP KTAR KWK KYW WBAL WBZA WDAY WEBC WGAR WHAM WJR WJZ WLW WREN WTMJ

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C — Ruth Etting, See Wednesday

R — Lucky Strike, See Tuesday

B — Happy-Rose Orchestra, See Tues.

E-10:15 p.m., C-9:15, M-8:15, P-7:15 С — Public Affairs Institute

WGST WHEC WHP WIBW WISN WJAS WKBH WKBN WKBW WKRC WLAC WLAP WLBW WLBZ WMAL WMBD WMT WNAX WNOX WOKO WORC WPG WREC WSPD WTAQ WTAR WTOC WWVA WXYZ

B — Snoop and Peep CFCF CKGW KOIL KWK WCKY WGAR WHAM WJR WJZ WREN E-10:30 p.m., C-9:30, M-8:30, P-7:30 B — Hollywood Nights, See Wednesday E-10:45 p.m., C-9:45, M-8:45, P-7:45 B-- Twenty Fingers of Harmony

CFCF KDKA WJZ WREN WBAL WHAM WJR

C - Arthur Jarrett, See Thursday

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

- Don Redman, Orchestra

CFRB KDYL KFJF KFPY KFRC KLZ KMBC KOH KSCJ KVOR KLZ KMBC KOH ESCJ KVOR WAAB WABC WACO WADC WBC WBT WCAO WCAU WDAE WDBO WDRC WEAN WFBL WHEC WHP WIBW WISN WKBN WKBC WLAP WLBW WLBZ WMT WNAX WOKO WORC WQAM WREC WSPD WTAR WTOC WWVA WXYZ R - Jesse Crawford, See Tuesday

E-11:15 p.m., C-10:15, M:9:15, P-8:15 R - Alice Joy, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C - Morton Downey, See Monday

R -- Buddy Rogers and Orchestra

KEX KGA KGHL KJR KPO KSD WBEN WCAE WCFL WCKY WDAF WEAF WEEL WFBR WFI WGY WEAF WEEI WFBR WFI WGY WHO WIBA WKY WOC WRC WTIC WWJ

E-12:00 m., C-11:00, M-10:00, P-9:00 C - Guy Lombardo, See Thursday

E-12:05 a.m., C-11:05, M-10:05, P-9:05 R - Coon-Sanders, See Wednesday

E-12:30 a.m., C-11:30, M-10:30, P-9:30 C — Harold Stern, Orchestra KDYL KFH KFPY KGB KLZ KMBC KOH KOL KSCJ KVOR WABC WEAN WFBL WISN WKBN WKBW WKRC WLAP WLBW WMT WNAC WNAX WOKO WSPD

SUNDAY

E-11:30 a.m., C-10:30, M-9:30, P-8:30 E-11:30 a.m., C-10:30, M-9:30, P-8:30 R-Major Bowes' Capitol Family KEX KFYR KGA KGHL KJR KOA KPO KPO KPRC KSTP WAPI WCSH WDAF WEAF WEAR WFBR WFI WFLA WGY WHAS WHO WIOD WJAR WKY WMC WOC WPTF WRC WSM WSMB WTAM WTIC WTMJ WWJ WWNC

E-12:30 p.m., C-11:30, M-10:30, P-9:30 International Broadcast C – International Broadcast CFRB KFH KFJF KFPY KLZ KMBC KOH KOL KSCJ KTSA KVI KVOR WAAB WABC WADC WBT WCAH WCAO WCAU WCCO WDAE WDBC WDRC WFBL WGR WHEC WHK WHP WIBW WISN WJAS WKBN WLAP WIBW WISN WJAS WKBN WLAP WLBW WISZ WMAL WMT WOKO WORC WPG WQAM WSPD WTAQ WTAR WWVA R = Correless Lover Neuro Drama

B — Careless Lover, Negro Drama KEX KGA KJR KOA KOIL KPO KPRC KSL KTAR WCKY WHAM WJZ

E-12:45 p.m., C-11:45, M-10:45, P-9:45 C — Street Singer CFRB KFH KFJF KFPY KLZ KMBC

KOH KOL KSCJ KTSA KVI KVOR

Sunday-Continued

SUNCAY—Continued WAAB WABC WABC WCA WCAH WCAO WCAU WCCO WDAE WDBO WFBL WGR WHEC WHP WIBW WISN WKEN WLAP WLBW WLBZ WMAL WMT WOKO WORC WOWO WPG WQAM WSPD WTAQ WTAR WTOC WWYA

E-1:00 p.m., C-12:00, M-11:00, P-10:00 - Cathedral Hour

CFRB KDYL KFH KFJF KFPY KLZ KMBC KMOX KOH KOL KRLD KSCJ KTRH KVI WAAB WABC WBT WCAH WCAU WCCO WDAE WDBO WDRC WFBL WCR WHEO WDBU WLAS WYDN WHEC WHP WIBW WJAS WKBN WLAP WLBW WLBZ WMAL WMT WOKO WPG WQAM WREC WTAQ WTAR WTOC WWVA WXYZ

B — Walter Damrosch Symphony B — Walter Damosch Symphony KDKA KFI KFSD KFYR KGO KGW KOMO KSL KSTP KVOO KWK WBAL WBZA WDAY WEBC WFLA WGAR WHAS WIBA WIOD WIS WJDX WJR WJZ WKY WLW WMAQ WOAI WPTF WREN WRVA WSB WTMJ WWNC

E-1:30 p.m., C-12:30, M-11:30, P-10:30 R -- Silver Flute WBEN WCAE WDAF WEAF WFI

WGY WJAR WRC WTAG WTIC WWJ E-1:45 p.m., C-12:45, M-11:45, P-10:45

R — Pop Concert, Walter Logan KFYR KGO KSD KVGO WCAE WDAY WEAF WFAA WHAS WIBA WIOD WIS WJAX WRVA WSB WSM WTAM WTMJ WWJ WWNC E-2:00 p.m., C-1:00, M-12:00, P-11:00

E-2:00 p.m., C-1:00, M-12:00, P-11:00 C- Eight Sons of Ei KFAB KMBC KMOX KRLD WABC WADC WBBM WBRC WBT WCAO WCAU WCCO WDRC WDSU WEAN WGR WHK WJAS WKRC WLAC WMAL WNAC WOKO WOWO

B - Yardley Program KOIL KWK WBAL WBZA WGAR WJZ WLW WMAQ WREN

WJ2 WLW WMAQ WREA E-2:15 p.m., C-1:15, M-12:15, P-11:15 R-Sunday Bright Spot CPCF CKGW KFI KFSD KFYR KGO KGW KHQ KOA KPRC KSD KSL KSTP KTAR KVOO KYW WAPI WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFDR WFLA WGY WHAS WHO WIOD WIAF WIAX WIJX WKY WIOD WJAR WJAX WJDX WKY WLIT WOAI WOC WOW WRVA WSAI WSB WMC WPTF WRC WSM WSMB WTAG WTAM WTIC WTMJ WWJ

E-2:30 p.m., C-1:30, M-12:30, P-11:30 - Church of the Air

KDYL KFH KFJF KFPY KGB KLZ KMBC KOH KOL KSCJ KTRH KVOR WAAB WABC WACO WBT WCAO WCCO WDAE WDBO WDRC WFBL WHEC WHP WIBW WJAS WKBN WKBW WKRC WLAP WLBW WLBZ WMAL WMT WOKO WORC WQAM WREC WTAQ WTAR WTOC R-Moonshine and Honeysuckle KSD WCAE WCKY WCSH WDAF WEAF WEEL WFBR WGY WJAR WMAQ WRC WTAG WTAM WTIC

WWJ

B – Yeast Foamers, Herbie Kay KDKA KFI KFSD KGHL KGIR KGW KHQ KOA KOIL KPO KPRC KSL KSTP KTAR KTHS KVOO KWK KYW WAPI WBAL WBZA WEBC WFAA WFLA WGAR WHAM WHAS WIOD WIS WJAX WJDX WJR WJZ

C -- Ann Leaf at Organ CFRB KDYL KFAB KFBK KFH KFJF KFRC KGB KLRA KLZ KMBC KOH KOIN KSCJ KVI KVOR WAAB WABC WADC WBCM WBIG WBCC WBT WCAH WCAO WCCO WDAE WDBJ WDOD WDCC WDSU WEAN WFAN WFBL WFIW WGST WHEC WHP WIBW WIP WISN WJAS WKBH WKBN WKBW WKRC WIDF WIDW WIP WISN WAR WKBH WKBN WKBC WLAC WLAP WLBW WLBZ WMAL WMBD WMT WNOX WODX WOKO WORC WQAM WREC WSPU WTAR WTOC WWYA WXYZ

R — Wayne King and Orchestra KSD KYW WBEN WCAE WDAF WEAF WEEI WFBF WCSII WDAF WEAF WEEI WFBR WGY WHO WJAR WLIT WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

B -- National Youth Conference

B — National Touth Conference KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KTAR KTHS KVOO KWK WAPI WBAL WCKY WFLA WGAR WIBA WIOD WIS WJAX WJDX WJZ WKY WMAQ WMC WOAI WPTF WREN WRVA WSB WSMB WWNC

E-3:15 p.m., C-2:15, M-1:15, P-12:15 C -- N.Y. Philharmonic Symphony CFRB KDYL KFAB KFBK KFH KFJF KFRC KGB KLRA KLZ KMBC KOFF AFRO KGB KLKA KLZ KMBC KOH KOIN KSCJ KVI KVOR WAAB WABC WADC WBCM WBIG WBRC WBT WCAH WCAO WCCO WDAE WDBJ WDOD WDSU WEAN WFBL WFBM WFIW WGST WHEC WHK WHED WIDW WHO WFBM WFIW WGST WHEC WHK WHP WIBW WISN WJAS WKBH WKBN WKBW WKRC WLAC WLAP WLBZ WMAL WMBD WMT WNOX WODX WOKO WORC WQAM WREC WSPD WTAQ WTAR WTOC WWYA WXYZ WWVA

E-3:30 p.m., C-2:30, M-1:30, P-12:30 R — Dr. S. Parkes Cadman KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KFSD KFYR KGO KGW KHQ KOA KOMO KFRC KSD KSL KSTP KTHS KYW WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFLA WGY WHAS WIOD WIS WJAR WJAX WJDX WKY WMC WOAI WOW WPTF WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WWJ WWNC KVOO KV00

B — Swift Garden Party' KOIL KWK WBAL WBZA WGAR WJR WJZ WLW WMAQ WREN

E-4:00 p.m., C-3:00, M-2:00, P-1:00

B-- Travelogue CFCF CKGW KDKA KOIL KWK KYW WBAL WBZA WJZ WREN

E-4:30 p.m., C-3:30, M-2:30, P-1:30 \mathbf{R} — Davey Tree Hour CFCF CKGW WBEN WCAE WCSH WDAF WEAF WEEL WENR WFBR WFI WGY WHO WJAR WOC WOW WFU WSAI WTAG WTAM WTIC WWJ

WWJ B — Sheaffer Lifetime Revue KDKA KFI KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KTAR KTHS KVOO KWK KGIR KGO KGW KHQ AVA KPRC KTAR KTHS KVOO KWK WAPI WBAL WBAP WCKY WDAY WEBC WHAM WHAS WIBA WJDX """ WKY WMAQ WMC WOAI WJZ WKY WMAQ WMC WOAI WREN WSB WSM WSMB WTMJ

WKY WLW WMC WOAI WPTF E-5:00 p.m., C-4:00, M-3:00, P-2:00 WREN WRVA WSB WSM WSMB C -- Real Folks WTMJ WWNC E-3:00 p.m., C-2:00, M-1:00 P-12:00 C -- Ann Leaf at Organ C -- Ann Leaf at Organ KFRK KFH WOWO WSPD WXYZ WGST

B — National Vespers, Dr. Fosdick B — National Vespers, Dr. Fosdick CKGW KFI KFSD KFYR KGIR KGO KGW KHQ KOMO KPRC KSTP KTHS KVÓO KWK WBAL WBZA WCKY WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WIS WIDY WIY WKAO WIS WJDX WJZ WKY WMAQ WOAI WPTF WREN WRVA WSB WSM WSMB WWNC

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

CFRB WAAB WABC WBRC WCAO WCAU WEAN WFBL WGR WHEC WHP WOKO WORC

WHP WOKO WORC R — General Electric Circle KECA KEX KFYR KGA KJR KOA KPO KPRC KSD KSL KSTP KTAR KVOO WAPI WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEL WENR WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMC WOAI WOAI WOCC WOW WPTF WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMJ WSMB WTAG WTAM WTIC WTMJ WWJ WWNC

- Simoniz Guardsmen **B** -

KOIL KWK KYW WBAL WBZA WGAR WHAM WJZ WLW WREN

WGAR WHAM WJZ WHY AND ALL C - Chicage Knights KDYL KFAB KPBK KFJF KPPY KGB KHJ KLZ KOH KOL KRLD KTSA KVOR WBBM WCAH WIBW WJAS WKBH WLAP WMT WWA

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C – Four Eton Boys, Irene Beasley WBIG WBRC WBT WDAE WDBJ WDOD WDSU WLAC WNOX WQAM WREC WTAR WTOC

WREE WIAN HASS R-Catholic Hour CFCF CKGW KPRC KSD KSTP KTHS KVOO WBEN WCAE WCSH WDAF WEAF WEBC WFAA WFLA WGY WHAS WHO WIOD WJAR WGY WHAS WHO WIOD WJAW WJDX WKY WLIT WLS WMC WOAI WOC WOW WRC WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ

B—Raising Junior KWK KYW WBAL WEBC WGAR WHAM WIBA WJR WJZ

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C -- Columbia Concerts Program KVI WAAB WABC WADC WBIG WBRC WBT WCAU WDAE WDOD WDSU WEAN WFBL WFIW WGST WHEC WHP WJAS WKBW WLAP WLBZ WNOX WODX WOKO WQAM WREC WTAR WTOC

B-"K-7, KWK W(K-7, War Drama WCKY WJR WJZ WMAQ

WREN

C --- Barnsdall Musical Memories

WCCO WGL WGN WIBW WISN WMT WSPD WXYZ

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C-National Advisory Council KFAB KFBK KFH KFJF KFPY

KHJ KLZ KMBC KOH KOIN KRLD KVI KVOR WABC W WADC WBBM WBCM WBIG IN KOL WACO WBT WCAH WCAO WCCO WDAE WDBJ WDOD WDSU WFAN WFBL WFBM WGL WGR WHEC WHP WIBW WIP WISN WJAS WKBH WKBN WLAP WLBW WLBZ WMAL WMT

Sunday—Continued

WNAX WNOX WOKO WPG WQAM WREC WSBT WSPD WTAR WTOC WWVA

B --- Willys-Overland Orchestra B — Willys-Overland Orchestra CFCF KDKA KFI KFSD KFYR KGHL KGO KGW KHQ KOA KOMO KPRC KSL KSTP KTAR KVOO KWK KYW WBAL WBZA WCKY WDAY WEBC WGAR WHAM WHAS WIBA WJDX WJR WJZ WMC WOAI WREN WEDP WJWWWY WSB WSM WSMB WTMJ

R-L'Heure Exquise CFCF WEAF WFBR WFLA WGY WIS WJAR WLS WRVA WSAI WTAG WTIC WWJ WWNC

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

E-7:15 p.m., C-6:15, M-5:15, P-4:15 R — Rexail Program CFCF KFI KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KSD KSL KVOO WCAE WCSH WDAF WDAY WEAF WEBC WFHR WFLA WGY WIOD WIS WJAR WJAX WJDX WKY WLIT WMAQ WMC WPTF WRC WRVA WSAI WSB WSM WSMB WTAG WTIC WTMJ WWJ WWYC WWNC

E-7:30 p.m., C-6:30, M-5:30, P-3:30 C — Luden's Novelty Orchestra C-Luden's Noveny Orcnessira KDYL KLZ KMBC KMOX KRLD WABC WBT WCAO WCAU WCCO WDSU WFBM WGN WGR WGST WHK WKBH WKRC WMAL WNAC WNAX WREC WXYZ B - Three Bakers OF CP LIVA KEL KESD KEYR

B — Three Bakers CFCF KDKA KFI KFSD KFYR KGO KGW KHQ KOA KOIL KOMO KPRC KSL KSTP KTAR KVOO KWK KYW WBAL WBZA WDAY WEBC WFAA WFLA WGAR WHAM WHAS WIBA WIDD WJDX WJR WJZ WKY WLW WMC WOAI WREN WJZ WKY WLW WMC WOAI WREN WRVA WSB WSM WSMB WTMJ

E-7:45 p.m., C-6:45, M-5:45, P-4:45 E-7:45 p.m., C — The Sylvanians KMOX WABC

KMBC KMOX WABC WCAO WCCO WDRC WGL WGN WGR WJAS WKRC WNAC WOKO WXYZ WCAU

E-8:00 p.m., C-7:00 M-6:00, P-5:00 C — Pennzoil Parade KFJF KLRA KMOX KTSA WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WGN WGR WGST WHK WJAS WKRC WMAL WAAC WNOX WOKO WSPD WXYZ

R - Chase & Sanborn CFCF CKGW KPRC KSD KSTP CFCF CKGW KPRC KSD KSTP KTHS KVOO WBEN WCAE WCSH WDAF WEAF WEBC WFAA WFLA WGY WHAS WHO WIOD WJAR WJDX WKY WLIT WLS WMC WOAI WOC WOW WRC WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ

B — Enna Jettick Melodies B — Enna Jetuck Melodies CFCF CKGW KDKA KFI KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KOLL KOMO KPRC KSL KSTP KTAR KTHS KVOO KWK KYW WBAL WBZA WDAY WEBC WFAA WFLA WGAR WHAM WTMS WIDA WIDA WID WHAS WIBA WOLD WIS WJAW WJR WJZ WKY WLW WC WOAI WREN WRVA WSB WSM WSMB WTMJ WWNC

E-8:15 p.m., C-7:15, M-6:15, P-5:15 B - Collier's Radio Hour B — Collier's Radio frour KDKA KFI KGO KGW KHQ KOA YOMO KSI, KWK KYW WBAL

WBCM WBIG WBRC WBT WCAH WCAO WCCO WDAE WDBJ WDBO WDRC WDSU WEAN WFAN WFBL WFBM WGR WGST WHK WHP WIBW WIP WISN WJAS WKBN WLAP WLBW WLBZ WMAL WMT WNAX WDDX WOKO WORC WQAM WREC WSPD WTAR WTOC WXYZ

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C — Angelo Patri, "Your Child" KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WGR WHK WJAS WKRC WMAL WNAC WOWO WSPD WXYZ

C - Col. Steepnagle and Budd WBCM WDAE WDBO WDRC WQAM WREC WTAR WTOC

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Everready, Jack Denny KDB KDYL KERN KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KWG WABC WADC WBT, WCAO WCAU WCCO KTAL AND AND KLZ KMBC KMJ KMOX KOIN KOL KWG WABC WADC WBT WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WGR WGST WHK WJAS WKRC WMAL WNAC WOKO WOWO WRR WSPD WYY? WSPD WXYZ

R — Our Government, David Lawrence KVOO WCSH WEAF WENR WFAA WEAR WFLA WG1 B WJDX WFBR WFI WFLA WGY WIOD WIS WJAR WJDN WOW WRC WSAI WWNC WHO WOC KSD

E-9:15 p.m., C-8:15, M-7:15, P-6:15 R -- Album of Familiar Music

KFI KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KOA KOMO KPRC KSD KSL KSTP KTAR KTHS KVOO WAPI WBEN WCAE WCSH WDAY WEAF WEBC WENR WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WJAR WJAX WHO WIBA WIAI WOC WOW WRC WRVA WSAI WSB WSM WEMD WEAC WETA WEATH WEEL WSMB WTAG WTAM WTMJ WWJ

B — Bayuk Stag Party KDKA KWK KYW WBAL WBZA WGAR WJR WJZ WLW WREN

E-9:30 p.m., C-8:30, M-7:30, P-6: C — Count Von Luckner, "Sea Devil" CFRB KDYL KFPY KFRC KI KLZ KMOX KOIN KOL WAT P-6:30 KHJ KLZ KMOX KOIN KOL WABC WADC WCAO WCAU WDRC WAAD WFBL WGN WGR WHK WJAS WKRC WMAL WNAC WOWO WSPD WXYZ KMBC

C — Ann Leaf at the Organ WBCM WBRC WBT WDAE WDBO WQAM WREC WTAR WTOC

E-9:45 p.m., C-8:45, M-7:45, P-6:45 R - Buick Revelers

KFI KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KTAR WAPI WEBN WCAE WCSH WDAF WDAY WEAF WEBN WCAE WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WJAR WJAX WJDX WKY WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WTMI WWI WTMJ WWJ

B — Making Movies, Ray Knight KDKA KOIL KWK KYW WBAL WBZA WGAR WHAM WJR WJZ WLW WREN

 WBZA WGAR WHAM WJR WJZ
 E-10:00 p.m., C-9:00, M-8:00, P-7:00

 WLW WREN
 C — Edna Wallace Hopper

 E-8:30 p.m., C-7:30, M-6:30, P-5:30
 C — Edna Wallace Hopper

 C-The Metropolitans
 KMDX KRLD KTSA WAAB WABC

 CFRB KFBK KFJF KFRC KGB
 WADC WBBM WBRC WCAO WCAO

 KHJ KLRA KLZ KMBC KMOX
 WGST WHEC WHK WISN WJAS

 KOH KOIN KVOR WABC WADC
 WADW WKRC WLAP WLBZ WMAL

 WCAO WCCO WDAE WDBJ WBOO
 WOKO WORC WOWO WREC WSPD

E-10:15 p.m., C-9:15, M-8:15, P-7:15 B — Old Singing Master KDKA KFI KFSD KGO KGW KHQ KOA KOIL KOMO KTAR KWK WBAL WBZA WGAR WHAM WJZ WLW WMAQ WREN R — Gordon String Quartet CKGW KTBS WBEN WCAE WCSH WDAF WEAF WEEI WFI WGY WIAB WOW WEC WTAC WTAM

WJAR WOW WRC WTAG WTAM

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

C – International Revue KMOX WAAB WABC WADC WBBM WCAO WCAU WCCO WDRC WDSU WEAN WFBL WFBM WGST WHK WJAS WKBW WKRC WAL WOKO WREC WRR WSPD WXYZ

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

E-10:45 p.m., C-9:45, M-8:45, P-7:45 C-Ernest Hutcheson, Pianist CFRB KDYL KFAB KFBK KFH KFJF KFPY KGB KLRA KLZ KMOX KOH KOIN KVOR WAAB WABC WADC WECW WDAE WDBJ WDOD WDRC WDSU WEAN WFBL WFBM WGL WGR WHEC WHK WHP WIBW WISN WJAS WKBN WLAC WLAP WLBW WLBZ WMAL WMT WNAX WNOX WOKO WORC WOWO WTAR WTOC WXYZ WPG WQAM WREC V WTAR WTOC WXYZ

WTAR WTOC WXYZ R -- Sunday at Seth Parker's CKGW KFSD KFYR KGHL KGIR KGO KGW KOA KPRC KSL KSTP KTAR KYW WAPI WBEN WCAE WCSH WDAF WDAY WEAF WEAC WCFD WCPD WCW WCAE WEEI WFBR WFI WFLA WGY WHAS WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMC WOAI WOC WOW WRC WRVA WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAM WTMJ WWJ WWNC

E-11:15 p.m., C-10:15, M-9:15, P-8:15 R — Ralph Kirbery, Dream Singer WCAE WDAF WEAF WENR WFBR WFI WGY WHO WOC WOW WWJ

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

C — The Gauchos, Tito Guizar KFJF KLRA WABC WADC WBCM WBRC WBT WCAO WCAU WDAE WDBJ WDOD WDRC WDSU WEAN WFBL WGL WGR WHEC WPBU WEAL WFBL WGL WGR WHEC WHP WIBW WISN WKBN WLAC WLBW WLBZ WMAL WMT WNOX WOKO WFG WQAM WREC WSPD WTAR WTOC WXYZ

C - Pennzoil Parade

KDB KDYL KERN KFBK KFPY KFRC KGB KHJ KLZ KMJ KOH KOL KOY KWG

RCJ ENER Crawford at Organ WCAE WCKY WDAF WEAF WENR WFBR WGY WHO WJAR WOC WOW WRC WTAM WWJ

E-12:00 m., C-11:00, M-10:00, P-9:00 C--Eddie Duchin, Casino Park Orch. KFH KOH KTRH WABC WCAU WCCO WEAN WFBL WGR WHP WIBW WISN WKBN WKRC WLAP WLBW WMT WNAC WNAX WOKO WSPD WTAR

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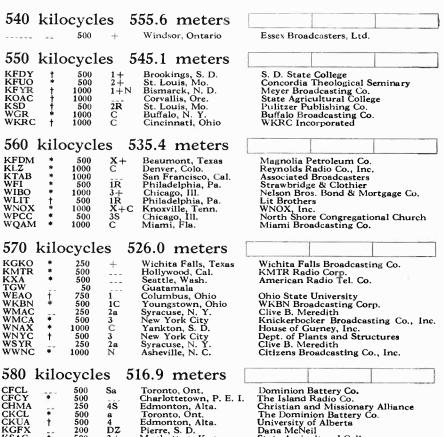
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[43]

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[44]

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WBAP † 10000 1N Dallas, Texas	KCYS.
810 kilocycles 370.2 meters	880
CHNS * 500 Za815 Halifax, N. S. CNRH 500 Za815 Halifax, N. S. WCCO * 5000 CX Minneapolis, Minn. WCCO * 5000 D New York City	Maritime Broadcasting Co., Ltd. Canadian National Railways Northwestern Broadcasting, Inc. Eastern Broadcasters, Inc. Gobierno del Estado de Aguascalientes Aure i Sone I td. DIAL
XFC 250 Aguascalientes, Mexic VOAS 75 St. John's, N. F.	Ayre & Sons, Ltd. DIAL
820 kilocycles 365.6 meters	
WHAS † 10000 NX Louisville, Ky. XFI 1000 818 Mexico City	Courier-Journal & Times Sria. de Ind., Commercio y Trabajo
830 kilocycles 361.2 meters	
830 kilocycles 361.2 meters CMGA - 100 834 Colon, Cuba KOA + 12500 NX Denver, Colo. WEEU - 1000 D Reading, Pa. WHDH 1000 D Boston, Mass. WRUF • 5000 Dn Gainesville, Fla.	Leopoldo V. Figueroa National Broadcasting Co., Inc. Berks Broadcasting Co. Matheson Radio Co., Inc. University of Florida
840 kilocycles 356.9 meters	
CKGW * 5000 Na Toronto, Ont. CKLC † 1000 b Red Deer, Alta. CMC * 500 842 Havana, Cuba CNRD † 1000 b Red Deer, Alta. CNRD † 1000 b Red Deer, Alta.	Gooderham & Worts, Ltd. Alberta Pacific Grain Co., Ltd. Cuban Telephone Co. Canadian National Railways Canadian Pacific Railways
850 kilocycles 352.7 meters	
830 KHIOCyCles 6001 KWKH * 10000 1 Shreveport, La. WWL * 10000 1 New Orleans, La.	Hello World Broadcasting Corp. Loyola University
860 kilocycles 348.6 meters	
CMJE 20 856 Camaguey, Cuba KMO † 500 + Dn Tacoma, Wash. WABC * 50000 Ca New York City WBOQ 50000 a New York City WHB * 500 D Kansas City, Mo. XFX 500 867 Mexico City, Mexico	Manuel Fernandez KMO, Inc. Atlantic Broadcasting Corp. Atlantic Broadcasting Corp. WHB Broadcasting Co. Secretaria de Educacion Publica
870 kilocycles 344.6 meters	
WENR 50000 1N Chicago, III. WLS † 50000 1B Chicago, III. WFF 500 875 Chihuahua, Chih.	National Broadcasting Co., Inc. Agricultural Broadcasting Co. Gobierno del Estado de Chihuahua
880 kilocycles 340.7 meters	
880KIIIOCyCles6100, 110, 110, 110, 110, 110, 110, 110,	Maple Leaf Radio Co., Ltd. N. Nathanson G. A. Vandry Cyrus Dolph Canadian National Railways Midwestern Radio Corp. Tribune Publishing Co. Pillar of Fire, Inc. Mississippi Broadcasting Co., Inc. Scranton Broadcasters, Inc. Scranton Times University of Iowa
Г. <u>/</u> Б	1

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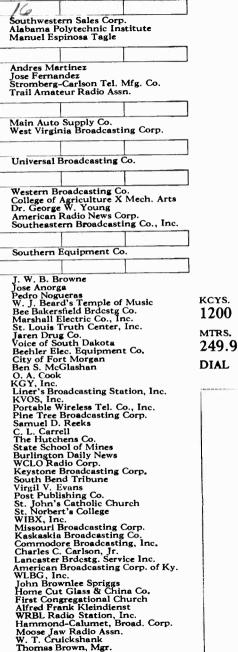
890	kil	ocyc	les	336.9 meters	
CFBO	*	500	100		
CKCO CKPR) <u>†</u>	100	3	St. John, N. B. Ottawa, Ont.	C. A. Munro, Ltd.
CKPR		50	3	Ft. William, Ont.	Dr. G. M. Geldert Dougall Motor Car Corp.
CMX	ţ	250 1000	007	navana, Cuba	Raoul Karman
KARK		250	885		Francisco Lavin
KFNF		500	2+	Little Rock, Ark.	Arkansas Radio & Equipment Co
KUSD WGST	*	500	2	Shenandoah, Iowa Vermillion, S. D.	
WILL	ŧ	250 250	+0		University of South Dakota Georgia School of Technology
WJAR		250	2+ +R	Orbana, III.	
WKAQ		250	TR	Providence, R. I.	(he (hit)at Co
WMM		250	+	Fairmont, W. Va.	Radio Corp. of Porto Rico Holt-Rowe Broadcasting Co.
XES	\$	500		San Juan, P. R. Fairmont, W. Va. Tampico, Mexico	Difusora Portena XES
900	kilc	ocycl	es	333.1 meters	
KGBU KHJ KSEI WBEN		500	••	Katahilan Al	
KHJ	‡	1000	C	Ketchikan, Alaska Los Angeles, Cal.	Alaska Radio & Service Co.
KSEI	*	250		Pocatello, Idaho	Don Lee, Inc. Radio Service Corp.
WIAX	*	1000	R	Pocatello, Idaho Buffalo, N. Y.	WBEN, Inc. City of Jacksonville WKY Radiophone Co.
WJAX WKY	*	$1000 \\ 1000$	N N	Jacksonville, Fla	City of Jacksonville
WLBL	t	2000	Ď	Oklahoma City Stevens Point, Wis.	WKY Radiophone Co.
010				-	Wisconsin Dept. of Markets
910	kilo	cyc1	es	329.6 meters	
CHIC		100	915	Prescott, Ont.	Radio Association
CFOC CJGC CNRL CNRS	÷.	500 5000	8 1	Saskatoon, Sask	The Electric Shop, Ltd. Free Press Printing Co., Ltd. Canadian National Railways Canadian National Railways
CNRL	*	5000	b b	London, Ont. London, Ont.	Free Press Printing Co., Ltd.
CNRS		500	a	Saskatoon Sask	Canadian National Railways
TICR XEW	Ť	50	911	Saskatoon, Sask. San Jose, Costa Rica	Canadian National Railways
ALL W		5000	1.1.1	Mexico City	Mexico Music Co.
920	kilo	cycl	es i	325.9 meters	
HHK	*	1000		Post an Dain	
KFEL	‡ *	500	1	Port au Prince, Haiti Denver, Colo	Republic of Haiti
KFXF		500	1	Denver, Colo. Denver, Colo. Seattle, Wash.	Eugene P. O'Fallon, Inc.
KOMO KPRC	‡	1000 1000	N	Seattle, Wash.	Colorado Radio Corp. Fisher's Blend Station, Inc.
WAAF		500	$_{\rm D}^{+\rm N}$	Houston, Texas Chicago, Ill.	Houston Printing Co.
WBSO		500	Ď	Needham, Mass.	Drovers' Journal Publishing Co.
WWJ	1	1000	R	Detroit, Mich.	House's Diend Station, Inc. Houston Printing Co. Drovers' Journal Publishing Co. Babson Service Organization, Inc. The Detroit News
930 1	-:1				
	KIIO	cycle	es d	322.4 meters	
CFCH CFRC		100	3	North Bay, Ont. Kingston, Ont. Brandon, Man. Havana, Cuba	Northern Supplies Ind
CKX	Ŧ	50 500	3+	Kingston, Ont.	Northern Supplies, Ltd. Queen's University
CMCD		250	925	Brandon, Man.	Manitoba Telephone System
CMCN		250	925	Havana, Cuba	inger bertematy
CMJF KFWI	Ť.	50	1.1	Camaguey, Cuba	Antonio Ginard John L. Stowers
KGBZ		500 500	$\frac{1}{2}$	San Francisco, Cal	Redio Entertainmente T
KMA	*	500	2+2+2+2	York, Nebr. Shenandoah, Iowa	Dr. George R. Miller
KROW	*	500	ī∔x +C	Oakland, Cal.	Dr. George R. Miller May Seed & Nursery Co.
WBRC WDBJ	*	500	+c	Birmingham, Ala.	
WIBG		250 25	∔C D	Roanoke, Va.	Birmingham Broadcasting Corp. Times-World Corp. WIRC, Inc.
		20	D	Elkins Park, Pa.	WIBG, Inc.
940 k	iloc	ycle	s 3	19.0 meters	
KGU	† 1	000	NXZ	Honolulu Hawait	Marken A Mark
KOIN	*]	000	С	Honolulu, Hawaii Portland, Oregon	Marion A. Mulrony KOIN, Inc.
KZRC WAAT		500	937.5	Cebu, P. I. Jersey City, N. J. Portland, Maine Farro N. D.	Erlanger & Galinger Inc
WCSH	¥ 1	300 000	D R+	Jersey City, N. J.	
WDAY	* i	000	N	Fargo, N. D.	Congress Square Hotel Co.
WFIW	• 1	000	С	Hopkinsville, Ky.	Congress Square Hotel Co. WDAY, Inc. WFIW, Inc.
WHA XEO		750	$\mathbf{D}+$	Wadison, Wis.	
	5	000		Mexico City	National Revoluncionario Party
950 k	iloc	vcle	2	15.6 meters	
CMHD		250		Calbarien, Cuba	Manual Al
KFWB	• 1	000		Caibarien, Cuba Hollywood, Cal.	Manuel Alvarez Warner Bros Broadcastlan C
					Warner Bros. Broadcasting Corp.

[46]

KGHL - 1000 KMBC * 1000 VONA - 30 WRC † 500	N Billings, Mont. C Kansas City, Mo. St. John's, N. F. N Washington, D. C	Northwestern Auto Supply Co., Inc. Midland Broadcasting Co., Inc. Lane, Gillard & Avery National Broadcasting Co., Inc.
960 kilocyc CHCK - 100 CHWC 500 CJBR - 500 CKCK † 500 CKNC * 500 CKNC * 500 CMBD - 150 CMBD - 250 CNRR - 500 CNRR - 1000	3 Regina, Sask. 3a Regina, Sask. 3a Regina, Sask. Toronto, Ont. 965 Havana, Cuba 965 Havana, Cuba 3a Regina, Sask.	P. E. I. W. E. Burke & J. E. Osher R. H. Williams & Sons, Ltd. Cooperative Wheat Producers, Ltd. Leader-Post, Ltd. Canadian National Carbon Co., Ltd. Domingo Fernandez Luis Perez Garcia Canadian National Railways Canadian National Railways
970 kilocyc CMGF 500 KJR 5000 WCFL 1500) B Seattle, Wash.	
980 kilocyc CFCN 10000 KDKA 50000 TI4NRH 14	0 B Pittsburgh, Pa.	rs W. W. Grant & H. G. Love Westinghouse Elec. & Mfg. Co. Armando Cespedes MTRS.
990 kilocy WBZ † 2500 WBZA † 100 XEK 10	cles 302.8 mete $B \square X$ Boston, Mass. $B \square X$ Springfield, Mas	Westinghouse Flee & Mfg Co.
1000 kilocy KFVD * 23 WHO * 500 WOC * 500 WORK 100 XEA 10 XEC XEE * 1 XEFE 1 XEFS XEI * 1 XEFS XEI * 1 XETC 1 XETC 1 XETG 1 XEU 1 XEU 1 XEU 1 XEU 1	50 Dn Culver City, Ca $N \square X$ Des Moines, Iov $N \square X$ Davenport, Iow	 Los Angeles Broadcasting Co. wa Central Broadcasting Co. York Broadcasting Co. al Alberto Palos Sauza Jesus R. Benavides Alfonso Zorilla B. ns. Rafael T. Carranza nih. Feliciano Lopez Islas Carlos Gutierrez M. Juan G. Buttner Antonio Garza Castro Juventino Sanchez Feliciano Lopez Islas
CMBZ KGGF † KQW * WHN * WIS * WNAD *	ycles 296.8 met 50	Acadia University Modesto Alvarez Manual y G. Salas Okla. Powell & Platz Okla. Pacific Agricultural Foundation, Ltd. y Marcus Loew Booking Agency C. South Carolina Broadcasting Co., Inc. a. University of Oklahoma a. Palisades Amusement Park
	15 1017 Ciego de Avil. 0000 Na Chicago, Ill. 0000 Na Chicago, Ill. 250 D Philadelphia, 300 Tiajuana, B.	a, Cuba Luis Marauri Westinghouse Elec. & Mfg. Co. Westinghouse Elec. & Mfg. Co. Pa. WRAX Broadcasting Co. C. Carlos de la Sierra
		[47]

103	30 k	ilocy	vcles	291.1 meters	The milers
CPC	H	50	10 N		-
CMK CNR	C V	* 15 † 50		Santiago de Cuha	Canadian Marconi Co. M. P. Martinez
XEB		1 100		- vancouver, B C	Canadian National Dailus
104	0.1	•1		- Mexico City, Mexico	El Buen Tono, S. A.
104	UK	ilocy	cles	288.3 meters	
KRLI KTH	D I	1000	0 Ci	Dallas, Texas	KRLD Radio Corp.
WKA	R	1000	U NI 0 D	Hot Springs, Ark.	
105	0.1	••	·	East Lansing, Mich.	Michigan State College
105	0 k	ilocy	cles	285.5 meters	
KFBI KNX		5000	Dr Dr	Milford, Kansas	Former & D
XEFC		5000	n	 Hollywood, Cal. 	Farmers & Bankers Life Insurance Co. Western Broadcast Co.
106	<u>م</u> 1_			include, 14C.	Hugo Molina Font.
100	U K	ilocy	cles	282.8 meters	
KWJJ WBAI	. *	500 10000		Portland Ore	KWJJ Broadcast Co., Inc.
WJAC WTIC	÷	1000) Dn	Dalfimore Md	Consolidated Gas Elec. & Pwr. Co.
		50000	1N	Hartford, Conn.	Consolidated Gas Elec. & Pwr. Co. Norfolk Daily News Travelers Broadcasting Control of C
1070) ki	locy	-100		Travelers Broadcasting Service Corp.
CMBC	3	. 150		280.2 meters	
CMBC CMCB	۲. •	150	11	Havana, Cuba Havana, Cuba	Francisco Garrigo
KJBS WCAZ	*	100 50		San Francisco Cal	Antonio Capablanca Julius Brunton & Sons Co.
WD7	-	100	D D	Carthage, Ill. Tuscola, Ill.	
WTAN XEG	1 *	50000 250	R	Cleveland, Ohio	James L. Bush National Broadcasting Co., Inc. Miguel Yarra
_				Mexico City, Mexico	Miguel Yarza
1080) ki	locyc	les	277.6 meters	
WBT WCBD		5000	CX	Charlotte, N. C.	Station William Th
WMBI	÷.	5000 5000	1 D 1 D	n 210n. []]	Station WBT, Inc. Wilbur Glenn Voliva Moody Bible Levie
					Moody Bible Institute
1090	KI.	locyc	les	275.1 meters	
КМОХ	•	50 00 0	С	St. Louis, Mo.	Voice of St. Louis, Inc.
1100	kil	locyc	les	272 6 master	Litt of St. Louis, Inc.
K (-) M		250	DX	272.6 meters	
WLWL WPG		5000	1	Stockton, Cal. New York City	E. F. Peffer
	. •	5000	1C	Atlantic City, N. J.	Missionary Society of St. Paul WPG Broadcasting Corp.
1110	kil	ocyc	les	270.1 meters	Corp.
CMHI		15		Sente Clara Cub	
KSOO KZKA	٠	2500 1000	Dn	Santa Clara, Cuba Sioux Falls, S. D. Manilla, P. I. Biobannad V	Laviz y Paz Sigur Fells Broadcasting A
WRVA	÷.	5000	Ň	Manilla, P. I. Richmond, Va.	Sioux Falls Broadcasting Assn., Inc.
1120	1.:1		1.		Larus & Bros. Co., Inc.
CECA	KII	ocyc]	les	267.7 meters	
CFCA CFJC CHGS	t	500 100	a	Toronto, Ont.	Star Pub. & Ptg. Co
CHGS	- 40 -	100		Kamloops, B. C. Summerside, P. E. I.	Star Pub. & Ptg. Co. N. S. Dalgleish & Sons R. T. Holman, Ltd. Harold R. Cascor
CJOC CNRT	‡	100 500		Lethbridge, Alto	Harold R. Carson
KFIO	1	100	a D	Spokane Wesh	Harold R. Carson Canadian National Railways Spokane Broadcasting Ca
KFSG KRKD		500 500	3 3		Echo Park Evong And
KRSC	1	50	D	Los Angeles, Cal. Seattle, Wash. Houston, Texas Orlando, Fla. Willmington Del	Dalton's, Inc. Radio Sales Corp.
KTRH WDBO	-	500 250	2C	Houston, Texas	Radio Sales Corp. Rice Hotel
WDEL WHAD	1	250	+C +X	Orlando, Fla. Wilmington Del	Orlando Broadaastin C
WHAD WISN		250 250	1	Wilmington, Del. Milwaukee, Wis. Milwaukee, Wis.	Marcuette University
WTAW	‡	230 500	1C 2	Milwaukee, Wis. College Station, Texas	Evening Wisconsin Co
1130	1.1.				Agricultural & Mech. College
1130] KSL	κΠ(JCyCI	es ,	265.3 meters	
WJJD WOV	-	5000 20000	NX Dn	Salt Lake City	Radio Service Corp. of Utah
WÔV XEH		1000	D	Mooseheart, Ill. New York City	
		1000	1132	Monterrey, N. L.	International Broadcasting Corp. Constantino Tarnava
				[48]	

1140	kilo	evel	es 2	263.0 meters	Γ
KV00	* 8	5000	1NX	Tulsa, Okla.	L
KVOO —WAPI XETA	• i	5000 5000	1NX 1NX	Birmingham, Ala.	
		500		Mexico City	_
1150	kilo	cycle	es 2	260.7 meters	
CMCO		600	212	Havana, Cuba Havana, Cuba	
CMQ WHAM	1,	250 5000	BX	Havana, Cuba Rochester, N. Y.	
10-AT		25	1155	Trail, B. C.	
1160	1-1-	aval	~~ [′]	258.5 meters	Г
1160	KIIO	cych		250.5 meters	L
WOWO WWVA	* 10	0000 5000	1C 1C	Ft. Wayne, Ind. Wheeling, W. Va.	
					-
1170	kilo(cycl		256.3 meters	L
WCAU	* 10	0000	СХ	Philadelphia, Pa.	
1180	bilo	evel.	P6 '	254.1 meters	Γ
KEX	*	5000	2B	Portland, Ore	L
KOB		0000	ž	Portland, Ore. State College, N. M. Minneapolis, Minn. New York City	
WDGY	*	1000	Dn	Minneapolis, Minn.	
KOB WDGY WINS WMAZ	*	500 500		Macon, Ga.	
			 		Г
1190	K110	cycl		252.0 meters	L
WOAI		0000	N	San Antonio, Texas	-
1200	kilo	cycl	es :	249.9 meters	
CKOV CMGB CMJG KBTM	••	100	1205	Kelowna, B. C. Matanzas, Cuba	
CMGB		7.5 30		Camaguey, Cuba Paragould, Ark. Bakersfield, Cal. Marshalltown, Iowa St. Louis, Mo.	
KBŤM		100	D	Paragould, Ark.	
KERN	Ŧ-	100 100	с +	Marshalltown, Iowa	
KERN KFJB KFWF		100	5'+ +	St. Louis, Mo.	
KGDE KGDY	*	100 100	+	Fergus Falls, Minn.	
KGEK	Ť	100	9	Yuma, Colo.	
KGEK KGEW KGFJ KGHI KGY	Ŧ	100	9	Fergus Falls, Minn. Huron, S. D. Yuma, Colo. Fort Morgan, Colo. Los Angeles, Cal. Little Rock, Ark. Olympia, Wash. Monroe, La.	
KGHI	÷"	100 100		Little Rock, Ark.	
KGY	+	100	+ D	Olympia, Wash. Monroe, La.	
KMLB	÷	100 100	D	Bellingham, Wash.	
KGT KMLB KVOS KWG WABI WABZ		100		Bellingham, Wash. Stockton, Cal. Bangor, Maine New Orleans, La.	
WABI WAB7	‡	100 100	i	Bangor, Maine New Orleans, La.	
WBBZ	*	100		Ponca City, Okla.	
WBHS	I -	50 100	10CP	Huntsville, Ala.	
WCAX	Ţ	100	2	Ponca City, Okla. Huntsville, Ala. Rapid City, S. D. Burlington, Vt.	
WABZ WBBZ WBHS WCAT WCAX WCLO WCOD WFAM WFBC WFBC	† †	100	3	Burlington, Vt. Janesville, Wis. Harrisburg, Pa. South Bend, Ind. Knoxville, Tenn. Cincinnati, Ohio	
WEAM	Ŧ	100 100	8	South Bend, Ind.	
WFBC	•	100 50	10	Knoxville, Tenn.	
	÷-	100 10	+	Canton, Ohio	
WHBY WIBX WIL	Ť.	100		Canton, Ohio Green Bay, Wis. Utica, N. Y.	
WIBX	*	$100 \\ 100$	+ 5+ 6	Utica, N. Y. St. Louis, Mo.	
WJBC	•	100	6	St. Louis, Mo. La Salle, Ill. Decatur, Ill.	
WIBL	ŧ	100 100	6		
WIL WJBC WJBL WJBW WKJC WLAP		100	6 1 3 C +	Lancaster, Pa. Louisville, Ky. Petersburg, Va.	
WLĂP WLBG	1	250 100	ç	Louisville, Ky.	
WNBO	*	100		Washington, Pa.	
WNBW WNBX WORC	. <u>†</u>	10	3	Washington, Pa. Carbondale, Pa. Springfield, Vt.	
WORC	1	10 1 0 0	čх	Worcester, Mass.	
WRBL	- †	50	8	Columbus, Ga. Hammond, Ind.	
WWAE		100 25	8	Moose Jaw. Sask.	
10-AB 10-BP	Ť	15		Moose Jaw, Sask. Wingham, Ont. Brantford, Ont.	
10-BQ		15		Brantiord, Ont.	



121	0 ki	locyd	cles	247.8 meters	
CFCO		250	8	Chatham, Ont.	Western Ontenia (17)
CFNB	÷	50		Fredericton, N. B.	Western Ontario "Better Radio" Club James S. Neill & Sons, Ltd.
CJOR CKM	n .	500 100	8	Vancouver B C	G. C. Chandler
KDFN	1 †	100	хz	Cobalt, Unt.	R. L. MacAdam
KDLR	<u>+</u>	100		Cobalt, Ont. Casper, Wyo. Devil's Lake, N. D.	Donald Lewis Hathaway KDLR,Inc.
KFJI KFOR	; ‡	100 100		Mamath Falls, Ore	KE II Broadcasters Inc.
KEVS	*	100	6	Lincoln, Nebr.	noward A. Shuman
KFXN	1 †	100	ğ	Cape Girardeau, Mo. San Bernardino, Cal.	Hirsch Battery & Radio Co. J. C. & E. W. Lee
KGCR	1 † 2 †	100	1.64	watertown, S. D.	Greater Kampeska Radio Com
KMJ	*	100 100		Dodge City, Kansas	Greater Kampeska Radio Corp. Dodge City Broadcasting Co. James McClatchy Co.
KPPC	\$	50	9	Fresno, Cal. Pasadena, Cal.	James McClatchy Co.
KWEA WALR		100		Shreveport, La.	
WBAX	÷ .	100 100	1	Zanesville, Ohio	Hello World Broadcasting Corp. Roy W. Waller
WBBL	. +	100	żs	Wilkes-Barre, Pa. Richmond, Va	John H. Stenger, Jr. Grace Covenant Pres. Church H. L. Deving & Church
WCBS WCOF	*	100	2	Richmond, Va. Springfield, Ill. Yonkers, N. Y.	H. L. Dewing & Chas Masster
WCRV	v .	100 100	3 4	Yonkers, N. Y.	H. L. Dewing & Chas. Messter Westchester Broadcasting Corp. Clinton R. White
WEBO	*	100	6	Chicago. Ill. Harrisburg, Ill.	Clinton R. White
WEDC		100	4	Unicago, III.	First Trust & Savings Bank Emil Denemark, Inc.
WGBB WGCN	4 +	100 100	3	Freeport, N. Y.	Harry H. Carmon
WHBF	*	100		Gulfport, Miss. Rock Island, Ill.	Great Southern Land Co Inc.
WHBU	Г <u>†</u>	100		Anderson, Ind.	Beardsley Specialty Co. Anderson Broadcasting Corp.
WIBU	•	100	3	Anderson, Ind. Poynette, Wis. Red Bank, N. J.	WILL C. Forrest
ŴĴBÛ	*	100 100	1		Monmouth Broadcasting Co.
WIBU WJBI WJBU WJBY WJW	*	100		Gadsden, Ala. Mansfield, Ohio Ithaca, N. Y. Richmond, Va. Jamaica, N. Y.	DUCKNell University
WLCI	*	100		Mansfield, Ohio	Gadsen Broadcasting Co., Inc. Mansfield Broadcasting Assn.
WMBC	*	50 100	7C	Ithaca, N. Y.	Contrain Assil, OI IChara
- WMRJ	*	100	3	Jamaica, N. Y.	Havens & Martin Inc
WOCL WOM1	*	50			Peter J. Prinz A. E. Newton
WPRO	*	100 100	5	Manitowoc, Wis. Providence, R. I.	Francis M Kadow
WODY		100		Thomasville, Ga.	Cherry & Webb Broadcasting Co.
WRBO	1	100	-	Greenville, Miss.	Stevens Luke
WSBC WSEN	Ť	100 100	4	Chicego, Ill.	J. Pat. Scully World Battery Co., Inc. Columbus Broadcasting Co.
WSEN WSIX	+	100		Springfield Term	
WSOC	‡	100		Columbus, Ohio Springfield, Tenn. Gastonia, N. C.	
WTAX XEX	Ť	100	2	opringneid, III.	WSOC, Inc. WTAX, Inc.
		500		Mexico City	Excelsior, Cia Editorial S. A.
1220 CMBY	kil	ocyc]	les	245.8 meters	
CMBY CMCA		350 150	1225 1225	Havana, Cuba Havana, Cuba	Callejas-Cosculluela Manuel Cruz
KFKU	*	500	1	Lawrence, Kansas	Manuel Cruz
KTW KWSC	÷-	1000		Seattle, Wash.	University of Kansas First Presbyterian Church State College of Wality
WCAD	*	$1000 \\ 500$	+ D	Pullman, Wash. Canton, N. Y.	
WCAF		1000	Ř	Pittsburgh, Pa.	St. Lawrence University
WDAE	:	1000	R C	lampa, Fla.	Pittsburgh Sun-Telegraph Tampa Publishing Co.
WREN	-	1000	ĭВ	Lawrence, Kansaa	Jenny Wren Co.
1230	kile	ocycl	es 2	243.8 meters	
KFOD KGGM KYA WBIS		100		Anchorage, Alaska	Anchorage Radio Club
KYA	1	250 1000	+	ADUQUERCIJE N Mer	New Mexico Broadcasting Co
WBIS	*	1000	a	San Francisco, Cal.	
WFBM	*	1000	1C	Boston, Mass. Indianapolis, Ind.	Shepard Broadcasting Corp. Indianapolis Power & Light Co. Shepard Broadcasting Service, Inc.
WNAC	*	1000	aC	Boston, Mass.	Shepard Broadcasting Service, Inc.
WPSC WSBT	Ť	500 500	D 1C	State College, Pa. South Bend, Ind.	
XETQ		100		Mexico, Mex.	South Bend Tribune Carlos G. Caballero
1240 CMAR	kilo	ocvc1	es 2	41.8 meters	Carlos G. Cabanero
CIVIAD		20	1249	Piper del Pio Cut	T
KGCU KLPM		250	3	Pinar del Rio, Cuba Mandan, N. D.	Francisco Martinez
KLPM KTAT	1	250	3	Mandan, N. D. Minot, N. D.	Mandan Radio Assn. John B. Cooley
KTEI	†	1000 250	1	Ft. Worth, Texas	John B. Cooley S. A. T. Broadcast Co.
WACO WXYZ	†	1000	1+ 1C	Twin Falls, Idaho Waco, Texas	
WXYZ	+	1000	C	Detroit, Mich.	Central Lexas Broadcasting Co Im-
					Kunsky-Trendle Broadcasting Corp.

lub casting Co. Ing Corp. Ing Service, Inc. t & Light Co. Ing Service, Inc. College e

Francisco Martinez
Mandan Radio Assn
John B. Cooley
S. A. T. Broadcast Co.
Radio Broadcasting Corp.
Central Texas Broadcasting Co. Inc.
Kunsky-Trendle Broadcasting Corp.

1250 kilocycles	239.9 meters	
KFMX † 1000 2 KFOX * 1000 2 WAAM * 1000 2 WCAL * 1000 2 WDSU † 1000 2 WGCP - 250 1 WLB † 1000 2 WODA - 1000 1 WRHM * 1000 2 XEFA - 250	Northfield, Minn. Long Beach, Cal.	Carleton College Nichols & Warinner, Inc. WAAM, Inc. St. Olaf College Jos. H. Uhalt May Radio Broadcast Corp. University of Minnesota Richard E. O'Dea Minnesota Broadcasting Corp. Manuel F. Murguia
1260 kilocycles	238.0 meters [
KOIL * 1000 B KRGV * 500 1 KVOA † 500 D KWWG * 500 1 WLBW * 500 C WTOC * 500 C	Council Bluffs, Iowa Harlingen, Texas Tucson, Arizona Brownsville, Texas Oil City, Pa. Savannah, Ga.	Mona Motor Oil Co. KRGV, Inc. Robert M. Riculfi Herald Pub. Co. Radio-Wire Program Corp. Savannah Broadcasting Co.
1270 kilocycles	236.1 meters	
KGCA 50 2D KOL † 1000 C KVOR 10000 C KWLC 1000 C WASH 500 a WEAI 1000 D WFBR 500 R WJDX 1000 N WOOD † 500 a	Decorah, Iowa Seattle, Wash. Colorado Springs, Colo. Decorah, Iowa Grand Rapids, Mich. Ithaca, N. Y. Baltimore, Md. Jackson, Miss. Grand Rapids, Mich.	Charles W. Greenley Seattle Broadcasting Co., Inc. Reynolds Radio Co., Inc. Luther College Kunsky-Trendle Broadcasting Corp. Cornell University Baltimore Radio Show, Inc. Lamar Life Insurance Co. Kunsky-Trendle Broadcasting Corp.
1280 kilocycles	234.2 meters	
CMCU 150 128. CMCW 150 128. KFBB * 1000 + WCAM * 500 1 WCAP * 500 1 WDOD * 1000 + WIBA * 500 + WOAX 500 1 WRR 500 C	5 Havana, Cuba Great Falls, Mont. Camden, N. J. Asbury Park, N. J. Chattanooga, Tenn.	Jorge Garcia Serra Jose Lorenzo Buttrey Broadcast, Inc. City of Camden Radio Industries Broadcast Co. WDOD Broadcasting Corp. Badger Broadcasting Co. WOAX, Inc. City of Dallas
1290 kilocycles	232.4 meters	KCYS.
KDYL † 1000 C KFUL 500 1 KLCN 50 D KTSA † 1000 1+ WEBC * 1000 + WJAS * 1000 + WNBZ - 50 D	Salt Lake City Galveston, Texas Blytheville, Ark. C San Antonio, Texas Superior, Wis. Pittsburgh, Pa. Saranac Lake, N. Y.	Intermountain Broadcasting Corp.1310News Publishing Co.1310C. L. LintzenichMTRS.Lone Star Broadcast Co.228.4Head of Lake Broadcasting Co.228.4Pittsburgh Radio Supply HouseDIAL
1300 kilocycles	230.6 meters	
KFAC * 1000 4 KFH * 1000 C KFJR * 500 3 KTBR - 500 3 WBBR * 1000 1 WEVD * 500 1 WHAP * 1000 1 WHAZ * 500 1 WHAZ * 500 1 WIOD * 1000 N WOQ * 1000 N WOQ * 250	Los Angeles, Cal. Wichita, Kansas Portland, Ore. Brooklyn, N. Y. New York City New York City Troy, N. Y. Miami, Fla. Kansas City, Mo. Tampico, Tams.	Los Angeles Broadcasting Co. Radio Station KFH Co. Ashley C. Dixon—KFJR, Inc. M. E. Brown People's Pulpit Association Debs Memorial Radio Fund, Inc. Defenders of Truth Society, Inc. Rensselaer Polytechnic Institute Isle of Dreams Broadcasting Corp. Unity School of Christianity Maria T. de Gutirrez
1310 kilocycles	228.9 meters	
KCRJ † 100 D KFBK † 100 KFGQ † 100 7 KFJY * 100 7 KFPL † 100 KFPM * 15	Jerome, Arizona Sacramento, Cal. Boone, Iowa Ft. Dodge, Iowa Dublin, Texas Greenville, Texas	Chas. C. Robinson Jas. McClatchy Co. Boone Biblical College Cedar Rapids Broadcast Co. C. C. Baxter The New Furniture Co
	[51]	

KFXJ	+	100		Grand Junction, Colo.	Western Slope Broadcasting Co.
KFXJ KFXR	±.	100	+	Oklahoma City	Exchange Ave. Baptist Church
KGBX KGCX		100		St. Joseph, Mo.	KGBX, Inc.
KGCX	ŧ	100	+	Wolf Point, Mont.	First State Bank of Vida
KGEZ	<u>t</u>	100		Kauspell, Mont.	First State Bank of Vida Donald C. Treloar
KGFW	1	100		Kearney, Nebr. Yakima, Wash.	
KIT KMED	1	100		Yakima, Wash.	Carl B. Haymond
KRMD	Ţ	100 50	9	Medford, Ore.	Mrs. W. J. Virgin Robert M. Dean
KTLC	- 1	100		Shreveport, La. Houston, Texas El Paso, Texas	Robert M. Dean
KTSM		100	2	Fi Deso, Texas	Houston Broadcasting Co.
KWCR	ŧ	100	7	Cedar Rapids, Iowa	W. S. Bledsoe & W. T. Blackwell
KXRO	+	100		Aberdeen, Wash.	Cedar Rapids Broadcast Co.
WBEO		100		Marquette, Mich.	KXRO, Inc.
WBOW		100		Terre Haute, Ind.	Lake Superior Broadcasting Co. Banks of Wabash, Inc. Louis G. Baltimore
WBRE		100		Wilkes-Barre, Pa.	Louis G. Baltimore
WCLS WDAH	÷.	100	1	Joliet, Ill.	WCLS, Inc.
WDAH	1	100	2	Joliet, III. El Paso, Texas Buffalo, N. Y. Royal Oak, Mich.	Bledsoe & Blackwell
WEBR		100	+	Buffalo, N. Y.	Howell Broadcasting Co., Inc.
WEXL WFBG	1	50	21	Royal Oak, Mich.	Royal Oak Broadcasting Co. Wm. F. Gable Co.
WFDF	÷	100 100	3X	Altoona, Pa.	Wm. F. Gable Co.
WFDV		100	D	Flint, Mich.	Frank D. Fallain
WGAL	1	100	5	Rome, Ga.	Rome Broadcasting Corp.
WGH	*	100		Lancaster, Pa. Newport News, Va.	WGAL, Inc.
WHAT	t	100	4	Philadelphia, Pa.	Hampton Roads Broadcasting Corp
WJAC WJAK WKAV	- ÷	100	3	Johnstown, Pa.	Independence Broadcasting Co. Johnstown Automobile Co.
WJAK	*	50	6	Elkhart Ind	Truth Publishing Co. Inc.
WKAV		100		Elkhart, Ind. Laconia, N. H.	Truth Publishing Co., Inc. Laconia Radio Club
WKBB		100	1	Joliet, Ill.	Laconia Radio Club Sanders Bros. Radio Station R. B. Broyles Furniture Co
WKBC	*	100		Birmingham, Ala.	R. B. Broyles Furniture Co
WKBS	*	100		Galesburg, Ill.	Permit IN, INEISON
WLBC	ŧ	50	6	Muncie, Ind. Auburn, N. Y.	Donald A. Burton WMBO, Inc.
WMBO	_ I _	100		Auburn, N. Y.	WMBO, Inc.
WNBH WOL	-	100		New Bedford, Mass.	New Bedford Broadcasting Co.
WRAW		100 100	5X	Washington, D. C.	American Broadcasting Co.
	÷	100		Reading, Pa. Knoxville, Tenn.	Reading Broadcasting Co.
WSAJ WSJS WTEL	1	100		Grove City Do	Stewart Broadcasting Co.
WSIS		100		Grove City, Pa. Winston-Salem, N. C.	Grove City College Winston-Salem Journal Co. Foulkrod Radio Engineering Co.
WTEL		100	4	Philadelphia, Pa.	Winston-Salem Journal Co.
WITS	+	100	÷	lackson Tenn	Sun Publishing Co.
WTŠL		100	ģ	Jackson, Tenn. Laurel, Miss.	C A Unishing Co.
XEFB		50		Monterrey, N. L.	G. A. Houseman
		50	1315	Monterrey, N. L.	Quintanilla y Stevenson
	 kild	50	1315	Monterrey, N. L.	Quintanilla y Stevenson
1320	 kilo	50 DCYCl	1315	Monterrey, N. L. 227.1 meters	Quintanilla y Stevenson
1320 кднг		50 0CYC] 250	i315 les	Monterrey, N. L. 227.1 meters	Quintanilla y Stevenson
1320 KGHF KGMB		50 DCYC 250 250	1315 les	Monterrey, N. L. 227.1 meters	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch
1320 KGHF KGMB KID	†	50 OCYC 250 250 250	1315 les	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd.
1320 KGHF KGMB KID WADC	†	50 OCYC 250 250 250 1000	$\operatorname{les}_{c}^{+}_{c}$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons
1320 KGHF KGMB KID		50 OCYC 250 250 250	i315 les	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co.
1320 KGHF KGMB KID WADC WSMB	† † * †	50 OCYC 250 250 250 1000 500	1315 les + C + C N	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La.	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons
1320 KGHF KGMB KID WADC WSMB	† † * †	50 OCYC 250 250 250 1000 500	1315 les + C + C N	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La.	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons
1320 KGHF KGMB KID WADC WSMB 1330	† † * †	50 50 500 500 500 500 500	1315 les + C + C N	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc.
1320 KGHF KGMB KID WADC WSMB 1330 KGB	† † * †	50 50 250 250 250 1000 500 500 500	1315 les + C C N les C	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal.	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ	† † * †	50 50 250 250 250 1000 500 500 500 500 500 1000	$ \begin{array}{c} 1315\\ les\\ +\\ C\\ N\\ les\\ -\\ 1+C \end{array} $	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal.	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros Co.
1320 KGHF KGMB WADC WSMB 1330 KGB KSCJ WDRC	† † * †	50 250 250 250 1000 500 DCYC 500 1000 500	$les \\ + C \\ + C \\ + C \\ + C \\ N \\ les \\ + C \\ $	Monterrey, N. L. 227.1 meters	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros Co.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI	‡ kilo	50 250 250 250 1000 500 DCYC 500 1000 500 500	$les \\ + C \\ + C \\ + C \\ + C \\ N \\ les \\ + C \\ $	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee
1320 KGHF KGDB WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ	t kilo	50 DCYC 250 250 250 250 000 500 1000 500 1000 500 1000	es + C + C + C = C + C + C = C + C + C = C + C +	Monterrey, N. L. 227.1 meters	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc.
1320 KGHF KGDB WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ	t kilo	50 DCYC 250 250 250 250 000 500 1000 500 1000 500 1000	es + C + C + C = C + C + C = C + C + C = C + C +	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis.	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340	t kilo	50 DCYC 250 250 250 250 000 500 1000 500 1000 500 1000	es + C + C + C = C + C + C = C + C + C = C + C +	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340	t kilo	50 50 50 500 500 500 500 500 50	$ \begin{array}{c} 1315 \\ 1315 \\ 100 \\ 10$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG	t kilo	50 50 50 250 250 250 1000 500 500 500 500 1000 500 5	$\begin{array}{c} 1315 \\ es \\ + C + C \\ N \\ es \\ - C \\ C \\ R \\ 1 \\ 1 \\ 1345 \\ 1345 \end{array}$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG	kilo kilo	50 50 250 250 250 500 500 500 1000 500 500 500	$\begin{array}{c} 1315 \\ es \\ +c \\ +c \\ N \\ es \\ 12 \\ c \\ R+ \\ 10 \\ c \\ R+ \\ 1345 \\$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba Havana, Cuba	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG CMCG CMCG CMCY KFPW	kilo kilo	50 50 50 250 250 1000 500 500 500 500 500 500	1315 es +C+CN N es C1+C R+1C es 1345 1345 D	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba Havana, Cuba	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG CMCGR CMCGR KFPW KFPY	kilo kilo	50 50 50 250 250 250 500 500 500	$\begin{array}{c} 1315 \\ es \\ +c \\ +c \\ N \\ es \\ 12 \\ c \\ R+ \\ 10 \\ c \\ R+ \\ 1345 \\$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels. Co. Symons Broadcasting Co.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG CMCG CMCG CMCCY KFPY KFPY WCOA	kilo kilo	50 50 50 50 50 500 500 500 500	1315 es +C+CN es C+C CR+ 12 CR+ 1345 1345 1345 C	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla.	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotel. Co. Symons Broadcasting Co.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG CMCGR CMCGR KFPW KFPY	kilo kilo	50 50 50 250 250 250 500 500 500	1315 es +C+CN N es C1+C R+1C es 1345 1345 D	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels. Co.
1320 KGHF KGMB KID WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCR CMCR KFPW KFPY WCOA WSPD	kilo kilo	50 50 50 50 50 500 500 500 500	$\begin{array}{c} 1315 \\ es \\ + C \\ + C \\ N \\ es \\ 1+C \\ C \\ + C \\ C \\ + C \\ R \\ + \\ 1C \\ es \\ 1345 \\ 1345 \\ 1345 \\ D \\ C \\ C \\ \hline \end{array}$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla. Toledo, Ohio	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotel. Co. Symons Broadcasting Co.
1320 KGHF KGMB KID WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCR CMCR KFPW KFPY WCOA WSPD	kilo kilo	50 50 50 50 50 500 500 500 500	$\begin{array}{c} 1315 \\ es \\ + C \\ + C \\ N \\ es \\ 1+C \\ C \\ + C \\ C \\ + C \\ R \\ + \\ 1C \\ es \\ 1345 \\ 1345 \\ 1345 \\ D \\ C \\ C \\ \hline \end{array}$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fla.	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotel. Co. Symons Broadcasting Co.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG CMCG CMCG CMCG KFPY WCOA WSPD 1350	kilo kilo	50 50 50 50 500 500 500 500 500	$\begin{array}{c} 1315 \\ es \\ + C \\ + C \\ N \\ es \\ 1+C \\ C \\ + C \\ C \\ + C \\ R \\ + \\ 1C \\ es \\ 1345 \\ 1345 \\ 1345 \\ D \\ C \\ C \\ \hline \end{array}$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba Havana, Cuba Havana, Cuba Havana, Cuba Havana, Cuba Havana, Fia. Toledo, Ohio 222.1 meters	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels. Co. Symons Broadcasting Co. Pensacola Broadcasting Co. Toledo Broadcasting Co.
1320 KGHF KGMB KID WADC WSMB 1330 KSCJ WDRC WSAI WTAQ 1340 CMCG CMCR KFPW KFPY WCOA WSPD 1350 KIDO	kilo kilo	50 50 50 50 50 500 500 500 500	1315 es +C+CN es C+C C+CR+ 1345 1345 1345 1345 C C C es	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Cuba Havana, Cuba Fort Smith, Ark. Spokane, Wash. Pensacola, Fila. Toledo, Ohio 222.1 meters Boise. Idaho	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels. Co. Symons Broadcasting Co. Pensacola Broadcasting Co. Toledo Broadcasting Co. Boise Broadcasting Station
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG CMCG CMCG CMCG CMCG CMCG CMC	kilo kilo	50 50 50 50 500 500 500 500 500	1315 es +C+CN es C+CR+ 1345 1345 1345 C C es B	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Fia. Toledo, Ohio 222.1 meters Boise, Idaho St. Louis, Mo.	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros, Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels. Co. Symons Broadcasting Co. Pensacola Broadcasting Co. Boise Broadcasting Station Greater St. Louis Brdestg Corp.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCR CMCG CMCR CMCY KFPW KFPY KFPY KFPY KFPY KFPY KFPY KFPY KFPY	kild kild kild kild kild	50 Cycl 250 250 250 1000 500 0cycl 500 0cycl 30 1000 500 0cycl 1000 500 0cycl 1000 500 0cycl 000 0cycl 000 000 000 000 000 000 000 0	$\begin{array}{c} 1315 \\ es \\ +c + c \\ N \\ es \\ 1c \\ +c \\ N \\ es \\ 1345 \\ 1345 \\ 1345 \\ 1345 \\ 1345 \\ C \\ c \\ es \\ B \\ 1 \end{array}$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana,	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels. Co. Symons Broadcasting Co. Pensacola Broadcasting Co. Toledo Broadcasting Co. Boise Broadcasting Station Greater St. Louis Brdcstg Corp. Pillar of Fire
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG CMCG CMCG CMCG KUDO KKPY WCOA WSPD 1350 KIDO KUDO KUDO KUDO KUDO KUDO KUDO KUDO KU	kilo	50 50 50 50 500 500 500 500 500	$\begin{array}{c} 1315 \\ es \\ + C \\ + C \\ N \\ es \\ 1345 \\ 1345 \\ 1345 \\ D \\ C \\ c \\ es \\ 1 \\ 1a \\ 1 \\ 1a \\ 1 \end{array}$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana,	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotel. Co. Symons Broadcasting Co. Toledo Broadcasting Co. Boise Broadcasting Station Greater St. Louis Brdcstg Corp. Pillar of Fire Standard Cashill Co., Inc.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCR KFPY KFPY KFPY KFPY KFPY KFPY KFPY KFPY	kild kild kild kild kild	50 50 50 50 50 500 500 500 500	$\begin{array}{c} 1315 \\ es \\ + C + C \\ N \\ es \\ C \\ + C \\ C \\ + C \\ C \\ + C \\ C \\ R \\ 1345 \\ 1345 \\ 1345 \\ D \\ C \\ C \\ es \\ B \\ 1 \\ 1 \\ D \end{array}$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana,	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotels. Co. Symons Broadcasting Co. Pensacola Broadcasting Co. Toledo Broadcasting Co. Boise Broadcasting Station Greater St. Louis Brdestg Corp. Pillar of Fire Standard Cahill Co., Inc. Italian Educ. Broadcasting Co., Inc.
1320 KGHF KGMB KID WADC WSMB 1330 KGB KSCJ WDRC WSAI WTAQ 1340 CMCG CMCG CMCG CMCG CMCG KUDO KKPY WCOA WSPD 1350 KIDO KUDO KUDO KUDO KUDO KUDO KUDO KUDO KU	kild kild kild kild kild	50 50 50 50 500 500 500 500 500	$\begin{array}{c} 1315 \\ es \\ + C \\ + C \\ N \\ es \\ 1345 \\ 1345 \\ 1345 \\ D \\ C \\ c \\ es \\ 1 \\ 1a \\ 1 \\ 1a \\ 1 \end{array}$	Monterrey, N. L. 227.1 meters Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 225.4 meters San Diego, Cal. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis. 223.7 meters Havana, Cuba Havana, Fia. Toledo, Ohio 222.1 meters Boise, Idaho St. Louis, Mo.	Quintanilla y Stevenson C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co., Ltd. KID Broadcasting Co. Allen T. Simmons WSMB, Inc. Don Lee, Inc. Perkins Bros. Co. WDRC, Inc. Crosley Radio Corp., Lessee Gillette Rubber Co. Jose Justo Moran Aurelio Hernandez M. D. Autran Southwestern Hotel. Co. Symons Broadcasting Co. Toledo Broadcasting Co. Boise Broadcasting Station Greater St. Louis Brdcstg Corp. Pillar of Fire Standard Cahill Co., Inc.

KGER 1000 Long Beach, Cal. KGIR 500 N Butte, Montana WCSC 500 Charleston, S. C. WFBL 1000 CX Syracuse, N. Y. WGES 500 1+ Chicago, III. WJKS 1000 1+Z Gary, Ind. WQBC 500 D Vicksburg, Miss.	1360	kil	locycl	es	220.4 meters
	KGIR WCSC WFBL WGES WIKS	· # #	500 500 1000 500 1000	$\frac{CX}{1+1+z}$	Butte, Montana Charleston, S. C. Syracuse, N. Y. Chicago, Ill. Gary, Ind.

1370 kilocycles 218.7 meters

1010	NIIC	JCyCI	00	LIO.7 Inccero
CMAC		30	1375	Pinar del Rio, Cuba
CMGE		30	1375	Cardenas, Cuba
CMGH		150		Matanzas, Cuba
HRB		2300		Tegucigalpa, Hond.
KCRC	Ť	100	2+	Enid, Okla.
	*	50	3	Everett, Wash.
KFBL	+	100	3	Grand Forks, N. D.
KF JM KF JZ	*			Et Worth Taxas
Krj2	4.	100		Ft. Worth, Texas
KFLX	*	100		Galveston, Texas
KGAR		100	+	Tucson, Arizona
KGDA	†	100		Mitchell, S. D.
KGFG	t	100	2	Oklahoma City
KGFL	<u>†</u>	50	4	Raton, N. M.
KGKL	- t	100		San Angelo, Texas
KICA		100	4CP	Clovis, N. Mex.
KMAC	+	100	5	San Antonio, Texas
KONO	+	100	5	San Antonio, Texas
KOOS		100		Marshfield, Ore.
KRE		100		Berkeley, Cal.
KUJ	+	100		Walla Walla, Wash.
KVĹ		100	3	Seattle, Wash.
KWKC		100		Kansas City, Mo.
WBGF	+	50		Glens Falls, N. Y.
WBTM	+	100	7	Danville, Va.
WCBM		100	+Z	Baltimore, Md.
WDAS	é	100	÷	Philadelphia, Pa.
WGL	÷.	100	Ċ	Fort Wayne, Ind.
WHBD	t	100	1.00	Mount Orab, Ohio
WHBO	ŧ	100		Memphis, Tenn.
WHDF	÷	100	+	Calumet, Mich.
WIBM		100	1	Calumet, Mich. Jackson, Mich.
WJBK		50	ī	Detroit, Mich.
WITL		100		Atlanta, Ga.
WJTL WLEY		100	+	Lexington, Mass.
WLVA	ŧ.	100	7	Lynchburg, Va.
WMBR	+	100	•	Tampa, Fla.
WPFB	÷	100		Hattiesburg, Miss.
WQDM	+	100	D	St. Albans, Vt.
WRAK	*	100		Williamsport, Pa.
WRAM		100		Wilmington, N. C.
WRDO	+	100		Augusta, Maine
WRJN	1	100		Racine, Wis.
wsvs	÷	50		Buffalo, N. Y.
11010		30		Domand, N. La

1380 kilocycles 217.3 meters

CMJC KOH KQV KSO WKBH WSMK	† † * *	150 500 500 1000 200	1382 C 2 1 1C 2	Camaguey, Cuba Reno, Nevada Pittsburgh, Pa. Clarinda, Iowa La Crosse, Wis. Dayton, Ohio	Feliciano Isaac The Bee, Inc. KQV Broadcasting Co. Iowa Broadcasting Co. WKBH, Inc. Stanley M. Krohn, Jr. Jaco A Parument
XETB		125	A77	Torreon, Coah.	Jose A. Berumen
1200 1			~~ ^	215 7 motors	

L

1390 kilocycles 215.7 meters 1000 1C Little Rock, Ark. KLRA KOY KUOA WHK * 500 С Phoenix, Arizona 1000 1 Fayetteville, Ark. 1 1000 Cleveland, Ohio

1400 kilocycles 214.2 meters

CMBI	30	1405	Havana, Cuba
CMBN	30	1405	Havana, Cuba
CMCH	15	1405	Havana, Cuba

Consolidated Broadcasting Corp. KGIR. Inc.

KGIR, Inc. South Carolina Broadcasting Co., Inc. Onondaga Radio Broadcasting Corp. Oak Leaves Broadcasting Station, Inc. Johnson-Kennedy Radio Corp. Delta Broadcasting Co., Inc.

Oscar S. Mechoso Genaro Sebater Alberto Alvarez United Fruit Co. Enid Radiophone Co. Leese Bros. University of North Dakota Ralph S. Bishop George Roy Clough Tucson Motor Service Co. Mitchell Broadcasting Corp. Oklahoma Broadcasting Co., Inc. KGFL, Inc. KGKL, Inc. W. E. Whitmore W. W. McAllister Mission Broadcasting Co. Mission Broadcasting Co. H. H. Hanseth, Inc. First Congregational Church KUJ, Inc. KVL, Inc. Wilson Duncan Broadcasting Co. W. N. Parker and H. H. Metcalfe Piedmont Broadcasting Corp. Baltimore Broadcasting Corp. WDAS Broadcasting Corp. WDAS Broadcasting Station, Inc. Fred Z. Zieg F. P. Moler Broadcasting Station WHBQ, Inc. Upper Michigan Broadcasting Co. WIBM, Inc. James F. Hopkins, Inc. Oglethorpe University Lexington Air Stations Lynchburg Broadcasting Corp. F. J. Reynolds Hattiesburg Broadcasting Co. A. J. St. Antoine C. R. Cummins Wilmington Radio Association WRDO, Inc. Racine Broadcasting Corp. Seneca Vocational School

Feliciano Isaac The Bee, Inc. KQV Broadcasting Co. Iowa Broadcasting Co. WKBH, Inc. Stanley M. Krohn, Jr. Jose A. Berumen	ксуз. 1400 mtrs. 214.2 DIAL
Arkansas Broadcasting Co. Nielson Radio & Sporting Goods Co. University of Arknasas Radio Air Service Corp. Francisco Mayorquim Armado Romeu Hernani Torralbas	

[53]

				I INEQUENCIES	AND DIAL NUMBERS
CMCM	1	15	1405	Havana, Cuba	Martinez-Madicu
KLO		500		Havana, Cuba Ogden, Utah	Interstate Broadcasting Corp.
KOCW	*	250	+	Chickasha Okla	College for Women
WBAA	† *	500	1+	Lafayette, Ind.	Purdue University
WBBC		500	2a	Brooklyn, N. Y.	Brooklyn Broadcasting Corp.
WCGU		500	2a	Lafayette, Ind. Brooklyn, N. Y. Brooklyn, N. Y.	U. S. Broadcasting Corp.
WCMA	4	500	12	Culver, Ind.	General Broadcasting Corp.
WFOX	Ť	500		Brooklyn, N. Y.	Paramount Broadcasting Co.
WKBF WLTH	- 1	500	12	Indianapolis, Ind. Brooklyn, N. Y.	Indianapolis Broadcasting, Inc.
XEP		500 200	2	Brooklyn, N. Y.	The voice of brooklyn, Inc.
		200		Laredo, Mexico	La Voz Latino
1/10	1-11		1.0.0	212 6	
1410	KII	ocyc	les	212.6 meters	
KFLV	‡	500	4	Rockford, Ill.	Rockford Broadcasters, Inc.
KGRS		1000	1	Amarillo, Texas	Gish Radio Service
WAAB	*	500	С	Boston, Mass.	Bay State Broadcasting Com
WBCM	[*	500	Č C 1	Bay City, Mich. Amarillo, Texas	James E. Davidson National Radio & Broadcasting Corp. Prose Pub Co
WDAG	*	1000	1	Amarillo, Texas	National Radio & Broadcasting Corp.
WHBL	*	500	4	Sheboygan, Wis. Bluefield, W. Va.	
WHIS WODX	. †	250	2	Blueneld, W. Va.	Daily Telegraph
WRBX		500 250	3C 2	Mobile, Ala.	Mobile Broadcasting Corp.
WSFA	+	500	зс	Roanoke, Va.	Richmond Development Corp.
WOL M	'	500	5Ç	Montgomery, Ala.	Montgomery Broadcasting Co., Inc.
1420	1.1.	0.0110		211 1	
1420	KII	ocycl	les	211.1 meters	
KABC	+	100		San Antonio, Texas	Alamo Broadcasting Co.
KBPS		100	4	Portland, Ore.	Benson Polytechnic Institute
KCMC		100		Texarkana, Ark.	North Mississippi Broadcasting Corp
KFIZ	*	100		Fond du Lac. Wis	Reporter Printing Co.
KFXD	*	100		Nampa, Idaho Flagstaff, Arizona Abilene, Texas	Frank E. Hurt
KFXY KFYO	77	100		Flagstaff, Arizona	Albert H. Scherman T. E. Kirksey
KFIU	I	100	+Y2	Abilene, Texas	T. E. Kirksey
KGFF	1	$\frac{100}{100}$	5	Shawnee, Okla.	KGFF Broadcasting Co.
KGGC KGIW	4	100		San Francisco, Cal.	Golden Gate Broadcasting Co.
KĞİX	÷	100		Trinidad, Colo. Las Vegas, Nevada	Leonard E. Wilson
KGKX	+ + + + +	100		Sand Point, Idaho	Leonard E. Wilson Las Vegas, Nevada, Radio Corp. W. W. Von Cannon, Trustee
KGVO	ť	100	D	Missoula, Montana	Mosby's Incorporated
KICK	*	100		Missoula, Montana Red Oak, Iowa	Red Oak Radio Corp.
KORE	*	100		Eugene, Iowa Portland, Ore. Houston, Texas Presque Isle, Maine Waterbury, Vt.	Eugene Broadcasting Station
KXL	*	100	4	Portland, Ore.	KXL Broadcasters, Inc.
KXYZ		100		Houston, Texas	Harris County Broadcast Co
WAGM		100	ī.	Presque Isle, Maine	Aroostook Broadcast CO. Harry C. Whitehill WEHS, Inc.
WDEV WEHS		50	D	Waterbury, Vt.	Harry C. Whitehill
WELL	+	100 50	a X	Cicero, Ill. Battle Creek, Mich.	WEHS, Inc.
WERE	‡	100		Esia Da	Enquirer-News Co.
WFDW	*	100		Erie, Pa. Anniston, Ala.	Erie Dispatch-Herald
WHDL	*	100	D	Tupper Lake, N. Y	Raymond G. Hammett
WHFC		100	a	Cicero, Ill.	WHEC Inc.
WIAS	† *	100		Ottumwa, Iowa	Tupper Lake Broadcasting Co. Inc., WHFC, Inc. Iowa Broadcasting Co.
WILM	*	100		Wilmington, Del.	Delaware Broadcasting Co., Inc.
WJBO WJMS	*	100		New Orleans, La.	Valdemar Jensen
WKBI	÷-	100	D	Ironwood, Mich.	Marius Johnson
WLBF		100 100	a	Cicero, Ill.	Marius Johnson WKBI, Inc. WLBF Broadcasting Co.
WMBC	† *	100		Kansas City, Kansas Detroit, Mich. Joplin, Mo.	WLBF Broadcasting Co.
WMBH		100	+++++++++++++++++++++++++++++++++++++++	Joplin Mo	Michigan Broadcasting Co., Inc.
WPAD	+	100		Paducah, Ky.	Edwin Dudley Aber Peduceh Broadcasting Co
WSPA	*	100	+++	Spartanburg, S. C.	Paducah Broadcasting Co. Voice of South Carolina
WTBO		100	÷	Cumberland, Md.	Associated Broadcasting Corp.
		100	D	Americus, Ga.	Americus Broadcast Co.
1420	1 .1				
1430	k1l0	ocycl	es	209.7 meters	
KECA	+	1000	N		
KGNF	÷	500	D	Los Angeles, Cal. North Platte, Nebr. Harrisburg, Pa.	Earle C. Anthony, Inc.
WBAK	÷	500	1+	Harrishurg Do	Great Plains Broadcasting Co.
WCAH	*	500	с'n	Columbus, Ohio	Penna. State Police Commercial Radio Service Co.
WFEA	*	500	C	Manchester, N. H	New Hampshire Broadcasting Co
WHEC	*	5 00	C	Manchester, N. H. Rochester, N. Y.	WHEC. Inc.
WHP	*	500	1C+[Harrisburg, Pa.	New Hampshire Broadcasting Co. WHEC, Inc. WHP, The Harrisburg Telegraph Memphis Broadcasting Co.
WNBR	*	500		Memphis, Tenn.	Memphis Broadcasting Co.
woko	+	500	$C\Box$	Albany, N. Y.	WOKO, Inc.
1440	1.11	1		Harrisburg, Pa. Columbus, Ohio Manchester, N. H. Rochester, N. Y. Harrisburg, Pa. Memphis, Tenn. Albany, N. Y. 208.2 meters	
1440	K110	ocycl	es	208.2 meters	
KLS	*	250	D	Oakland, Cal.	Wannes Bros
WBIG	*	500	č	Greensboro, N. C.	Warner Bros. North Caroline Broadcasting Co.
			ũ	5.551655010, 11, C.	North Carolina Broadcasting Co.

[54]

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	II WEA	DI INEQUENCIES A	IND DIAL NOMBLING	
WCBA * WMBD * WSAN * WTAD †	250 a 500 3 250 a 500 3	Allentown, Pa. +C Peoria Heights, Ill. Allentown, Pa. Quincy, Ill.	B. B. Musselman Peoria Broadcasting Co. Allentown Call Publishing Co., Inc. Illinois Broadcasting Corp.	
1450 kil	locycles	206.8 meters		
KTBS * WBMS † WGAR † WHOM * WNJ * WSAR * WTFI	F00	Hackensack, N. J. Cleveland, Ohio Jersey City, N. J.	Tri-State Broadcasting System, Inc. WBMS Broadcasting Corp. WGAR Broadcasting Co. New Jersey Broadcasting Corp. Radio Investment Co. Doughty & Welch Electric Co., Inc. Toccoa Falls Broadcasting Co.	
1460 kil	locycles	205.4 meters		
KSTP WJSV •	10000 N 10000 -		National Battery Broadcasting Co. WJSV, Inc.	
1470 kil	ocycles	204.0 meters		
KGA † WLAC •	5000 E 5000 C	Spokane, Wash.	Northwest Broadcasting System, Inc. Life & Casualty Insurance Co.	
1480 kil	ocycles	202.6 meters		
KFJF WKBW •	5000 C 5000 C		National Radio Mfg. Co. Buffalo Broadcasting Co., Lessees	
1490 kil	ocycles	201.2 meters		
WCHI * WCKY *	5000 1 5000 1	Chicago, Ill. N Covington, Ky.	Midland Broadcasting Company L. B. Wilson, Inc.	
1500 kil	ocycles	199.9 meters		
CMBL CMBQ CMBQ KDB * KGFI * KGFI * KGKY * KROW † KROW † KROW † KROW † KROW † KROW † KROW † KROW † KROW † WLBX * WLBX * WLBY * WLSY * WLY * WLY * WLY * WLY * WLY * WLY *	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	 Boston, Mass. Newport, R. I. Brooklyn, N. Y. Brooklyn, N. Y. Lapeer, Mich. Binghamton, N. Y. Bristol, Tenn. Philadelphia, Pa. Augusta, Ga. Rutland, Vt. 	Julio C. Hidalgo Gali-Sardinas Tomas Basail Santa Barbara Broadcasters, Ltd. Eagle Broadcasting Co., Inc. Red River Broadcasting Co., Inc. Grant City Park Corp. East Texas Brdostg. Co. Hilliard Co., Inc KNOW Broadcasting Co. A. P. Miller Wescoast Broadcasting Co. J. S. Edwards E. R. Irey and F. M. Bowles Knox Battery & Electric Co. K. L. Ashbacker (J. John N. Brahy Boston Broadcasting Co. LeRoy Joseph Beebe Paul J. Gollhofer Arthur Faske First M. P. Church Howitt, Wood Radio Co., Inc. Radiophone Brdcstg. Station, Inc. Wm. Penn Broadcasting Co. Long Island Broadcasting Corp. Walker & Downing Radio Corp. Manuel Zetina	ксуз. 1500 mtrs. 199.9 dial
				DIAL

[55]

Columbia: C. National: Red, R; Blue, B; Both, N.

				and the second se			
ALABAMA				San Jose J-1	500	KOW	1010
	Watts		Kcys.	Santa Ana M-3	100	KQW KREG	1010 1500
Anniston O-22	100	WFDW	1420	Santa Barbara M-2	100	KDB C	1500
Birmingham O-21	5000 500	WAPI N WBRC C	1140 930	Stockton J-2	250	KGDM	1100
	100	WKBC	1310		100	KWG	1200
Gadsden O-21	100	WIBY	1210	COLODADO			
Huntsville N-21	50	WBHS	1200	COLORADO			
Mobile Q-20 Montgomery P-21	500	WODX C WSFA C	1410	Colorado Springs K-1		KVOR C	1270
Montgomery P-21	500	WSFA C	1410	Denver K-11	500 500	KFEL	920
					1000	KFXF KLZ C	920 560
ALASKA					12500	KOA N	830
Anchorage	100	KFOD	1230	1 - · · ·	500	KPOF	880
Ketchikan	500	KGBU	900	Fort Morgan J-11	100	KGEW	1200
				Grand Junction K-9	100 500	KFXJ	1310
				Greeley J-11 Pueblo L-11	250	KFKÅ KGHF	880 1320
ARIZONA)	Trinidad L-11	100	KGIW	1420
Flagstaff M-7	100	KFXY	1420	Yuma J-12	100	KĞEK	1200
Jerome M-6	100	KCRJ KOY C	1310	1			
Phoenix N-6	500	KOY C	1390	CONNECTICUT			
Descent M 6	500	KTAR N	620	Bridgeport H-27	250	WICC	600
Prescott M-6 Tucson O-7	100 100	KPJM KGAR	1500	Hartford H-27	500	WDRC C	1330
Tucsoff 0-7	500	KVOA	1370 1260		50000	WTIC R	1060
	0.00	IC ON	1200	Storrs H-28	250	WTIC R WCAC	600
ARKANSAS							
	-			DELAWARE			
Blytheville M-19	50 1000	KLCN	1290	1.			
Fayetteville M-16 Fort Smith N-16	50	KUOA KFPW	1390 1340	Wilmington J-26	250	WDEL	1120
Hot Springs N-17	10000	KTHS N	1040		100	WILM	1420
Little Rock N-17	250	KARK	890	DISTRICT OF			
	100	KGHI	1200	DISTRICT OF C	COLU	MBIA	
	1000	KLRA C	1390	Washington J-26	250	WMAL C	630
Paragould M-18	100	KBTM	1200		500	WRC N	950
Texarkana O-17	100	KCMC	1420		100	WOL	1310
				FLORIDA			
CALIFORNIA			1				
Bakersfield L-3	100	KERN C	1200	Clearwater R-24	1000	WFLA N	620
Berkeley J-2	100	KERN C KRE	1370	Gainesville Q-24	5000	WRUF	830
Beverly Hills M-3	500	KMPC	710	Jacksonville Q-24 Miami T-25	1000 1000	WJAX N WIOD N	900 1300
Burbank M-3	500	KELW	780	1-25	1000	WQAM C	560
Culver City M-3	250	KFVD	1000	Orlando R-24	250	WDBO C	1120
El Centro N-4	100	KXO	1500	Pensacola Q-21	500	WCOA	1340
Fresno K-2	$\begin{array}{c} 100 \\ 1000 \end{array}$	KMJ KFWB	1210	St. Petersburg S-24	1000	WSUN N	620
Hollywood M-3	500	KMTR	950 570	Tampa R-24	1000	WDAE C	1220
	5000	KNX	1050		100	WMBR	1370
Long Beach M-3	1000	KFOX	1250	GEORGIA			
	1000	KGER	1360		100		
Los Angeles M–3	1000	KECA N	1430	Americus P-22 Athens O-23	100	WTET	1420
	1000	KFAC	1300	Atlanta O-22	500 250	WTFI WGST C	1450 890
	50000 500	KFI N KFSG	640 1120		100	WITL	1370
	100	KGFJ	1200		5000	WJTL WSB N	740
	1000	KHJ C	- 900 l	Augusta O-23	100	WRDW	1500
	500	KRKD	1120	Columbus O-22	50	WRBL	1200
	500	KTM	780	Macon O-23	500	WMAZ	1180
Oakland J-1	250	KLS	1440	Rome N-22	100	WFDV	1310
	500	KLX KROW	880	Savannah O-24 Thomasville Q-22	500 100	WTOC C WQDX	1260
Pasadena M-3	500 50	KROW	930	Thomasvine Q-22	100	" QDA	1210
Sacramento J-2	100	KFBK	1310	HAWAII			
San Bernardino M-3	100	KFXM	1210		250	NON	
San Diego N-3	500	KFSD N	600	Honolulu	250	KGMB C	1320
_	500	KGB C	1330		1000	KGU R	940
San Francisco J-1	1000	KFRC C	610	IDAHO			
	500	KFWI KGGC	930		1000	VIDO	1250
	100 7500	KGO N	1420	Boise G-5 Idaho Falls G-7	1000 250	KIDO KID	1350 1320
	100	KJBS	1070	Nampa G-5	100	KFXD	1420
	5000	KPO N	680	Pocatello H-7	250	KSEI	900
		KTAB	560	Sand Point D-6	100	KGKX	1420
	1000	KYA	1230	Twin Falls H-6	250	KTFI	1240

[56]

ILLINOIS	Watts		Kcys.	Shenandoah J-16	500	KFNF	890
Carthage J-18 Chicago I-20	50 10000	WCAZ KFKX N	1070 1020	Sioux City I-15 Waterloo I-17	500 1000 500	KMA KSCJ C WMT C	930 1330 600
-	10000 500	KYW N WAAF	1020 920		300	wini c	000
	25000 1500	WBBM C WCFL R	770 970	KANSAS Dodge City L-13	100	KGNO	1210
	5000 100	WCHI WCRW	1490 1210	Kansas City K-16 Lawrence K-16	100 500	WLBF KFKU	1420
	100 50000	WEDC WENR N	1210 870	f	1000	WREN B	1220 1220
	500 25000	WGES WGN C	1360 720	Manhattan K-15 Milford K-14	500 5000	KSAC KFBI	580 1050
	1000	WIBO	560	Topeka K-16 Wichita L-15	1000 1000	WIBW C KFH C	580 1300
	50000 5000	WLS B WMAQN	870 670	RENTHORY			
	5000 500	WMBI WPCC	1080 560	KENTUCKY Covington K-22	5000	WCKY N	1490
Cicero I-20	100 100	WSBC WEHS	1210 1420	Hopkinsville M-20 Louisville L-21	1000	WFIW C WHAS N	940 820
	100 100	WHFC WKBI	1420 1420		250	WLAP C	1200
Decatur K-19	100 100	WJBL WKBS	1200 1310	Paducah M-19	100	WPAD	1420
Galesburg J-18 Harrisburg L-19	100	WEBQ	1210	LOUISIANA			
Joliet I-19	100 100	WCLS WKBB	1310 1310	Monroe P-18 New Orleans R-19	100 100	KMLB WABZ	1200 1200
La Salle J-19 Mooseheart I-19	100 20000	WJBC WJJD WMBD C	1200 1130		1000 100	WDSU C	1250 1420
Peoria Heights J-19	500 500	WMBD C WTAD	1440 1440		100	WJBO WJBW WSMB N	1200
Quincy K-18 Rockford I-19 Rock Island I-18	500 100	KFLV WHBF	1410 1210		10000	WWL	850
Springfield K-19	100 100	WCBS WTAX	1210 1210	Shreveport P-17	50 1000	KRMD KTBS N	1310 1450
Tuscola K-20	100	WDZ	1070		100 10000	KWEA KWKH	1210 850
Urbana J-20 Zion I-20	250 5000	WILL WCBD	890 1080	MAINE			
				Augusta F-28 Bangor F-29	100 100	WRDO WABI	1370 1200
INDIANA			1	Portland F-28	500 1000	WLBZ C WCSH R	620 940
Anderson J-21 Connersville K-21	100	WHBU	1210	Presque Isle D-29	100	WAGM	1420
Culver 1-20	100 500	WKBV WCMA	1500 1400	MARYLAND			
Elkhart I-21 Evansville L-20	50 500	WJAK WGBF	1310 630	Baltimore J-26	10000	WBAL B	1060
Fort Wayne J-21	100 10000	WGL C WOWOC	1370 1160		250 100	WCAO C WCBM	600 1370
Gary I-20 Hammond I-20	1000 100	WJKS WWAE	1360 1200	Cumberland J-25	500 100	WFBR R WTBO	1270 1420
Indianapolis J-21	1000	WFBM C WKBF	1230 1400	MASSACHUSE	тте		
Lafayette J-20	500	WBAA	1400 1310	Boston G-28	500	WAAB C	1410
Muncie J-21 South Bend I-20	50 100	WLBC WFAM	1200		1000 25000	WBIS WBZ B	1230 990
Terre Haute K-20	500 100	WSBT C WBOW	1230 1310		1000	WEEI R WHIDH	590 830
					100	WLOE	1500
IOWA				Fall River H-28	1000 250	WNAC C WSAR	$1230 \\ 1450$
Ames I-17	5000	WOI	640	Lexington G-28 Needham G-28	100 500	WLEY WBSO	1370 920
Boone I-17 Cedar Rapids I-18	100 100	KFGQ KWCR	1310 1310	New Bedford H-28 Springfield H-27	100 1000	WNBH WBZA B	1310 990
Clarinda J-16 Council Bluffs J-16	500 1000	KSO KOIL B	1380 1260	Worcester G-28	100 250	WORC C WTAG R	1200 580
Davenport I-18 Decorah H-18	5000 50	WOC N KGCA	1000 1270	MICHICAN	200	in the K	000
Des Moines I-17	100 5000	KWLC WHO N	1270 1000	MICHIGAN Battle Creek I-21	50	WELL	1420
Fort Dodge I-16	100 500	KFJY WSUI	1310 880	Bay City H-22 Calumet E-19	500 100	WBCM C WHDF	1410 1370
Iowa City I-18 Marshalltown I-17	100 100	KFJB WIAS	1200 1420	Detroit H-22	50 10000	WJBK WJR B	1370 750
Ottumwa J-17 Red Oak J-16	100	KICK	1420		10000	WMBC	1420
				I			

Detroit H-22	1000	WWJ R		NEVADA	Watts	; ł	Ccys.
East Lansing H-21 Flint H-22	1000 1000 100	WXYZ C WKAR WFDF	2 1240 1040 1310	Las Vegas L-5 Reno I-3	100 500	KGIX KOH C	1420 1380
Grand Rapids H-21	500	WASH	1270	NEW HAMPSH	IDE		
Ironwood F-18	500 100	WOOD WJMS WIBM	1270 1420	Laconia G-28	100	WKAV	1310
Jackson I-21 Kalamazoo I-21	$\begin{array}{r}100\\1000\end{array}$	WIBM WKZO	1370 590	Manchester G-28	500	WFEA C	1430
Lapeer H-22	100	WMPC	1500	Portsmouth G-28	250	WHEB	740
Ludington H-20 Marquette F-19	50 100	WKBZ WBEO	1500 1310	NEW JERSEY			
Royal Oak H-22	50	WEXL	1310	Asbury Park I-27	500	WCAP	1280
MINNESOTA				Atlantic City J-27 Camden I-26	5000 500	WCAM	1100 1280
Fergus Falls F-15	100	KGDE	1200	Hackensack I-27 Jersey City I-27	250 300	WBMS WAAT	1450 940
Minneapolis G-17	5000 1000	WCCO C WDGY	810 1180		500	WHOM	1450
	1000	WRHM	1250	Newark 1–27	1000 250		1250 1250
Moorhead F-15 Northfield G-17	50 1000	KGFK KFMX	1500 1250		250 5000		1450 710
St. Paul G-17	1000	WCAL WLB	1250 1250	Paterson I-27	1000	WODA	1250
St. Faul G-I/	10000	KSTP N	1460	Red Bank I-27 Trenton I-26	100 500		1210 1280
MICCICCIDDI				Zarephath I-27	250		1350
MISSISSIPPI Greenville O-18	100	WRBQ	1210	NEW MEXICO			
Gulfport Q-19	100	WGCM	1210	Albuquerque N-7	250		1230
Hattiesburg Q-19 Jackson P-19	100 1000	WPFB WIDX N	1370 1270	Clovis N-11 Raton M-11	100 50	KICA KGFL	1370 1370
Laurel P-20	100	WJDX N WTSL WCOC	1310	State College P-9	20000		1180
Meridian P-20 Vicksburg P-18	500 500	WQBC	880 1360	NEW YORK			
MICCOUDI			1	Albany H-27	500	woко с	1430
MISSOURI Cp. Girardeau L-19	100	KFVS	1210	Auburn H-25	100 100	WMBO	1310 1500
Columbia K-17	500	KFRU	630	Binghamton H-26 Brooklyn I-27	500	WBBC	1400
Grant City J-16 Jefferson City L-17	100 500	KGIZ WOS	1500 630		$1000 \\ 500$		1300 1400
Joplin M-16 Kansas City K-16	100 1000	WMBH KMBC C	1420 950		500	WFOX	1400
Kalisas City K-10	100	KMBC C KWKC	1370		500 100		1400 1500
	1000 500	WDAF N WHB	610 860	Buffalo H-24	$100 \\ 1000$	WMIL WBEN R	1500 900
St. Joseph K-16	1000 2500	woq	1300	Dunato 11-24	100	WEBR	1310
	100	KFEQ KGBX	680 1310		1000 5000	WGR C WKBW C	550 1480
St. Louis L-18	500 100	KFUO KFWF	550 1200	Canton F-26	50 500	WSVS	1370
	50000	KMOX C	1090	Freeport I-27	100	WGBB	1220 1210
	500 1000	KSD R KWK B	550 1350	Glens Falls G-27 Ithaca H-25	50 1000		1370 1270
	1000 100	WEW WIL	760		50	WLCI	1210
MONTANA	100		1200	Jamaica H-27 Jamestown H-24	100 50		1210 1210
Billings F-9	1000	KGHL N	950	Long Island City I-27 New York City I-27	100 50000	WLBX WABC C	1500 860
Butte F-7 Great Falls E-8	500 1000	KGIR N KFBB	1360 1280	New TORK City I-27	250	WBNX	1350
Kalispell D-7	100	KGEZ	1310		50000 250	WBOQ WCDA	860 1350
Missoula E-7 Wolf Point E-11	100 100	KGVO KGCX	1420 1310		50000	WEAF R	660
NEBRASKA					500 500	WINS	1300 1180
Clay Center J-14	1000	KMMJ	740		1000 250		1300 1010
Kearney J–14 Lincoln J–15	100 5000	KGFŴ KFAB C	1310		30000	WJZ B	760
Encom J-15	100	KFOR -	1210		5000 500	WMCA	1100 570
Norfolk I-15	$\frac{500}{1000}$	WCAJ WJAG KGNF	590 1060		250 500	WMSG I WNYC	1350 570
North Platte J-13 Omaha J-15	500 500	KĞNF WAAW	1430		1000	WOV	1130
	1000	WOW N	660 590		250 500	WPAP 1 WPCH	1010 810
Scottsbluff I-11 York J-15	100 500	KGKY KGBZ	1500 930		250 250	WQAO	1010
					250	WRNY 1	1010

Winston-Salem M-24 100 WSJS 1310 Johnstown J-24 100 WJAC NORTH DAKOTA Bismarck F 13 1000 KFYR 550 Lancaster I-26 100 WGAL Devils Lake E-14 100 KDLR 1210 Lancaster I-26 100 WLBW C Fargo F-15 1000 WDAY 940 Philadelphia I-26 1000 WCAU C Minot E-13 250 KCGU 1240 500 WFA C 100 WHAC 500 WFA C 100 WHAC 100 WHAC 500 WEA 100 WHAC 500 WFA C 100 WHAC 100 WHAC 500 WEA 100 WHAC 500 WEA 100 WHAC 100 WKAC							and the second division of the second division of	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Rochester G-25				Portland E-3			1180
$\begin{array}{cccccccccccccccccccccccccccccccccccc$							KBPS	1420 1300
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Saranac Lake F-26					1000	KCW N	620
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			WEBL C				KOIN C	940
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Syracuse G-25		WMAC				KTBR	1300
$\begin{array}{c c c c c c c c c c c c c c c c c c c $					1		KWII	1060
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Trov G-27			1300		100		1420
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Woodside I-27 Yonkers I-27 100 WWRL 1500 FERUISALLYAINA NORTH CAROLINA Asheville M-23 1000 WWRC N 570 Charlotte M-24 5000 WBC C 100 WEBG Gastonia M-24 1000 WSOC 100 WEGG Gastonia M-24 1000 WSOC 100 WEGG Winston-Salerm M-24 1000 WSOC 100 WCOL Winston-Salerm M-24 1000 WSIS 100 WCOD NORTH DAKOTA 1000 KFYR 550 100 WGAL Biamarck F 13 1000 KFYR 100 WJAY 100 WGAL Grand Forks E-15 100 WDAY 1100 WGAL 100 WGAL Mimot E-13 250 KLPM 1200 100 WKAX 1000 WHAY Cleveland I-23 1000 WGAR 1300 KFYR 100 100 WESA Mandan F13 250 WGAR 1300 100		100	WIBX		DENING VI VANIL			
NORTH CAROLINA Allentown I-26 250 WCBA Acheville M-23 1000 WWNC N 570 Castonia M-24 100 WSOC 100 Castonia M-24 100 WSOC 100 Gastonia M-24 100 WSOC 120 Gastonia M-24 100 WSOC 120 Gastonia M-24 100 WSOC 120 Winston-Salem M-24 100 WRJS 1310 NORTH DAKOTA 1000 KFJR 120 Birmarck F 13 1000 KFJR 120 Grand Forks E-14 1000 KDLR 1210 Grand Forks E-15 1000 KFJM 1370 Minot E-13 250 KLPM 1240 OHIO Karon I-23 1000 WACC 100 Caron I-23 1000 WACC 1300 Columbus J-22 100 WFG E 100 5000 WJAY 610 100 WHZ Columbus J-22 500 WALK 100 WEAC 500 WJAY <td>Woodside I-27</td> <td></td> <td></td> <td></td> <td>PENNSILVANIA</td> <td>1</td> <td></td> <td></td>	Woodside I-27				PENNSILVANIA	1		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Yonkers I-27	100	WCOH	1210	411 7.36	250	WCDA	1440
NORTH CAROLINA Attoona 1-25 100 WFBG Asheville M-23 1000 WWCNC N 500 WBG 100 WSDC 100					Allentown 1-26		WSAN	1440
Asheville M-23 Charlotte M-24 South M-24 Gestonia M-24 1000 WBT WWNC N 570 Carbondale H-26 10 WNBW Eric Bark 1-26 25 WBG Gastonia M-24 100 WSC C 100 WERE 100 WSC C	NORTH CAROL	INΔ			Altoona I-25			1310
Asheville M-23 1000 WWBC 320 Charlotte M-24 1000 WBT C 1210 Greensboro M-24 1000 WBG 1210 Grove City I-24 100 WSAJ Raleigh M-25 1000 WPTF 680 100 WCOD 100 WCOD Wilmington N-25 100 WRAM 1370 100 WGOD 100 WHAT 500 WGOD 100 WHAT 500 WK1C 500 WK1C 500 WK1C 100 WHAT 100 WHAT 500 WK1C 500 WK1C 500 WK1C 500 WK1C 100 WK1C			WWW.CON					1200
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$\begin{array}{c c c c c c c c c c c c c c c c c c c $						100	WERE	1420
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						100	WSAJ	1310
			WPTF N		Harrisburg I-25		WBAK	1430
Winston-Salem M-24 100 WSJS 1310 Johnstown J-24 100 WILC NORTH DAKOTA Bismarck F 13 1000 KFYR N 550 WILC 100 WGAL Devils Lake E-14 100 KDLR 1210 WILC 100 WJC Grand Forks E-15 1000 WDAY N 940 500 WEW C Minot E-13 250 KLPM 1240 500 WFAN C Minot E-13 250 KLPM 1240 500 WILT C Akron I-23 100 WADC C 1200 500 WFAN C Canton I-23 100 WHBC 5000 WCH T 500 WCA Cleveland I-23 500 WGAR B 1330 1000 WHAS 1000 WASS Columbus J-22 100 WHA 610 1000 WASS 1000 WCAE 500 WCV Mansheld J-221 1000 WCAE 100 WSEN 120 100 WRAE <td>Wilmington N-76</td> <td>100</td> <td>WRAM</td> <td>1370</td> <td></td> <td></td> <td></td> <td>1200</td>	Wilmington N-76	100	WRAM	1370				1200
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Wington-Salem M-74	100	WSIS					1430
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Winston-Salem m-21	100		1010			WJAC	1310
$\begin{array}{c c c c c c c c c c c c c c c c c c c $					Lancaster 1-26	100	WGAL	1310 1200
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	NORTH DAKOT	'A			1		WIDU	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Riemarck F 13	1000	KEYR N	550	Cit City J 24		WIRWC	1210 1260
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Devile Leke F-14						WCAUC	1170
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Fargo F-15		WDAY N		r madeipma 1-20			1370
Minot E-13 250 KLPM 1240 100 WHAT OHIO			KF JM	1370				610
Minot E-13 250 KLPM 1240 100 WHAT OHIO			KĞCU				WFI R	560
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Minot E-13	250	KLPM	1240		100	WHAT	1310
$\begin{array}{c c c c c c c c c c c c c c c c c c c $								610
Akron I-23 Canton I-23 Canton I-23 1000 100 WADC C 1320 Lincinnati K-22 1000 WHBC WHBC 1200 Lincinnati K-22 1000 Soudo WHBC 1200 WKR C 1000 Soudo WTL 1000 WTL WTL 1000 Soudo WTL 1000 WTL WTL 1000 WTL <td>OHIO</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>WLIT R</td> <td>560</td>	OHIO						WLIT R	560
$\begin{array}{c c c c c c c c c c c c c c c c c c c $								1500
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$\begin{array}{c c c c c c c c c c c c c c c c c c c $			WARU U				WCAE R	1220
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			WSAI R				WIAS C	1290
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Cleveland I-73		WGAR B				WWSW	1500
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			WHK C		Reading I-26	1000		830
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$\begin{array}{c c c c c c c c c c c c c c c c c c c $			WTAM R		Scranton H-26		WGBI	880
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Columbus J-22		WAIU C				WQAN	880
Observe Observe <t< td=""><td></td><td></td><td>WCAH C</td><td></td><td>State College 1-25</td><td></td><td>WNBO</td><td>1230 1200</td></t<>			WCAH C		State College 1-25		WNBO	1230 1200
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Maint Orab K-22 100 WHBD 1370 Mount Orab K-22 1000 WSPD C 1340 York J-26 1000 WORK Poledo I-22 1000 WSPD C 1340 Youngstown I-23 500 WKBN C 570 Zanesville J-23 100 WALR 1210 OKLAHOMA Cebu 500 KZRC Chickasha N-14 250 KOCW 1400 Enid M-14 100 KCRC 1370 Norman N-15 5000 KFJF C 480 100 KGFG 1370 Namila 1000 KZRA Oklahoma N-15 5000 KFJF 1400 San Juan W-34 250 WKAQ Ponca City M-15 1000 WBZ 1200 San Juan W-34 250 WKAQ Shawnee N-15 5000 KVOO N 1140 Newport H-28 100 WMBA Providence H-28 250 WEAN C 250 WAR R	Mansfield I-22				Williamsport I-25			1370
Toledo I-22 Youngstown I-23 1000 WSPD C 1340 500 PHILIPPINES Zanesville J-23 100 WALR 1210 PHILIPPINES OKLAHOMA C 100 KZRC 900 OKLAHOMA 250 KOCW 1400 KZRC 1000 KZRA Norman N-15 500 WNAD 1010 PORTO RICO VKAQ Norman N-15 5000 KFJF C 1480 1000 KZRM 6 100 KGFG 1370 Norman N-15 5000 WKAY 900 PORTO RICO San Juan W-34 250 WKAQ Ponca City M-15 100 WBZ 1200 Scoffeyville M-15 5000 KGGF 1010 Shawnee N-15 100 KGGF 1010 Newport H-28 100 WMBA Tulsa M-15 5000 KVOO N 1140 Yervidence H-28 250 WZAR R						1000	WORK	1000
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OKLAHOMA Manila 1000 KZKA Chickasha N-14 250 KOCW 1400 1000 KZRM 6000 Enid M-14 100 KCRC 1370 PORTO RICO PORTO RICO Norman N-15 5000 KFJF C 1480 1000 KZRA 1000 KZRM 6000 Oklahoma N-15 1000 KGFG 1370 1000 KKR 1310 1000 KGFG 1370 Namila 1000 KAQ 1000 KAQ 1000 KAQ 1000 KAQ 1000 KGFG 1370 Name N=34 250 WKAQ 1000 KGFF 100 KGFF 1000 KGFF 1420 Newport H-28 100 WMBA Shawnee N-15 1000 KGFF 1420 Newport H-28 250 WEAN C 250 WEAN C <td< td=""><td>Zanesville J-23</td><td>100</td><td>WALR</td><td>1210</td><td> PHILIPPINES</td><td></td><td></td><td></td></td<>	Zanesville J-23	100	WALR	1210	PHILIPPINES			
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Chickasha N-14 250 KOCW 1400 1000 KZRM 6 Chickasha N-14 100 KCRC 1370 1000 KZRM 6 Chickasha N-14 100 KCRC 1370 1000 KZRM 6 Norman N-15 5000 KFJF C 1480 100 PORTO RICO Oklahoma N-15 5000 KFJF C 1480 100 San Juan W-34 250 WKAQ Ponca City M-15 1000 WKY 900 RHODE ISLAND Newport H-28 100 WMBA Shawnee N-15 1000 KGGF 1420 Providence H-28 250 WAA R	OKI ALIONAA						K7KA	937.5 1110
Chickasha N-14 250 KOCW 1400 Enid M-14 100 KCRC 1370 Norman N-15 500 WNAD 1010 Oklahoma N-15 5000 KFJF C 1480 100 KGFG 1370 1000 KGFG 1370 1000 WBZ 1200 S. coffeyville M-15 500 KGGF Shawnee N-15 100 KGFF Tulsa M-15 5000 KVOO	UKLAHUMA				aima		KZRM	618.5
Norman N-15 Oklahoma N-15 500 5000 WNAD KFXR 1010 100 PORTO RICO Oklahoma N-15 5000 KFJF 1480 100 FC 1480 KGFG San Juan W-34 250 WKAQ Ponca City M-15 100 WBZ 1200 WBZ RHODE ISLAND RHODE ISLAND Shawnee N-15 100 KGFF 1420 VOO N Newport H-28 Providence H-28 100 WMBA Tulsa M-15 5000 KVOO N 1140 250 WEAN C		250		1400		1000		010.0
Oklahoma N-15 5000 KFJF C 1480 100 KGFG 1370 San Juan W-34 250 WKAQ Ponca City M-15 100 WKY 900 RHODE ISLAND RHODE ISLAND S. coffeyville M-15 500 KGGF 1010 KGFF 1420 Shawnee N-15 100 KGGF 1010 KGR 100 Tulsa M-15 5000 KVOO 1140 Providence H-28 250 WEAR R	Enid M-14		KCRC	1370				
100 KFXR 1310 San Juan W-34 250 WKAQ 100 KGFG 1370 100 WKAQ 1000 WKY 900 RHODE ISLAND RHODE ISLAND S. Coffeyville M-15 500 KGGF 1010 Newport H-28 100 WMBA Shawnee N-15 100 KGFF 1420 Newport H-28 250 WEAN C Tulsa M-15 5000 KVOO 1140 Z50 WJAR R	Norman N-15				PORTO RICO			
100 KGFG 1370 1000 WKY 900 Ponca City M-15 100 WBZ 1200 S. Coffeyville M-15 500 KGGF 1420 Shawnee N-15 100 KGGF 1420 Tulsa M-15 5000 KVOO N 1140	Oklahoma N-15				Son Juan W 34	250	WKAO	890
1000 WKY N 900 Ponca City M-15 100 WBZZ 1200 S. Coffeyville M-15 500 KGGF 1010 Shawnee N-15 100 KGFF 1420 Tulsa M-15 5000 KVOO N 1140					Gan Juan W-J4	200	intrag	3,0
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S. Coffeyville M-15 500 KGGF 1010 Newport H-28 100 WMBA Shawnee N-15 100 KGFF 1420 Providence H-28 250 WEAN C Tulsa M-15 5000 KVOO N 1140 Providence H-28 250 WJAR R	Ponca City M-15		WBBZ		RHODE ISLAND	2		
Shawnee N-15 100 KGFF 1420 Newport H-28 100 WMBA Tulsa M-15 5000 KVOO N 1140 Providence H-28 250 WEAN C 250 WJAR R 250 WJAR R 250 WJAR R	S. Cofferville M-15	500				-		
Tulsa M-15 5000 KVOO N 1140 Providence 11-28 250 WJAR R	Shawnee N-15		KGFF					1500
250 WJAR R	Tulsa M-15				Providence H-28			780 890
								1210
	ODECON					100	WPRO	1210
OREGON	UREGUN							
Corvallis E-2 1000 KOAC 550 SOUTH CAROLINA			KOAC		SOUTH CAROL	INA		
Eugene F-2 100 KORE 1420 SOUTH CHRODINAL	Eugene F-2		KORE				WOOD	1262
Klamath Falls G-3 100 KFJI 1210 Charleston O-25 500 WCSC Marshfield F-1 100 KOOS 1370 Columbia N-24 500 WIS N			KFJI	1210			WLSC	1360
			KOOS		Columbia N-24		WIS N	1010 1420
Medford G-2 100 KMED 1310 Spartanburg N-23 100 WSPA	Medford G-2	100	KMED	1310	Spartanourg N-25	100	WOPA	1420

Parameter and a second s		Propinsion and the second second second	-			
SOUTH DAKO	TA Wat	ts	Kcys.	VIRGINIA	Watts	Kcys.
Brookings H-15	500	KFDY	550	Alexandria K-26	10000	WJSV 1460
Huron H-14	100		1200	Arlington J-25	1000	NĂA 690
Mitchell H-14	100	KGDA	1370	Danville L-25	100	WBTM 1370
Pierre G-13 Reprid City H 12	200	KGFX	580	Emory L-23	500	WEHC 1350
Rapid City H-12 Sioux Falls H-15	100 2500	WCAT KSOO	1200 1110	Lynchburg L-25	100 100	WLVA 1370 WGH 1310
Vermillion I-15	500	KUSD	890	Newport News L-26 Norfolk L-26	500	WGH 1310 WPOR 780
Watertown G-15	100	KGCR	1210	I HOLIOIR E-20	500	WTAR C 780
Yankton I-15	1000	WNAX C	570	Petersburg L-26	100	WLBG 1200
				Richmond K-26	100	WBBL 1210
TENNESSEE				11	100	WMBG C 1210
Bristol L-23	100	WOPI	1500	Roanoke L-24	5000 250	WRVA N 1110 WDBJ C 930
Chattanooga N-21	1000	WDOD C	1500 1280	Roanoke L-24	250	WRBX 1410
Jackson N-20	100	WTJS	1310	11	200	1110
Knoxville M-22	50	WFBC	1200	WASHINGTON		
	1000	WNOX C	560	Aberdeen D-2	100	KXRO 1310
	100	WROL	1310	Bellingham C-3	100	KVOS 1200
Memphis N-19	100	WHBQ	1370	Everett C-3	50	KFBL 1370
	500 500	WMC N WNBR	780 1430	Olympia D-3	100	KGY 1200
	500	WREC C	600	Pullman E-5 Seattle C-3	1000 5000	KWSC 1220 KIR R 970
Nashville M-21	5000	WLAC C	1470	Seattle C-3	1000	KJR R 970 KOL C 1270
	5000	WSM N	650		1000	KOMO N 920
Springfield M-20	100	WSIX	1210		100	KPCB 650
					50	KRSC 1120
TEXAS					1000	KTW 1220
Abilene P-13	100	KFYO	1420		100 500	KVL 1370 KXA 570
Amarillo N-12	1000	KGRS	1420	Spokane D-5	100	KXA 570 KFIO 1120
Amarino 14-12	1000	WDAG	1410		1000	KFPY C 1340
Austin Q-14	100	KNOW	1500	1	5000	KGA R 1470
Beaumont R-17	500	KFDM	560		1000	KHQ N 590
Brownsville U-15	500	KWWG	1260	Tacoma D-3	500	KMO 860
College Sta. Q-15 Corpus Christi S-14	500	WTAW	1120	Walls Walls E F	1000	KVI C 760
Dallas P-15	100	KGFI KRLD C	1500 1040	Walla Walla E-5 Wenatchee D-4	100 50	KUJ 1370 KPQ 1500
Danas I -10	50000	WFAA N	800	Yakima D-4	100	KIT 1310
	500	WRR C	1280			
Dublin P-14	100	KFPL	1310	WEST VIRGINI	A	
El Paso P-9	100	KTSM	1310	Bluefield L-24	250	WHIS 1410
Fort Worth P-15	100 100	WDAH KE17	1310 1370	Charleston K-23	250	WOBU 580
Fore worth r-15	1000	KFJZ KTAT	1240	Fairmont J-24	250	WMMN 890
	10000	WBAP N	800	Huntington K-23	250	WSAZ 580
Galveston R-16	100	KFLX	1370	Wheeling J-24	5000	WWVA C 1160
a	500	KFUL	1290	WISCONSIN		
Greenville O-15	15 500	KFPM	1310			
Harlingen T-14 Houston R-16	1000	KRGV KPRC N	1260 920	Eau Claire G-18	1000	WTAQ C 1330
nouston n-ro	100	KTLČ	1310	Fond du Lac H-19 Green Bay G-19	100 100	KFIZ 1420 WHBY 1200
	500	KTRH C	1120	Janesville I-19	100	WCLO 1200
	100	KXYZ	1420	La Crosse H-18	1000	WKBH C 1380
San Angelo Q-13	100	KGKL	1370	Madison H-19	750	WHA 940
San Antonio R-14	100 100	KABC KMAC	1420 1370		500	WIBA N 1280
	100	KONO	1370	Manitowoc H-20	100	WOMT 1210
	1000	KTSA C	1290	Milwaukee H-19	250 250	WHAD 1120 WISN C 1120
	50000	WOAI N	1190		1000	WISN C 1120 WIMJ N 620
Tyler P-16	100	KGKB	1500	Poynette H-19	100	WIBU 1210
Waco Q-15	1000	WACO C	1240	Racine I-20	100	WRJN 1370
Wichita Falls O-14	250	KGKO	570	Sheboygan H-20	500	WHBL 1410
				Stevens Point G-19	2000	WLBL 900
UTAH			1	Superior F-17	1000	WEBC N 1290
Ogden I-7	500	KLO	1400	WYOMING		
Salt Lake City I-7	1000	KDYL C	1290	1		
-	5000	KSL N	1130	Casper H-10	100	KDFN 1210
VERMONT				CAN	IADA	
Burlington F-27	100	WCAX	1200	E _		
Rutland G-27	100	WSYB	1500	ALBERTA		
St. Albans F-27	100	WQDM	1370	Calgary B-7	500	CFAC 690 CFCN 985
Springfield G-27 Waterbury F 27	10	WNBX	1200		10000	CFCN 985
Waterbury F-27	50	WDEV	1420		500	CJCJ 690

Columbia: C. National: Red, R; Blue, B; Both, N.

				1			
Edmonton A-8	250	CHMA	580		Watt		Kcys.
Editoritori A-0	500	CJCA	745	Quebec D-27	100	CHRC	645
	500	ČKUA	580 1120	Quebec D-27	100	CKCI CKCV	645
Lethbridge C -8 Red Deer A-8	100 1000	CJOC CKLC	840		50	CKCV	880 880
Red Deel A-0	1000	CNRD	840		50	CINKQ	000
BRITISH COLU	MBIA			SASKATCHEW			
Chilliwack B-3	100	CHWK	665	Fleming C-13	$1000 \\ 500$	CJRW CJRM	665 665
Kamloops B-5	100	CFJC	1120	Moose Jaw C-11	25	10-AB	1200
Kelowna C-5	100	CKOV 10-AT	1200 1155	Regina C-12	500	CHWC	960
Trail C-6 Vancouver B-3	25 100	CHLS	730	_	500 500	ĊJBR CKCK	960 960
Tancourter D v	500	CJOR CKCD	1210		500	CNRR	960
	100 50	CKCD	730 730	Saskatoon B-11	500	CFOC	910
	100	CKFC CKMO	730	N 14- D 12	500 500	CNRS CJGX	910 630
	100	CKWX	730	Yorkton B-13			050
Winter de C 3	500 50	CNRV CFCT	1030 630	NEWFO	UNDL	AND	
Victoria C-3	50	CI-CI	0.00	St. Johns A-35	75	VOAS	810
MANITOBA					30 500	VONA VOWR	950 675
Brandon D-14	500 5000	CKX CKY	930 780				
Winnipeg D-15	5000	CNRW	780	CENTRAL	, AMI	ERICA	
NEW BRUNSWI	CK			COSTA RICA			
Fredericton D-29	50	CFNB	1210	Heredia FF-23	15	TI4NRH	980
Moncton D-30	500	CNRA	630 890	San Jose FF-23	50	TICR	911
St. John D-30	500	CFBO	090	GUATAMALA			
NOVA SCOTIA			605	Guatamala CC-19	50	TGW	570
Glace Bay C-32 Halifax E-31	2000 500	VAS CHNS	685 815				
Hamax E-51	500	CNRH	815	HONDURAS	2300	HRB	1370
	100	VCX	690 880	Tegucigalpa CC-21	2300	TIKD	1570
Sydney C-32 Wolfville D-31	50 50	C JCB CKIC	1010	SALVADOR			
ONTARIO				Salvador CC-19	500	RUS	664
Brantford H-23	15	10-BQ	1200	II ME	XICO		
Chatham H-22	250	CFCO	1210	AGUASCALIEN			
Cobalt E-23	100	CKMC	1210			XFC	810
Ft. William E-19 Hamilton H-24	50 50	CKPR CHML	890 880	Aguascalientes W-10	250	AFC	010
	500	CKOC	635	BAJA CALIFOR			
Kingston G-25	50 5000	CFRC	930 910	Tiajuana N-3	300	XEFD	1020
London H-23	5000	CJGC CNRL	910	CHIHUAHUA			
North Bay E-23	100	CFCH	930	Chihuahua R-9	100	XEFI	1000
Ottawa F-25	100 500	CKCO CNRO	890 600		250	XFF	875 1000
Prescott F-25	100	CFLC	915	Juarez P-9	101 5000	XEJ XEO	750
Preston H-23	100	CKPC	880	COAHUILA	••••		
St. Catherines H-24 Toronto G-24	500 500	CKTB CFCA	635	Saltillo, Coah. U-12	25	XEL	1000
1010110 0-24	500	CFCL	580	Torreon U-11	125	XETB	1380
	4000 500	CFRB C CKCL	690 580	II	100	XETG XER	1000 735
	5000	CKGW N	840	Villa Acuna R-12	75000	AER	755
	500	CKNC	960	D. F.			
	500 4000	CNRT CNRX	1120 690	Coyoacan Y-13	100	XETZ	1500
	5000	CPRY	840	Mexico City Y-13	1000 250	XEB XEFA	1030 1250
Waterloo G-23	100	CKCR	645		250	XEG	1070
Windsor H-22	500 15	10-BP	540 1200		101	XEK	990
Wingham G-23			1200		1000 5000	XEN	711 940
PRINCE EDWA Charlottestown C-31	500	CFCY	580		500	XEO XETA	1140
Charlottestown C-31	100	CHCK	960		100	XETQ	1230
Summerside C-31	100	CHGS	1120		5000 500	XEW [~] XEX	910 1210
QUEBEC					500	XEZ	780
Montreal E-26	500	CFCF N	1030		2000	XFG	638
	5000		730 730		1000 500	XFI XFX	818 867
	5000 5000		730	Toluca. Y-12	50	XEC	1000

(Continued on page 67)

CFAC

A COMPLETE INDEX BY CALL LETTERS

KFDY

CFAC 690	CKCI 645	CMCA 1225	CNRL 910
Calgary, Alta. CFBO 890	Quebec, Que. CKCK 960	Havana, Cuba	London, Ont.
St. John, N. B.	CKCK 960 Regina, Sask.	CMCB 1070 Havana, Cuba	CNRM 730 Montreal, Que,
CFCA 1120	CKCL 580	CMCD 925	CNRO 600
Toronto, Ont.	Toronto, Ont.	Havana, Cuba	Ottawa, Ont.
CFCF 1030	СКСО 890	CMCF 890	CNRQ 880
Montreal, Que.	Ottawa, Ont. CKCR 645	Havana, Cuba CMCG 1345	Quebec, Que.
North Bay, Ont.	Waterloo, Ont.	Havana, Cuba	Regina, Sask.
CFCL 580	CKCV 880	CMCH 1405	CNRS 910
Toronto, Ont. CFCN 985	Quebec, Que.	Havana, Cuba	Saskatoon, Sask.
Calgary, Alta.	CKFC 730 Vancouver, B. C.	CMCJ 630 Havana, Cuba	CNRT 1120 Toronto, Ont.
CFCO 1210	CKGW 840	CMCM 1405	CNRV 1030
Chatham, Ont.	Toronto, Ont.	Havana, Cuba	Vancouver, B. C.
CFCT 630 Victoria, B. C.	CKIC 1010	CMCN 925	CNRW 780
CFCY 580	Wolfville, N. S. CKLC 840	Havana, Cuba CMCO 660	Winnipeg, Man. CNRX 690
Ch'lottet'n,P.E.I.	Red Deer, Alta.	Havana, Cuba	CNRX 690 Toronto, Ont.
CFJC 1120	CKMC 1210	CMCQ 1150	CPRY 840
Kamloops, B. C.	Cobalt, Int.	Havana, Cuba	Toronto, Ont.
CFLC 915 Prescott, Ont.	CKMO 730	CMCR 1345	ННК 920
CFNB 1210	Vancouver, B. C CKNC 960	Havana, Cuba CMCU 1285	Port au Prince, H. HIX 630
Fredericton, N.B.	Toronto, Ont.	Havana, Cuba	Santo Domingo
CFQC 910	CKOC 635	CMCW 1285	HRB 1370
Saskatoon, Sask. CFRB 690	Hamilton, Ont. CKOV 1200	Havana, Cuba CMCY 1345	Tequcigalpa
Toronto, Ont.	Kelowna, B. C.	CMCY 1345 Havana, Cuba	KABC 1420 San Antonio, Tex.
CFRC 930	CKPC 880	CMDC 660	KARK 890
Kingston, Ont.	Preston, Ont.	Havana, Cuba	Lit. Rock, Ark.
CHCK 960 Ch'lottet'n,P.E.I.	CKPR 890 Ft. William, Ont.	CMGA 834 Colon, Cuba	KBPS 1420
CHGS 1120	CKTB 635	CMGB 1205	Portland, Ore. KBTM 1200
Sum'rside, P.E.I.	St. Cath., Ont.	Matanzas, Cuba	Paragould, Ark.
CHLS 730	CKUA 580	CMGE 1375	KCMC 1420
Vancouver, B.C. CHMA 580	Edmonton, Alta.	Cardenas, Cuba CMGF 977	Texarkana, Ark.
Edmonton, Alta.	Vancouver, B. C.	CMGF 977 Matanzas, Cuba	KCRC 1370 Enid, Okla.
CHML 880	CKX 930	CMGH 1370	KCRJ 1310
Hamilton, Ont.	Brandon, Man.	Matanzas, Cuba	Jerome, Ariz.
CHNS 815 Halifax, N. S.	CKY 780 Winning Man	CMHC 790 Tuinucu, Cuba	KDB 1500
CHRC 645	Winnipeg, Man CMAB 1249	CMHD 950	S. Barbara, Cal KDFN 1210
Quebec, Que.	Pinar del Rio, Cu	Caibarien, Cuba	KDFN 1210 Casper, Wyo.
CHWC 960	CMAC 1375	CMHI 1110	KDKA 980
Regina, Sask. CHWK 665	Pinar del Rio, Cu CMBC 965	Santa Clara, Cu CMHJ 645	Pittsburgh, Pa.
Chilliwack, B. C	CMBC 965 Havana, Cuba	CMHJ 645 Cienfuegos, Cuba	KDLR 1210 Devils Lake, N.D.
CHYC 730 1 1	CMBD 965	CMJC 1382	KDYL 1290
Montreal, Que.	Havana, Cuba	Camaguey, Cuba	Salt Lake City
CJBR 960 Regina, Sask.	CMBG 1070 Havana, Cuba	CMJE 856	KECA 1430
CJCA 745	CMBI 1405	Camaguey, Cuba CMJF 930	Los Angeles, Cal. KELW 780
Edmonton, Alta	Havana, Cuba	Camaguey, Cuba	Burbank, Cal.
CJCB 880	CMBL 1500	CMJG 1200	KERN 1200
Sydney, N. S. CJCJ 690	Havana, Cuba CMBN 1405	Camaguey, Cuba CMJH 1017	Bakersfield, Cal.
Calgary, Alta.	Havana, Cuba	Ciego de Avila, C.	KEX 1180 Portland, Ore.
CJGC 910	CMBQ 1500	CMK 730	KFAB 770
London, Ont. CJGX 630	Havana, Cuba	Havana, Cuba	Lincoln, Nebr.
Yorkton, Sask.	CMBR 1500 Havana, Cuba	CMKC 1034 Santiago, Cuba	KFAC 1300
CJOC 1120	CMBS 790	CMQ 1150	Los Angeles, Cal KFBB 1280
Lethbridge, Alta.	Havana, Cuba	Havana, Cuba	Great Fls., Mont.
CJOR 1210	CMBT 790	CMW 588	KFBI 1050
Vancouver, B. C.	Havana, Cuba CMBW 1010	Havana, Cuba CMX 885	Milford, Kans.
Moose Jaw, Sask.	Havana, Cuba	Havana, Cuba	KFBK 1310 Sacramento, Cal.
UJRW 665	CMBY 1225	CNRA 630	KFBL 1370
Fleming, Sask.	Havana, Cuba	Moneton, N. B.	Everett, Wash.
CKAC 730 Montreal, Que.	CMBZ 1010	CNRD 840 Red Deer, Alta.	KFDM 560
CKCD 730	Havana, Cuba CMC 842	CNRH 815	Beaumont, Tex KFDY 550
Vancouver, B. C.	CMC 842 Havana, Cuba	Halifax, N. S.	KFDY 550 Brookings, S. D.
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[62]

KFEL

A COMPLETE INDEX BY CALL LETTERS

KRKD

Nume Data Pueblo, Colo. San Processor (FPQ) 680 KYPD 1420 KCH1 1200 KMBC 950 (t. Joseph, Mo. Nampa, Idaho KCH1 1200 KMBC 950 (FQQ) 1310 KYPT 920 Billings, Mont. KMBC 950 (FGQ) 1310 KYPT 920 Billings, Mont. KMBC 950 (Gata) Gata Kers. JalCol. Buits, Mont. KrME 120 (Gata) KrX 1310 KrX 1420 Koll. Kmbr. (Gata) KrX 1310 KrX 1420 Koll. Kmbr. (Flo) 1120 KrX 1420 Koll. Koll. Koll. Koll. Koll. (Flo) 1120 KrX 1420 Koll. K				
CPEO CARD FAXD FI20 FGH1 1200 KABC 950 CFGQ 1310 KFYF 920 KGH1 950 KABC 950 CFGQ 1310 KFYF 920 KGH1 950 KABC 950 CFF1 KABC 920 KGH1 120 KMBC 950 CFF1 KABC 1310 KGH1 120 KMBC 1310 CFF1 KABC San Ber' In O, Cal. KMBC 1200 Morree, La. KMBC 1200 CF10 120 KFX 1310 KGIX 1420 KMMJ 7, sobre GF12 1420 KFYR 1420 KMMJ 7, sobre 100 KGIX 1420 KMMJ 7, sobre 100 KGK 100 <td< th=""><th></th><th> KFWI 930</th><th>KGHF 1320</th><th>KMAC 1370</th></td<>		KFWI 930	KGHF 1320	KMAC 1370
J. Jaseph, Mo. Namps, Idaho Little Rock, Ark. Kan. (City Mo. Versen, Colo. Billings, Mont. Metford, Ore. Metford, Ore. Joone, Jowa Denver, Colo. Billings, Mont. Metford, Ore. Versen, Kaso George, Colo. Billings, Mont. Metford, Ore. Sone, Josea George, Cal. San Ber'd no.Cal. KILW 1420 CH10 KFXM 1310 KGIX 1420 KMDT Science, Cal. San Ber'd no.Cal. Frindiad, Colo. KMDT 7400 Sright Jabo KFXM 1420 KGKB Tasoma, Wash. Colain More, Tas. Sright Jabo KFYA 1420 KGKB 1300 KMOX 1009 Marshaltown, Ia. Abliene, Texas Tyler, Texas St. Colain, Mox 1000 KMOX 1009 Krin ath Pails Ore Sockare, Wash. Wichts File, Texas KGKK 1420 KMOX 1009 Karshaltown, Ia. Abliene, Texas KGKK 1420 KOK KMOX 100	Denver, Colo.	San F'neisco, Cal.	KGHI 1200	KMBC 950
Grog. 1310 KFXF 920 KGHL 950 KGHL 950 KMIJ 131 Grad. Low Derver, Colo Billings, Monto France, Cal. France, Cal. France, Cal. France, Cal. France, Cal. KMIJ 1210 KMIJ 1210 Grad. Cal. San Ber'd no, Cal. KMIJ Trinifidad, Colo. KMIMJ 740r. Grad. Cal. San Ber'd no, Cal. KMIJ 740r. France, La. KMIJ 740r. Grad. Cal. KANN Okiahoma City Las Vegas, Neo. KMIJ 740r. France, La. KMIJ 740r. Kribit FYR 1320 KKFK KKIK KKIK KKIK 130r. KKIK <td></td> <td></td> <td>Little Rock, Ark.</td> <td>Kan. City Mo.</td>			Little Rock, Ark.	Kan. City Mo.
CPFH 1360 KFX1 1370 KCIII 1360 KMI 1210 CFI 640 Grand Janc, Col. KUIM 1420 KMIM 1200 CPIO 1120 KFXM 1210 KGIM 1420 KGIM 1200 CPIO 1120 KFXM 1210 KGIZ 1500 KMOR KMOR KGIZ 1500 KMOR KMOR KMOR KMOR KMOR 1600 Strip 1480 KFYG 1420 KGKB 1500 KMOR 1600 KMOR 1600 KMOR 1600 KMOR 1600 KMOR 1600 KMOR 1600 St. Long St. Long KMOR 1600 St. Long	KEGO 1310	KEYE 920	KGHL 950	KMED 1310
Wichta, Kannas Grand June, Col. Butte, Mont. Presso, Cal. or Angeles, Cal. San Ber'd no, Cal. KMLB 1200 KollW 1420 KMLB 1200 Option San Ber'd no, Cal. KollW 1420 KMLB 1200 Monroe, La. Option Oklahoma City Las Vegas, Neo KMMJ 7, Tebr. Option EX Y at 1420 Grand City, Mo Stacoma, Wash. View of the Construction EX Y at 1420 Grand City, Mo Stacoma, Wash. Kighton Rick of the Construction KKRK 1370 Stacoma, Wash. Kighton Kighton Kighton Kok Viewo Stacoma, Wash. Kighton Kighton Kighton Kighton Kighton Kok Viewo Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton Kighton	Boone, Iowa	Denver, Colo.	KCIR 1360	KMJ 1210
CPI 640 NPADe-121Cal. Trining Constraints Montrop. Law Core Angeles. Cal. SFXR Notano. KGIX Marchall Spokane, Wash. GFXR KGIX H420 KGIX H420 Yerl H 1200 KGIX H420 KGIX H420 Yerl H 1200 KYY KGIX H420 KGIX Storm, Wash. Grant City. M0 Trining Gene, Texas Trining Gene, Texas KGIX Storm, Tiono. Storm, Wash. KPID 1420 KGA H4.0 KGA Storm, Tiono. Storm, Tiono. Storm, Tiono. KFII 1210 KGAA H370 KGKX H420 KNWT Storm, Tiono. Hollywood, Cal. KFII 1310 KGBU Stord, Tiono. KGN KGN Hollywood, Cal. KOA Fert Jordge Ia. KGBU 900 KGBU Storm, Fill KOA		Grand JuneCol.	Butte, Mont.	Fresno, Cal.
CP10 1120 FFXR 1310 KGIX 1420 KOIX 1420 Orad du Lac, Wiss Flagstaf, Arz. KGIX 1500 KGIX 1600 KGIX 1600 GP1B 1200 KGIX 1420 KGIX 1500 KGIX 1600	KFI 640	1 KFXM 1210	KGIŴ 1420	KMLB 1200
Solvane, Wash. (FIZ 420) Oklahoma City Las Vegas, Nev. (GTZ 1420) Clay Ctr., Nebr. KMO 860 Yond du Lac, Wis. (FIB 1200 FAVX 1420 KGLX 1500 Tkoma, Wash. KGKX 1500 KMO X 1090 Marshalltown, Ia. (FJF 148) KPY0 1420 KGKB 1500 KGKM 1500 KMO X 1090 Marshalltown, Ia. (FJF 1480 KPYR 55 KGK 1180 KGK 1181 KMO X 1090 Karballtown, Ia. (FJJ 1612) Bismarck, Y 0 Schogelo, 726 KMVTR 570 KGR 1370 KGAR 1370 KGK 1420 KNWW 1500 Krift 1610 KGAR 1370 KGK 1420 KNW 1050 Krift 1610 KGK 1320 KGK 1420 KNW 1050 Krift 1620 KGK 1420 KNW 1050 Austin, Tes. Krift 1620 KGK 1420 KNW 1050 Austin, Tes. Krift 1620 KGK 1520 Sand Picniki, Nebr. KOX 700 KOX 700 Krift 1620 KGK 1270 KGK 1270 KOX 700 State Col., N. M. KOX 700 Krift 1620 KGK 1270 KGK 1270 KGK 1270 KGK 1270 KGK 1270 Krift 162	Los Angeles, Cal.	San Ber'd no,Cal.	Trinidad, Colo.	KMMJ 740
CF1Z 1420 FF XY 1420 KGIZ 1500 Tacoma, Wash, KY JB Filestaff, Anz. Grant Cluy, Kranbaltown, Ia. Abilene, Texas KGKB 1500 KMOX 1090 Kry JB 1200 KGKR 1500 KKKB 1090 Kry JD 1200 KGAR 1200 KGKL 1370 Krab Misson KGAR 1370 KGAR 1370 KGAR 1400 Krab Misson KGAR 1370 KGAR 1410 KGAR 1500 York JD Greg KGAR 1370 KGAR 1320 KGAR 1500 York JC Crasson KGBU 1300 KGBU Sottsbluff, Nebr. Hollywood, Cal. KON 1500 York JC Sa Stotsbluff, Nebr. Sottsbluff, Nebr. Hollywood, Cal. KOR York JC Sottsbluff, Nebr. Hollywood, Cal. KOR KOR York JC Sottsbluff, Nebr. Hollywood, Cal. KOR York JC Sottsbluff, Nebr. Hollywood, Cal. KOR KOR York JC Sottsbluff, Nebr. Hollywood,		Oklahoma City	Las Vegas, Nev.	Clav Ctr., Nebr.
CF1B T200 KFYO 1420 KGRB TS00 KMOX NOS D990 Karbaltown, Ia. Abliene, Texas KGRL Tsler, Texas KLouiis, Mo. KPJF 1430 KGRA 14.0 KGRO Baveriff Hill, Call Kanath FailsOre KGRA 1330 KGRO Kustin, Tex. KNOX Krift 1300 KGRA 1340 KGAK 1420 KOA 830 Ferty Tata Honolulu, T. H. Honolulu, T. H. Honolulu, T. H. Honolulu, T. H. KGAK 1420 KOAK 630 Collar, Kas. State Collar, N. M. KrkA 880 York, ebra 1310 KGRS 1410 KGAK <td< td=""><td>KFIZ 1420</td><td>1 KFXY 1420</td><td>I KCIZ 1500</td><td>H E MO 960 </td></td<>	KFIZ 1420	1 KFXY 1420	I KCIZ 1500	H E MO 960
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Kahanna City Bismarck, N D San Angelo, Tex. Beverly Hills, Call KGAI 1210 KGA 14.0 KGAK Kork Ko	KFJB 1200	Abilana Texas	Tyler Texas	St. Louis, Mo.
Kahanna City Bismarck, N D San Angelo, Tex. Beverly Hills, Call KGAI 1210 KGA 14.0 KGAK Kork Ko		KFYR 55	KGKL 1370	KMPC 710
Klamath Falls Ore Spokane, Wash. Wichita Fils., Tex. Hollywood, Ch. KGAR NJM 1370 KGAR NJM Mode Austin, Tex. Gr Jr, Groks, N.D. Tueson, Arizona Sand Point, Idaho Austin, Tex. Optiand, Ore. San Diego, Cal. Scottsblutl, Nebr. Hollywood Cal. Sortand, Ore. KGR X 1320 KGR X 1420 Kow of Cal. Sortand, Ore. KGR X 1310 KGR X 1320 Kow of Cal. Sortand, Ore. KGR X 1310 Kork X 1320 Kork X 330 Cort Dodge Ia. Ketchikan, Al'ka Honolut, T. 430 Kork X 430 Kork X 530 Ereley, Cu20 Kork X 120 No. Kork X 120 Kork X 120 Krix X 1020 Watertown, S. D. Amarillo, Texas Rene, Nevada Krix X 1020 KGCA 1370 KGCA 126 KOR Krix X 120 Kasoula, Mont. Kor X Kor X	Oklahoma City	Bismarck, N D	San Angelo, Tex.	Beverly Hills, Cal
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Norman Dortland, OreSort Dirgo (Cal. KGBU 1200Sort Bull, T. Nebr. KGBU 1320Hollywood, Cal. KOA 830Rel ZKGBK 1310KGBU 1320Bortelly, Nebr. KGBZ 930Bortelly, Nebr. KGBU 1210Denver, Colo. KOA 530Rel XSt. Joseph, Mo. Streley, Colo.York, Nebr. KGBZ 930KGCN 1210KOB 1180Greeley, Colo. KFKU 1220York, Nebr. KGCA 1270KGCN 1210KOCW 1400Chicago, Ill. Chicago, Ill. KKFX 1020KGCK 1210KGCK 1210KOCK 1800KKFX 1020KGCK 1310KGCK 1310KGCK 1310KOLL 1240Reekord, Ill. Mandan, N. D. Calveston, Tex. KYDK 110KGCK 1310KGCK 1310KGCK 1310KKFX 1250KGDA 1370KGW 620KOLL 1240KOLL 1240Shenandoah, 1a. KFOK 1210KGCK 1200KGY 1200Sonthe Wash. Missoula, Mont. KODU 1370Sonthe Wash. KOW 1370Shenandoah, 1a. FFQu Shoka, Cal. Lincoin, Nebr. KFPX 1340KGER 1360Clovis, N. M. Eugene, Ore. KODU 1370Sonthe Wash. KODU 1370KFPX 1340KGER 1360KGER 1360KICA 1370KOB 1370KGER 1360KGER 1360KICA 1370KOCK 1420KFPV 1340KGER 1360KICA 1370KOCK 1370KFPY 1340KGER 1360KICA 1370KOCK 1370KFPK 1340KGEF 1420KICA 1370KOCK 1370KFPK 1340KGER 1360KICA 1370KOCK 1370KFPK 1340KGER 1360KICA 1370KOCK 1370KFPK 1340KGEF 1420KICA 1370KO	Grd. Forks, N.D.	Tucson, Arizona	Sand Point, Idaho	
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Chicago, Ill.Watertown S. D. KGCU 1240Amarillo, Texas KGU 240Reno, Nevada KGU 1240KPLV1410Mandan, N. D. KGCX 1310KGU 1420Council Bluffs, Ia. KGV 1420KPLX1370KGCX 1310KGV 1420KPLX1370KGCANissoula, Mont. KGV 1200KGV 1220KFMX1250KGDA 1370KGW 620KFMX1250KGDA 1370KGW 620KFMS890KGDE 1200Portland, Ore. KGDA 1370KFNF890KGDA 1100KHJ 900KFOR 1210KGDY 1200KGY 1200Lneoln, Nebr.KGDY 1200KGDY 1200KFOX 1250KGDY 1200KGDY 1200Long Beach, Cal.KGEK 1200Clovis, N. M. KICA 1370Long Beach, Cal.KGEK 1200KICK 1420KFPM 1310KGEK 1200KICK 1420Greenville, TexasLong Beach, Cal.Red Oak, IowaKFPY 1340KGEK 1360KGEY 1310Spokane, Wash.KGEF 1420KID 1320KFPQ 1239Kaispeli, Mont.Boise, IdahoSpokane, Wash.KGFF 1420KIT 1310KFPQ 610Oklahoma CityKJR 970KFSD 600KGFJ 1500KGFJ 1200KFSD 600KGFJ 1200KGFK 1500KGFK 1500KGFK 1500KFQD 620KGFJ 1200KFRD 630KGFF 1420KFPW 630KGFF 1420KFPW 1310KGFF 1200KFPW 1320KGFK 1370KFPW 1330KGFF 1200KFPW 1330KGFF 1370 <td>Lawrence, Kans.</td> <td>Becorah, Iowa</td> <td>KGRS 1410</td> <td>KOH 1380</td>	Lawrence, Kans.	Becorah, Iowa	KGRS 1410	KOH 1380
KFLV 1410 KGCU 1240 KGU 340 Concell Buills, I.a. KROckford, Ill. Mandan, N. D. Honolulu, Hawaii Concell Buills, I.a. KOIN 940 Galveston, Tex. Wolf P't, Mont. KGVO 1 4200 Portland, Ore. KOIN 940 Stepandoah, Ia. KGDE 1200 KGW 520 KOL 1270 Shenandoah, Ia. FergusFalls, Minn Olympia, Wash. KONO 920 Shenandoah, Ia. Stockton, Cal. Los Angeles, Cal. KONO 1270 KFOX 1250 KGDY 1200 KGY 1200 Spokane, Wash. KOOS 1370 KFPX 1310 KGEK 1200 KICK 1420 Marshfield, Ore. KOOS 1370 KFPU 1310 KGER 1360 KGEK 1220 KOY 1330 Phoentx, Arizona KFPU 1340 KGER 1360 KGK KHY 1330 Scattle, Wash. KOY 13390 KFPW 1340 <td></td> <td>Watertown, S. D.</td> <td>Amarillo, Texas</td> <td>Reno, Nevada</td>		Watertown, S. D.	Amarillo, Texas	Reno, Nevada
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RFOM Long Beach, Cal.Huron, S. D.Spokane, Wash. KICAMarshfield, Ore. KOREMarshfield, Ore. KOREKFPL1310KGEK1200KICA1370KORE1420Dublin, TexasYuma, Colo.Clovis, N. M.Eugene, Ore.KORE1420Greenville, TexasLong Beach, Cal.Red Oak, IowaPhoenis, ArizonaKFPW1340KGEW1200Idaho Falls, 'da.Scattle, Wash.KFPU1340KGEZStattle, Wash.KPCB650Spokane, Wash.KGF1420KID1350Prescott, Ariz.KFQD1230KGF1420KIT1310KPOGSan F'ncisco, Cal.KGF1420KIB1070San F'ncisco, Cal.KFRU630KGFI1500KJRSan F'ncisco, Cal.Denver, Colo.KFRU630Corp's Ch'st. TexSeattle, Wash.KPOF880San F'ncisco, Cal.KGFJ1200KLCN1200KPQColumbia, Mo.Corp's Ch'st. TexSeattle, Wash.KPQC1200KFSG1120KGFK1500KLCN1240KPQC920Los Angeles, Cal.Moorhead, Minn.Ogden, UtahHouston, TexasKQV1330KFUL1290KGFK1370KLCM1240KQV1380Gaueston, TexasRaton, N. M.KLCM1240KQV1330Pritsburgh, Pa.KFVU1000KGFK580San Jose, Cal.KLCM	KFOR 1210		KHJ 900	KONO 1370
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KFPL 1310 KGEK 1200 KICA 1310 KORE 620 bubbin, Texas Yuma, Colo. KGER 1360 KICA is N. M. Eugene, Ore. Eugene, Ore. Eugene, Ore. Eugene, Ore. Eugene, Ore. Eugene, Ore. KOY 1390 Greenville, Texas Long Beach, Cal. Red Oak, Iowa Red Oak, Iowa Rhowa Rhowa <td>Long Beach, Cal.</td> <td>Huron, S. D.</td> <td>Spokane, Wash.</td> <td>Marshfield, Ore.</td>	Long Beach, Cal.	Huron, S. D.	Spokane, Wash.	Marshfield, Ore.
KFPM 1310 KGER 1360 KICK 1420 KOIT 1350 Greenville, Texas Long Beach, Cal. KGEW 1200 KID 1320 KPCB 650 Ft. Smith, Ark. KGEZ 1310 KID 1320 KPCB 650 Spokane, Wash. KGEF 1420 KID 1310 Scattle, Wash. KPOD 680 Anchorage, Alas. Sinwnee, Okla. Yakima, Wash. San F'ncisco, Cal. KPOC 680 San F'ncisco, Cal. Oklahoma City San F'ncisco, Cal. KPPC 1210 Pasadena, Cal. KFSD 600 KGFI 1200 KLN 1210 Pasadena, Cal. KFSD 600 KGFI 1200 KLN 970 KPPC 1210 San Fincisco, Cal. KGFI 1200 KLN 970 KPPC 1210 San Diego, Cal. KGFJ 1200 KLN 1240 KPQC 1300 San Diego, Cal. KGFK 1500 KLO	KFPL 1310	11 KGEK 1200	KICA 1370	KORE 1420
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Ft. Smith, Ark. Ft. Morgan, Colo. Idaho Falis, 'da. Scattle, Wash. KFPY 1340 KGEZ 1310 KPDN 1500 Prescott, Ariz. Spokane, Wash. Kalispell, Mont. KGFF 1420 KIT 1310 KPO 680 Anchorage, Alas. Si. wruce, Okla. Yakima, Wash. KFO 680 San F'nelsco, Cal. KPO 680 San F'nelsco, Cal. Oklahoma: City San F'nelsco, Cal. Denver, Colo. KFPC 1210 Denver, Colo. KFSU 630 Corp's Ch'st, Tex Seattle, Wash. KPQ 1500 KPQ 1500 KFSU 640 KGFI 1200 KLCN 1290 Wenatchee, Wash San Diego, Cal. Los Angeles, Cal. Biytheville, Ark. KPQ 1500 KPM 1540 KFSG 1120 KGFK 1500 KLO 1400 Houston, Texas Kupu 1310 KLO 1440 Houston, Texas KQW 1830 KFSG 1290 KGFK 1310 KLO 1440 Houston, Texas KFVU 1290 KGFL 1310	Greenville Texas	Long Beach, Cal.	Red Oak, Iowa	Phoenix, Arizona
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Ancholage, Mas. KGFG 1370 KJRS KOOF 880 San F'ncisco, Cal. Oklahoma City San F'ncisco, Cal. Denver, Colo. KPPC 1210 San F'ncisco, Cal. KGFI 1500 San F'ncisco, Cal. Pasadena, Cal. Enver, Colo. KPPC 1210 Columbia, Mo. Corp's Ch'st. Tex Seattle, Wash. Pasadena, Cal. KPQC 1500 San Diego, Cal. KGFJ 1200 KLCN 1290 Wenatchee, Wash. Los Angeles, Cal. KGFK 1500 KLO 1400 Houston, Texas KFSD Galveston, Texas Raton, N. M. KLPM 1240 Houston, Texas KFU0 550 KGFW 1310 KLR KLRA 1390 KQW 1370 St. Louis, Mo. KGFZ 580 Oakland, Cal. KREG 1500 Cu'v - Ci'y, Cal. KGGC 140 KLX 880 San face, Cal. KVU 1000 KGGC 1210 KGGC 1230 KLRA	KFQD 1230	KGFF 1420	III K I'P 1310	KPO 680
Ar RO Old Oklahoma City San F'ncisco, Cal. Denver, Colo. KFRU 630 KGFI 1500 San F'ncisco, Cal. Denver, Colo. KFRU 630 KGFI 1500 KJR 970 KPPC 1210 Columbia, Mo. Corp's Ch'st. Tex Seattle, Wash. Pasadena, Cal. KPPC 1210 KFSD 600 Los Angeles, Cal. KLCN 1290 KLCN Wenatchee, Wash. KFSG 1120 KGFK 1500 KLO 1400 Houston, Texas KFUL 1290 KGFK 1500 KLO 1400 Houston, Texas KFUL 1290 KGFU 1370 KLPM 1240 Pittsburgh, Pa. KFUU 550 KGFW 1310 KLRA 1390 KQW 1010 St Lous, Mo. Kearney, Nehr. Little Rock, Ark. KRE 1370 KRE 1370 K+VD 1000 KGGC 1420 San F'ncisco. Cal. KLX 880 <	Anchorage, Alas.	Shownee, Okla.	KIRS 1070	KPOF 880
KFRU 630 KGFI 1500 KJR 970 KPPC 1210 Columbia, Mo. Corp's Ch'st, Tex Seattle, Wash. Pasadena, Cal. KRQ 1500 KFSD 600 KGFJ 1200 Blytheville, Ark. KPQ 1500 San Diego, Cal. Los Angeles, Cal. Blytheville, Ark. Wenatchee, Wash KPQ 1800 KFSG 1120 KGFK 1500 KLO 1400 Houston, Texas Galveston, Texas Raton, N. M. KGFK 1310 KLR 1390 KQW 1010 St Lous, Mo. KGFX 580 KLR 1320 KRW 1010 Culv Ci'y, Cal. Pierre, S. D. Oakiand, Cal. Berkeley, Cal. KREG 1500 Culv Ci'y, Cal. Pierre, S. D. Oakiand, Cal. San Jose, Cal. San Ana, Cal. KFWB 950 KGGF 100 KLZ San Ana, Cal. KRed 1500 San F'netsco, Cal. San F'netsco, Cal. San Ana, Cal. KRGV 1260 <td>San F'ncisco Cal.</td> <td>Oklahoma City</td> <td>San F'ncisco, Cal.</td> <td>Denver, Colo.</td>	San F'ncisco Cal.	Oklahoma City	San F'ncisco, Cal.	Denver, Colo.
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KF3D 600 KOF J 1200 Block mellsWenatchee, WashSan Diego, Cal.Ko Angeles, Cal.KK KSG 1400 Wenatchee, WashLos Angeles, Cal.KGFK 1500 Moorhead, Minn.Orden, UtabHouston, TexasKFUL1290KGFL 1370 KLPM 1240 Houston, TexasGaiveston, TexasRaton, N. M.Minot, N. Dak.Fittsburgh, Pa.KQW 1380 St. Louis, Mo.KeFW 310 KLRA 1390 Little Rock, Ark.KRE 1370 Cuiv - Ciry, Cal.Pierre, S. D.Oakiand, Cal.Berkeley, Cal.Berkeley, Cal.RtKE 1370Cuiv - Ciry, Cal.San Friesco, Cal.KLZS60KREG 1560Sant Ana, Cal.KFWB555KGGF1010KLZS60KRGV1260Hollywood, Cal.Coffeyville, Okla.Denver, Colo.Harlingen, TexasKRGV1220KFWB520KGGM1230KMA930KRKD1120	Columbia, Mo.	Corp's Ch'sti Tex	KLCN 1290	II KPO 1500
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Galveston, TexasRaton, N. M. KGFW 1310Minot, N. Dak. KGFW 1310KFUO550KGFW 1310KLRA1390KQW 1010St. Louis, Mo.KGFX 580KLRA1390San Jose, Cal.KFVD1000KGFX 580KLS1440KRECulvCity, Cal.Pierre, S. D.Oakiand, Cal.Berkeley, Cal.KFWBS50KGGF1010KLZS60KREG 1500Cape Gir'rd'u, MoSan F'neisco, Cal.KLZ560KRGV 1260Hollywood, Cal.Coffeyville, Okla.Denver, Colo.Harlingen, TexasKFWB1200KGGM1230KMA930KRKD	KFSG 1120	KGFK 1500	"I KLO 1400	KPRC 920
Galveston, TexasRaton, N. M. KGFW 1310Minot, N. Dak. KGFW 1310KFUO550KGFW 1310KLRA1390KQW 1010St. Louis, Mo.KGFX 580KLRA1390San Jose, Cal.KFVD1000KGFX 580KLS1440KRECulvCity, Cal.Pierre, S. D.Oakiand, Cal.Berkeley, Cal.KFWBS50KGGF1010KLZS60KREG 1500Cape Gir'rd'u, MoSan F'neisco, Cal.KLZ560KRGV 1260Hollywood, Cal.Coffeyville, Okla.Denver, Colo.Harlingen, TexasKFWB1200KGGM1230KMA930KRKD	Los Angeles, Cal.	Moorhead, Minn.	KLPM 1240	KQV 1380
St. Louis, Mo. $KFVIDKearney, Nehr.KGFXLittle Rock, Ark.KISSan Jose, Osi.KIEKrVD1000CuivKGFX580Pierre, S. D.MarketKl.S1440Oakiand, Cal.KREG1370Berkeley, Cal.KREGKrVS1210Cape Gir'rd'u, MoHollywood, Cal.KGGF1420Coffeyville, Okla.KLX880Cakland, Cal.KLZKREG1500Santa Ana, Cal.KRGV1260Harlingen, TexasKRMAKFWB526Coffeyville, Okla.Coffeyville, Okla.Cal.Denver, Colo.KMAHarlingen, TexasKRKD$	Gaiveston, Texas	Raton, N. M.	Minot, N. Dak.	Pittsburgh, Pa.
St. Louis, Mo. $KFVIDKearney, Nehr.KGFXLittle Rock, Ark.KISSan Jose, Osi.KIEKrVD1000CuivKGFX580Pierre, S. D.MarketKl.S1440Oakiand, Cal.KREG1370Berkeley, Cal.KREGKrVS1210Cape Gir'rd'u, MoHollywood, Cal.KGGF1420Coffeyville, Okla.KLX880Cakland, Cal.KLZKREG1500Santa Ana, Cal.KRGV1260Harlingen, TexasKRMAKFWB526Coffeyville, Okla.Coffeyville, Okla.Cal.Denver, Colo.KMAHarlingen, TexasKRKD$	KFUO 550	KGFW 1310	KLRA 1390	KQW 1010
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Cape Gir'rd'u, Mo	Culv City Cal	Pierre, S. D.		Berkeley, Cal.
Cape Gir'rd'u, Mo	R.V.5 1210	KGGC 1420	KLX 880	I KREG 1500
Hollywood, Cal Coffeyville, Okla Denver, Colo Harlingen, Texas KGGM 1230 KMA 930 KRKD 1120	Cape Gir'rd'u, Mo	San F'neisco, Cal.	- Oakland, Cal.	KRGV 1260
KRKD 1200 KRGM 1230 KMA 930 KRKD 1120	KFWB 950	Coffeyville Okla		Harlingen, Texas
St. Louis, Mo.	KEWE 1200	KGGM 1230	KMA 930	KRKD 1120
	St. Louis, Mo.	Albuq'rque, N.M.	Shenandoah, Ia	Los Angeles, Cal.
				-11

KRLD

A COMPLETE INDEX BY CALL LETTERS

WDRC

KRLD 1040 Dallas, Texas	KWKC 1370	WAPI 1140	WCAP 1280 Asbury Pk., N. J.
KRMD 1310	Kansas City, Mo. KWKH 850	Birmingham, Ala. WASH 1270	Asbury Pk., N. J.
Shreveport, La.	Shreveport, La.	Gr. Rapids Mich.	Rapid City, S. D.
KROW 930	KWLC 1270	WAWZ 1350	WCAU 1170
Oakland, Cal. KRSC 1120	Decorah, Iowa	Zarephath, N. J. WBAA 1400	Philadelphia, Pa.
Seattle, Wash.	KWSC 1220 Pullman, Wash.	WBAA 1400	WCAX 1200
KSAC 580	KWWG 1260	Lafayette, Ind. WBAK 1430	Burlington, Vt. WCAZ 1070
KSAC 580 Manh'tt'n, Kans. KSCJ 1330	Brownsville, Tex.	Harrisburg, Pa.	Carthage, Ill.
KSCJ 1330	I KXA 570	WBAL 760-1060	WCBA 1440
Sloux City, Ia. KSD 550	Seattle, Wash. KXL 1420	Baltimore, Md.	Allentown, Pa.
St. Louis, Mo.	Portland, Ore.	WBAP 800 Fort Worth, Tex.	WCBD 1080 Zion, Ill.
KSEI 900	KXO 1500	WBAX 1210	WCBM 1370
Pocatello, Idaho	El Centro, Cal.	Wilkes-Barre, Pa.	Baltimore, Md.
KSL 1130 Salt Lake City	KXRO 1310	WBBC 1400	Baltimore, Md. WCBS 1210
KSO 1380	Aberdeen, Wash. KXYZ 1420	Brooklyn, N. Y. WBBL 1210	Springfield, Ill.
Clarinda, Iowa	Houston, Texas	Richmond, Va.	WCCO 810 Minnean Minn
KSOO 1110	KYA 1230	W DDM 110	Minneap., Minn. WCDA 1350 New York City
Sioux Falls, S. D. KSTP 1460	San F'ncisco, Cal.	Chicago, Ill.	New York City
St. Paul, Minn.	KYW 1020 Chicago, Ill.	WBBR 1300	WCFL 970
KTAB 560	KZKA 1110	Brooklyn, N. Y. WBBZ 1200	Chicago, Ill.
San F'ncisco, Cal.	KZKA 1110 Manilla, P. I.	Ponca City, Okla	WCGU 1400 Brooklyn, N. Y.
KTAR 620	KZRC 937.5 Cebu, P. I.	WBCM 1410	WCHI 1490
Phoenix, Ariz. KTAT 1240	KZRM 618.5	Bay City, Mich.	Chicago, Ill.
Ft. Worth, Tex. KTBR 1300	Manila, P. I.	WBEN 900 Buffalo, N. Y.	WCKY 1490 Covington Ky
KTBR 1300	NAA 690	WBEO 1310	Covington, Ky. WCLO 1200
Portland, Ore.	Arlington, Va.	Marguette, Mich.	Janesville, Wis.
KTBS 1450 Shreveport, La.	RUS 664	WBGFF 1370	I WCLS 1310
KTFI 1240	Salvador TGW 570	Glens Falls, N. Y. WBHS 1200	Joliet, Ill WCMA 1400
Twin Falls, Ida.	Guatamala	Huntsville, Ala.	WCMA 1400 Culver, Ind.
KTHS 1040	TICR 911	WBIG 1440	WCOA 1340
Hot Spgs., Ark. KTLC 1310	San Jose, C. R.	Greensboro, N.C.	Pensacola, Fla.
Houston, Texas	TI4NRH 980 Heredia, C. R.	WBIS 1230	WCOC 880
KTM 780	VAG COT	Boston, Mass. WBMS 1450	Meridian, Miss. WCOD 1200
Los Angeles, Cal.	Glace Bay, N. S.	Hackensack, N.J.	Harrisburg, Pa.
KTRH 1120	VCA 690	WBNX 1350	WCOH 1210
Houston, Texas KTSA 1290	Halifax, N. S.	New York City	Yonkers, N. Y.
San Antonio, Tex.	VOAS 810 St. John's, N. F.	WBOQ 860 New York City	WCRW 1210
KTSM 1310	VONA 950	WBOW 1310	Chicago, Ill. WCSC 1360
El Paso, Texas	St. John's, N. F.	Terre Haute, Ind.	Charleston, S. C.
KTW 1220 Seattle, Wash.	VOWR 675	WBRC 930	WCSH 940
	St. Johns, N F. VPN 610	Birmingham, Ala. WBRE 1310	Portland, Maine
Walla Wal., Wash.	Nossen DT	Wilkes-Barre, Pa.	WDAE 1220
KUOA 1390	WAAB 1410	WBSO 920	Tampa, Fla. WDAF 610
Fayetteville, Ark KUSD 890	WAAB 1410 Boston, Mass.	Needham, Mass.	Kansas City, Mo.
Vermillion, S. D.	WAAF 920 Chicago, Ill.	WRL 1080	WDAG 1410
KVI 760	WAAM 1250	Charlotte, N. C. WBTM 1370	Amarillo, Texas
Tacoma, Wash.	Newark, N. J.	Danville, Va.	WDAH 1310 El Paso, Texas
KVL 1370		WBZ 990	WDAS 1370
Seattle, Wash. KVOA 1260	Jersey City, N. J. WAAW 660	Boston, Mass.	Philadelphia, Pa.
Tucson, Arizona	Omaha, Nebr.	WBZA 990 Springfield, Mass.	WDAY 940
KVOO 1140	WABC 860	WCAC 600	Fargo, N. D. WDBJ 930
Tulsa, Okia.	New York City	Storrs, Conn.	Roanoke, Va.
KVOR 1270	WABI 1200	WCAD 1990 II	WDBO 1120
Col. Sp'gs, Colo. KVOS 1200	Bangor, Maine WABZ 1200	Canton, N. Y.	Orlando, Fla.
Bellingh'm, Wash.	New Orleans, La.	WCAE 1220 Pittsburgh, Pa.	WDEL 1120
KWCR 1310 4	WACO 1940	WCAH 1430	Wilmington, Del WDEV 1420
Cedar Rapids, Ia.	Waco, Texas WADC 1320	Columbus, Ohio	Waterbury, Vt.
KWEA 1210 Shreveport, La.	WADC 1320 Akron, Ohio	WCAJ 590	WDGY 1180
KWG 1200	WAGM 1420	Lincoln, Nebr. WCAL 1250	Minneap., Minn.
Stockton, Cal.	Presque Isle, Me.	Northfield, Minn.	WDOD 1280 Chattan'ga, Tenn
KWJJ 1060	WAIU 640	WCAM 1280	WDRC 1330
Portland, Ore. KWK 1350	Columbus, Ohio	Camden, N. J.	Hartford, Conn.
St. Louis, Mo.	WALR 1210 Zanesville, Ohio	WCAO 600 Baltimore Md	
		Baltimore, Md.	

WDSU

A COMPLETE INDEX BY CALL LETTERS

WLEY

WDSU 1250	WGAL 1310	WHN 1010	WJJD 1130
New Orleans, La.	Lancaster, Pa.	New York City	Mooseheart, Ill.
WDZ 1070	WGAR 1450	WHO 1000	WJKS 1360
Tuscola, Ill. WEAF 660	Cleveland, Ohio	Des Moines, Ia. WHOM 1450	Gary, Ind. WJMS 1420
New York City	WGBB 1210 Freeport, N. Y.	Jersey City, N. J.	Ironwood, Mich.
WEAF 660 New York City WEAI 1270 Ithaca, N. Y. WEAN 780		Jersey City, N. J. WHP 1430	WJR 750
Ithaca, N. Y.	Evansville, Ind.	Harrisburg, Pa.	Detroit, Mich.
WEAN 780	WGBI 880	WIAS 1420 Ottumwa, Iowa	WJSV 1460
Providence, R. I WEAO 570	Seranton, Pa.	WIBA 1280	Alexandria, Va. WJTL 1370
Columbus, Ohio	WGCM 1210 Gulfport, Miss.	Madison, Wis.	Atlanta, Ga.
WEBC 1290	WGCP 1250 Newark, N. J.	WIBG 930 Elkins Park, Pa.	WJW 1210
Superior, Wis.	Newark, N. J.	Elkins Park, Pa.	Mansfield, Ohio
WEBQ 1210 Harrisburg, Ill.	WGES 1360 Chicago, Ill.	WIBM 1370 Jackson, Mich.	WJZ 760 New York City
WEBR 1310	WGH 1310	II WIBO 560	WKAQ 890
WEBR 1310 Buffalo, N. Y. WEDC 1210 Chicago, III.	WGH 1310 Newp't News,Va.	Chicago, Ill.	WKAQ 890 San Juan, P. R.
WEDC 1210	WGL 1370	WIBU 1210	WKAR 1040
	Ft. Wayne, Ind. WGN 720	Poynette, Wis. WIBW 580	E. Lansing, Mich. WKAV 1310
WEEI 590 Boston, Mass.	WGN 720 Chicago, Ill.	Topeka, Kansas	Laconia, N. H.
WEEU 830	WGR 550	WIBX 1200	WKBB 1310
Reading, Pa.	WGR 550 Buffalo, N. Y.	Utica, N. Y. WICC 600	Joliet, Ill.
WEHC 1350 Emory, Va.	ILWGST 890	WICC 600	WKBC 1310 Birmingham Ala
Emory, Va. WEHS 1420	Atlanta, Ga.	Bridgeport, Conn WIL 1200	Birmingham, Ala. WKBF 1400
Cicero, Ill.	WGY 790 Schenec'dy, N. Y. WHA 940	St. Louis, Mo.	Indianapolis, Ind.
	WHA 940	WILL 890	WKBH 1380
Battle C'k, Mich.	Madison, Wis. WHAD 1120	Urbana, Ill.	La Crosse, Wis.
	WHAD 1120	WILM 1420 Wilmington, Del.	WKBI 1420
Chicago, Ill. WERE 1420	WHAD 1120 Milwaukee, Wis. WHAM 1150 Rochester, N. Y.	WINS 1180	Cicero, Ill. WKBN 570
Erie, Pa.	Rochester, N. Y.	New York City	Youngstown, O.
Erie, Pa. WEVD 1300	WHAP 1300	WIOD 1300	WKBS 1310
New York City	New York City WHAS 820	Miaml, Fla.	Galesburg, Ill. WKBV 1500
WEW 760 St. Louis, Mo.		Philadelphia, Pa.	Connersville, Ind.
WEXL 1310	Louisville, Ky. WHAT 1310	WIS 1010	WKBW 1480
WEXL 1310 Royal Oak, Mich.	Philadelphia, Pa	WIS 1010 Columbia, S. C.	Buffalo, N. Y.
WFAA 800 Dallas, Texas	WHAZ 1300	WISN 1120 Milwaukee, Wis.	WKBZ 1500
WFAM 1200	Troy, N. Y. WHB 860	WJAC 1310	Ludington, Mich WKJC 1200
WFAM 1200 So. Bend, Ind.	Kansas City, Mo WHBC 1200	Johnstown, Pa.	Lancaster, Pa.
WFAN 610	WHBC 1200	WJAG 1060 Norfolk, Nebr.	WKRC 550
Philadelphia, Pa.	Canton, Ohio	WJAK 1310	Cincinnati, Ohio
WFBC 1200 Knoxville Tenn	WHBD 1370 Mt. Orab, Ohio	WJAK 1310 Elkhart, Ind.	Oklahoma City
Knoxville, Tenn WFBE 1200	WHBF 1210	WJAR 890	WKZO 590
Cincinnati, Ohio	Rock Island, Ill.	Providence, R. I.	Kalamazoo, Mich.
WFBG 1310	WHBL 1410	WJAS 1290	WLAC 1470 Nasbville, Tenn.
Altoona, Pa. WFBL 1360	_ Sheboygan, Wis.	Pittsburgh, Pa WJAX 900	WLAP 1200
Syracuse, N. Y.	Memphis, Tenn.	Jacksonville, Fla.	Louisville, Ky.
WFBM 1230	WHBQ 1370 Memphis, Tenn. WHBU 1210	WIAY 610	WLB 1250
Indianapolis, Ind.	Anderson, Ind.	Cleveland, Ohio	St. Paul, Minn.
WFBR 1270 Baltimore Md	WHBY 1200 Green Bay Wis	WJBC 1200 La Salle, Ill.	WLBC 1310 Muncie, Ind.
Baltimore, Md. WFDF 1310	Green Bay, Wis. WHDF 1370	WJBI 1210	WLBF 1420
Flint, Mich.	_ Calumet, Mich.	WJB1 1210 Red Bank, N. J.	WLBF 1420 Kansas City, Ks. WLBG 1200
Flint, Mich. WFDV 1310 Rome, Ga.	WHDH 830	WJBK 1370	WLBG 1200
Rome, Ga. WFDW 1420	Boston, Mass WHDL 1420	Detroit, Mich. WJBL 1200	WLBL 900 Stevens Pt., Wis.
Anniston, Ala.	TupperLake.N.Y.	Decatur, Ill.	Stevens Pt., Wis.
WFEA 1430	WHEB 740	WJBO 1420	WLBW 1260
Manchester, N.H.	Portsmouth, N.H.	New Orleans, La.	Oil City, Pa.
WFI 560	WHEC 1430	WJBU 1210 Lewisburg, Pa.	WLBX 1500 L. I. City, N. Y.
Philadelphia, Pa. WFIW 940	Rochester, N. Y. WHFC 1420	WJBW 1200	WLBZ 620
Hopkinsville, Ky.	Cicero, Ill.	New Orleans, La.	WLBZ 620 Bangor, Maine
WFLA 620	WHIS 1410	WJBY 1210	WLČI 1210 Ithaca, N. Y.
Clearwater, Fla.	Bluefield, W. Va	Gadsden, Ala. WJDX 1270	WLEY 1370
WFOX 1400 Brooklyn, N. Y.	WHK 1390 Cleveland, Ohio	Jackson, Miss.	Lexington, Mass.
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WLIT

A COMPLETE INDEX BY CALL LETTERS

XEFS

WLIT 560	WNOX 560	WQDX 1210	WSUN 620
Philadelphia, Pa. WLOE 1500	Knoxville, Tenn.	Thomasville, Ga.	St. Petersb'g, Fla.
Boston, Mass.	New York City	WRAK 1370	WSVS 1370
WLS 870	WOAI 1190	Williamsport, Pa. WRAM 1370	Buffalo, N. Y.
Chicago, Ill.	San Antonio, Tex.	Wilmington, N.C.	WSYB 1500 Rutland, Vt.
WLTH 1400	WOAX 1280	WRAW 1310	WSYR 570
Brooklyn, N. Y.	Trenton, N. J.	Reading, Pa.	Syracuse, N. Y.
WLVA 1370	WOBU 580	WRAX 1020	WTAD 1440
Lynchburg, Va. WLW 700	WOC 1000	Philadelphia, Pa. WRBL 1200	Quincy, Ill.
Cincinnati, Ohio WLWL 1100	Davenport, Iowa	Columbus, Ga.	WTAG 580 Worcester, Mass.
	WOCL 1210	WRBQ 1210	WTAM 1070
New York City	Jamestown, N. Y.	Greenville, Miss.	Cleveland, Ohio
WMAC 570 Syracuse, N. Y.	WODA 1250	WRBX 1410	WTAO 1990
WMAL 630	WODX 1410	Roanoke, Va. WRC 950	Eau Claire, Wis. WTAR 780
Weshington D.C.	Mobile, Ala.	WRC 950 Washington, D.C.	WIAR 780
WMAQ 670	WOI 640	WRDO 1370	Norfolk, Va. WTAW 1120
Chicago, III.	Amon Tonio	Augusta, Maine	College Sta., Tex.
WMAZ 1180	WOKO 1430 Albany, N. Y.	WRDW 1500	College Sta., Tex. WTAX 1210
Macon, Ga. WMBA 1509	Albany, N. Y.	Augusta, Ga.	Springfield, Ill.
Newport R. I.	WOL 1310 Washington, D.C.	WREC 600	WTBO 1420
WMBC 1429	WOMT 1210	Memphis, Tenn. WREN 1220	Cumberland, Md WTEL 1310
Detroit, Mich.	Manitowoc, Wis.	Lawrence, Kans.	Philadelphia, Pa.
WMBD 1440	WOOD 1270	WRHM 1250	WTFI 1450
Peoria Hghts,,Ill. WMBG 1210	Gr. Rapids, Mich.	Minneap., Minn.	Athens, Ga.
Richmond, Va.	WOPI 1500 Bristol Tenn.	WRJN 1370	WTIC 660-1060
WMBH 1420	WOO 1300	Racine, Wis. WRNY 1010	Hartford, Conn.
Joplin, Mo.	Kansas City, Mo.	New York City	WTJS 1310 Jackson, Tenn.
WMBI 1080	WOR 710	WROL 1310	WTMJ 620
Chicago, Ill. WMBO 1310	Newark, N. J.	Knoxville, Tenn.	Milwaukee, Wis.
WMBO 1310 Auburn, N. Y.	WORC 1200	WKK 1280	WTOC 1260
WMBQ 1500	Worcester, Mass. WORK 1000	Dallas, Texas WRUF 830	Savannah, Ga.
Brooklyn, N. Y.	York, Pa.	Gainesville, Fla.	WTSL 1310 Laurel, Miss.
WMBR 1370	WOS 630	WRVA 1110	WWAE 1200
Tampa, Fla. WMC 780	Jeff's'n City, Mo.	Richmond, Va.	Hammond, Ind.
WMC 780 Memphis, Tenn.	WOV 1130 New York City	WSAI 1330	WWJ 920
WMCA 570	WOW 590	Cincinnati, Ohio WSAJ 1310	Detroit, Mich.
New York City	Omaha, Nebr.	WSAJ 1310 Grove City Pa	WWL 850 New Orleans, La.
WMIL 1500	WOWO 1160	Grove City, Pa. WSAN 1440	WWNC 570
Brookiyn, N. Y.	Ft. Wayne, Ind.	Allentown, Pa.	Asheville, N. C.
WMMN 890 Fairmont, W. Va.	WPAD 1420 Paducah, Ky.	WSAR 1450	WWRL 1500
WMPC 1500	WPAP 1010	Fall River, Mass. WSAZ 580	Woodside, N. Y.
Lapeer, Mich.	New York City	Hunt'gton, W. Va.	WWSW 1500 Pittsburgh, Pa.
WMRJ 1210	WPCC 560	WSB 740	WWVA 1160
Jamaica, N. Y. WMSG 1350	Chicago, Ill.	Atlanta, Ga.	Wheeling, W. Va.
New York City	WPCH 810 New York City	WSBC 1210	WXYZ 1240
WMT 600	WPEN 1500	Chicago, Ill. WSBT 1230	Detroit, Mich.
Waterloo, Iowa	Philadelphia, Pa.	South Bend, Ind.	XEA 1000 Guad'l'jara, Mex.
WNAC 1230	WPFB 1370	WSEN 1210	XEB 1030
Boston, Mass. WNAD 1010	Hattiesb'g., Miss.	Columbus, Ohio	Mexico City
Norman, Okla.	WPG 1100 Atl'ntic City,N.J.	WSFA 1410	XEC 1000
WNAY 570	WPOR 780	Montgomery, Ala WSIX 1210	Toluca, Mexico
Yankton, S. D.	Norfolk, Va.	Springfield, Tenn.	XED 965 Reynosa, Mexico
WNBF 1500	WPRO 1210	WSIS 1310	XEE 1000
Bingh'mt'n, N.Y.	Providence, R. I.	WinstSal., N. C.	Oaxaco, Mexico
WNBH 1310 New B'df'd, Mass.	WPSC 1230 State College Da	WSM 650	XEFA 1250
WNBO 1200	State College, Pa. WPTF 680	Nashville, Tenn. WSMB 1320	Mexico City
Washington, Pa.	Raleigh, N. C.	New Orleans, La.	XEFB 1315 Monterrey, Mex.
WNBR 1430	WQAM 560	WSMK 1380	XEFC 1050
Memphis, Tenn.	Miami, Fla.	Dayton, Ohio	Merida, Mex.
WNBW 1200 Carbondale, Pa.	WQAN 880	WSOC 1210	XEFD 1020
WNRY 1200	Scranton, Pa. WQAO 1010	Gastonia, N. C.	Tijuana, Mex.
Springfield, Vt.	New York City	WSPA 1420 Spartanburg, S.C.	XÉFE 1000
WNBZ 1290	WQBC 1360	WSPD 1340	Laredo, Mexico XEFI 1000
Sar'n'c L'ke, N.Y.	Vicksburg, Miss.	Toledo, Ohio	Chihuahua, Mex.
WNJ 1450 Newark, N. J.	WQDM 1370	WSUI 880	XEFS 1000
Newalk, N. J.	St. Albans, Vt.	Iowa City, Iowa	Queretaro, Mex.
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[66]

XFG

A COMPLETE INDEX BY CALL LETTERS

10-BQ

XEG 1070	1 1	XEP 1400		XETG 1000	1	XFC 810	
Mexico, Mex.		Laredo, Mexico		Torreon, Mex.		Aguascal'ntes, M.	
XEH 1132		XEQ 750		XETQ 1230		XFF 875	
Monterrey, Mex.		Juarez, Mexico		Mexico, Mex.		Chihuahua, Mex.	l
XEI 1000		XER 735		XETZ 1500		XFG 683.3	
Morelia, Mexico		Villa Acuna, Mex.	1 3	Coyoacan, Mex.	1	Mexico City	
XEJ 1000		XES 890		XEU 1000		XFI 818	
Juarez, Mexico		Tampico, Mexico		Veracruz, Mex.	fi. 1	Mexico City	
XEK 990		XET 690		XEV 1000		XFX 867	
Mexico City		Monterrey, Mex.	E	Puebla, Mexico		Mexico City	
XEL 1000		XETA 1140		XEW 910		10-AB 1200	
Saltillo, Mexico		Mexico City		Mexico City	1 1	Moose Jaw, Sask.	
XEM 1300		XETB 1380		XEX 1210		10-AT 1155	
Tampico, Mexico		Torreon, Mex.		Mexico City		Trail, B. C.	
XEN 711		XETC 1000		XEY 1000		10-BP 1200	
Mexico City		Jalapa, Mex.		Merida, Mexico		Wingham, Ont.	1
XEO 940		XETF 630		XEZ 780		10-BQ 1200	
Mexico City		Veracruz, Mex.		Mexico City		Brantford, Ont.	
				-			

INDEX BY LOCATIONS WITH MAP KEY

(Continued from page 59)

				1		
JALISCO	Watts		Kcys.	Ciego de Avila W-26	15 CMJH	1017
Guadalajara, Jal. X-10	101	XEA	1000	Cienfuegos W-25 Colon W-24	40 CMHJ 100 CMGA	645 834
MICHOACAN				Havana W-23	150 CMBC	965
					250 CMBD 150 CMBG	965 1070
Morelia, Mich. Y-12	101	XEI	1000		30 ČMB1	1405
NEUVO LEON					20 CMBL 30 CMBN	1500 1405
Monterrey, N. L. U-13	50	XEFB	1315		50 CMBQ	1500
Monterrey, 14. D. 0-15	1000	XEH	1132		15 CMBR 150 CMBS	1500 790
O I V I O I	500	XET	690	1	500 CMBT	790
OAXACA					150 CMBW	1010
Oaxaca, Oak. AA-14	105	XEE	1000		350 CMBY 150 CMBZ	1225 1010
PUEBLA					500 CMC	842
				i	150 CMCA	1225
Puebla Z-13	101	XEV	1000		150 CMCB 250 CMCD	1070 925
QUERETARO				1	250 CMCF	890
Oueretaro X-12	40	XEFS	1000		30 CMCG	1345
	40	ALL O	1000		15 CMCH 250 CMCI	1405 630
TAMAULIPAS					15 CMCM	1405
N. Laredo S-13	101	XEFE	1000		250 CMCN	925
D	200	XEP	1400		225 CMCO 600 CMCQ	660 1150
Reynosa, Tams. T-14 Tampico, Tams. W-14	10000 500	XED XEM	965 730		150 CMCR	1345
· u	500	XES	890		150 CMCU 150 CMCW	1285 1285
VERA CRUZ					50 CMCY	1345
Jalapa Y-14	100	XETC	1000	1	500 CMDC	660
Veracruz, Ver. Z-14	500	XETF	630		3150 CMK 250 CMO	730 1150
•	101	XEU	1000		1400 CMW	588
YUCATAN					1000 CMX	885
Merida, Yuc. X-19	105	XEY	1000	Matanzas W-24	7.5 CMGB 50 CMGF	1205 977
N TO OT		-			150 CMGH	1370
WEST	IND	IES		Pinar del Rio W-22	20 CMAB	1249
BAHAMA				Santa Clara W-25	30 CMAC 15 CMHI	1375 1110
Nassau, U-26	500	VPN	610	Santiago X-28	150 ČMKC	1034
CUBA				Tuinucu	100 CMHC	790
Caibarien W-25	250	CMHD	950	DOMINICAN R	EPUBLIC	
Camaguey W-26	150	CMJC	1382	Santo Domingo X-31	1000 HIX	630
	20	CMĴE	856	1	1000 IIIA	000
	50 30	CMJF CMIG	930 1200	HAITI		
Cardenas W-24	30	CMGE	1375	Port au Prince X-30	1000 HHK	920

Broadcasting Stations of the World Compiled by U. S. Department of Commerce

		-	•						
	DUTH AME			117	Country and City	Call	Kcys.	М.	Watts
Country and City ARGENTINA	Call	Kcys.	М.	Watts	COLOMBIA	****			
Bahia Blanca	LU2	700	000	500	Barranquilla	HKA	6160	48.7	
	LP4	789	380	500	Barranquilla	HKD	5837	51.4	
Buenos Aires Buenos Aires	LP4 LP6	670	480	5000	D		605()	49.6	
Buenos Aires	LR1	590 790	$\frac{509}{380}$	500	Bogota	HJN	685	437	2000
Buenos Aires	LR2	870	345	10000	Bogota	HKC	6275	47.8	50
Buenos Aires	LR3	950	316	5000	Bogota	HKF	1304	230	2 · · · ·
Buenos Aires	LR4	990	330	10000			7616	39.4	
Buenos Aires	LR5	830	361	500			8692	34.5	
Buenos Aires	LR6	990	330	5000	Bogota	HKM	7143	42.0	
Buenos Aires	LR7	750	400	7000	Manizales		2190	42.0	25
Buenos Aires	LR8	1150	261	10000	Medellin	HKT HKN	$7139 \\ 11712$		
Buenos Aires	LR9	1030	201	10000		nnn	117(2	25.6	71/2
Buenos Aires	LSOR	9810	30.6	10000	ECUADOR				
Buenos Aires	LSX	10382	28.9	20000	El Prado		7538	39.8	
Buenos Aires	LSI	710	423	5000	DID COULS				
Buenos Aires	$\tilde{LS2}$	1190	252	10000	PARAGUAY	in the second se			
Buenos Aires	Ĩ.S3	1270	236	1000	Asuncion	ZP1	1363	220	
Buenos Aires	LS5	1069	280	10000	PERU				
Buenos Aires	LS6	1349	222	3000	Arequipa	OA6U	1764	170	20
Buenos Aires	LS8	1229	244	10000	Lima	OAX	790	380	1500
Buenos Aires	LS9	1388	216	10000	Lima	OA4M	1428	210	12
Concordia	ĹŤĺ	810	370	1000		Onting	1 120	210	1-
Concordia	LT1 LT2	1360	226	400	URUGUAY	G 17.4			
Cordoba	$\tilde{L}\tilde{V}2$	911	329	1000	Montevideo	CX6 CX10 CX12 CX14	6 50	462	1000
Cordoba	LV3			1000	Montevideo	CX10	730	411	1000
Cordoba	LV4			1000	Montevideo	CX12	770	390	500
General Pico	LT7	1441	208	1000	Montevideo	CX14	810	370	1000
La Plata	LP8	685	438	1000	Montevideo	UA10	850	353	· · 2 : -
Los Molinos	LV8		-00	1000	Montevideo	CX18	890	337	250
Mar del Plata	LU1	1414	213	100	Montevideo	CX20	930	323	2000
Mendoza	LT4 LT5	759	394	500	Montevideo	CX22 CX24 CX26 CX30	970	309	250
Parana	LT5	1249	240	500	Montevideo	CX24	1010	297	1000
Rosario	LT3	1080	275	2000	Montevideo	OA20 OV20	1050	286	2000
Rosario	LV5	1388	216	500	Montevideo	CX30	1130	266	250
Rosario	LT9	1075	279	100	Montevideo Montevideo	CX32	1170	256	200
San Juan	LT6	730	411	5000		CX34	1210	248	500
Tucuman	LV7	881	340	500	Montevideo Montevideo	CX36	$1250 \\ 1290$	240	250
Villaguay	LP2	1140	263	65	Montevideo	CX38 CX40		233	100
BOLIVIA					Montevideo	CX40 CX42	1330	226	100
	ODY	1050			Montevideo	CX42	1370	219	500
La Paz	CPX	1350	226	1000		CV46	1410	$213 \\ 207$	20
BRAZIL					Montevideo Montevideo	CX44 CX46 CX48	1450		100
Amparo	PRAM	638	470	50	Paysandu	CW40	1490	201	50
Bahia	PRAH	674	445	50	Paysandu	CW40 CW44	1340 1420	224	30
Bello Horizonte	PRAQ	1090	275	00	Salto	CW32	1120	$211 \\ 254$	30
Campinas		1170	256	20	Salto	CW34	1220	234 246	30 50
Curityba	PRAN	882	340	5 0	Salto	CW36	1260	238	30
Franca	PRAZ	1110	270	50	Salto	CW38	1300	231	30
Juiz de Fora	PRAJ	857	350	200	Tucuarembo	CW30	1140	263	30
Mogy das Cruzes	PRAY	1000	300	50	Tucuarembo	CW46	1460	205	20
Para	PRAF	842	356	250		01110	1100	200	20
Pelotas	PRAD	920	326	50	VENEZUELA	WW DO			
Pernambuco	PRAP	706	425	3000	Caracas	YV1BC	960	312	11122
Porto Alegre	PRAG	706	425	3000	Caracas	YV2BC	6061	49.5	400
Ribeirao Preto	PRAI	1070	280	10	Valencia	YV4BV	11700	25.6	
Rio de Janeiro	PRAA	750	400	1000		EUROPE			
Rio de Janeiro	PRAB	937	320	500	AUSTRIA				
Rio de Janeiro	PRAC	857	350	500	Graz		851	353	7000
Rio de Janiro	PRAK	1153	260	1000	Innsbruck		1058	284	500
Rio de Janeiro	PRAX	1364	220	1000	Klagenfurt		662	453	500
Santos (Miramir)	PRAS	887	338	1000	Linz-an-der-Donau		1220	246	500
Sao Paulo	PRAE	815	368	1000	Vienna (Rosenhuegel)	UOR2	11801	25.4	
Sao Paulo	PRAR	1006	298	500			6072	49.4	15000
BRITISH GUIANA					Vienna (Rosenhuegel)		581	516	
	VRY	6704	50.4	000	BELGIUM				
Georgetown	1111	6726	52.4	200	Antwerp (Berchem)	ON4ED	1455	206	50
CHILE					Brussels	ON4ED ON4GT	1455	206	50
Antofagasta	(1.1.1.) ···				Brussels	ON4G1 ON4RB	1375	218	100
Santiago	CMAB	625	480	1000	Brussels	ON4RB ON4RC	$539 \\ 1448$	509 207	3600
Santiago	CMAC	804	373	1000	Brussels (Schaerbeck)	ONARO	1448	207 246	100
Santiago	CMAK	1333	225	100	Chatelineau	ON4FO	1219		100
Santiago	CMAO	1016	295	250	Dampremy	ON4CE ON4FG	1388	216 206	200
Santiago	CMAQ	1224	245	100	Ghent	ON4FG ON4RG	1455	206	250
Valparaiso	CMAJ	1034	290	100	Liege	ON4RG ON4RW	1219	246	400 200
-						OTTATE IN	1719	44U	200

[68]

Ottomont (Adriemont) ON4EX	1388	216	100	Breslau		923	325	1700
Velthem		589	509	15000	Cologne		1319	227	1700
Verviers	ON4CE	1455	206	100	Dresden Flensburg	1.5.1	941 1373	$\frac{319}{219}$	300 600
CZECHOSLAVAKIA Bratislava	OKR	1075	279	12000	Frankfort		770	390	1700
Brno	OKB	878	342	36000	Freiburg		527	569	300
Kosice	OKK	1023	293	2500	Gleiwitz Hamburg	- 11 I.I.I.	$\frac{1157}{806}$	$\frac{259}{372}$	5600 1700
Prague Prague (Strasnice)	OK1MPI OKP	5169 616	$\frac{58}{487}$	2000 5000	Hanover		530	566	300
DANZIG	0181	010	101	0000	Heilsburg		1085	277	60000
Danzig	PTB	662	453	250	Kaiserslautern Kassel		$\frac{1112}{1220}$	$\frac{270}{246}$	300 300
DENMARK					Kiel		1292	232	300
Copenhagen (Skamleback)	oxo-ox	7 00:7	49.5		Konigsberg		1085	277	1700
(DRaineback)	0.40-0.4	2 6037 9488	$\frac{49.5}{31.6}$		Langenbu rg Leipzig		$635 \\ 1184$	$473 \\ 253$	$\frac{17000}{2300}$
~ .		15300	19.6	500	Magdeburg		1058	284	600
Copenhagen (Axelborg)		1067	281	1000	Stuttgart (Muehlacker)		833	360	60000
Kallundborg	10	1007	201	1000	(Muenster) Muenster		1319	227	600
(Gisselore)		1153	260	7500	Munich		563	533	1700
Soro ESTONIA		309	971	200 0	Nuremburg Stettin	• • • • • • •	$1256 \\ 1058$	239 284	2300 600
Tallinn		1013	296	10000	HUNGARY		1000	201	000
Tallinn		250	1200	100	Budapest		545	550	20000
Tartu		735	408	2200	Szekesvehervar	HAT	9125	32.9	
FINLAND Abo		1220	246		ICELAND	OT A	1200	250	500
Bjorneborg		1220	240	1500	Reykjavik Reykjavik	TFA	$\frac{1200}{240}$	1250	21000
Helsingfora					IRISH FREE STATE				
(Fredriksberg) Jakobstad		840 1220	$358 \\ 246$	10000 750	Cork	6CK	1337	225	1000
Lahti		167	1796	40000	Dublin	2RN	726	413	1500
Tammerfors		1001		1000	ITALY Bari	11BA			
Viborg FRANCE		1031	291	750	Bolzano	IBZ	662	453	200
Angers		1091	275	250	Firenze	11FL		313	1500
Beziers		1364	220	1500	Genoa Milan	IGE IMI	959 599	501	8500
Biarritz Bordeaux		$1515 \\ 1199$	$\frac{198}{250}$	$\frac{250}{5000}$	Naples	INA	905	331	1500
Bordeaux		986	304	1500	Palermo Rome	I1PA I1AX	554 6667	$\frac{542}{45}$	4000
Caen		1080	278	200	Rome	liro	680	441	7500
Fecamp Grenoble		914	328	1500	Rome	I2RO	3750	80	9000
Lille		1132	265	500	Trieste	IITR	11810 1211	$25.4 \\ 248$	15000
Limoges Lyon	YR	1022 1030	$293 \\ 291$	500	Turin	ITO	1013	296	8500
		7463	40.2	500	Vatican City	HVJ	$ \begin{array}{r} 15112 \\ 5965 \end{array} $	$19.8 \\ 50.3$	10000
Lyon (La Doua) Mont-de-Marsan	YN	644 750	466 400	3000	LATVIA		0900	30.5	10000
Marseille		950	400 316	$\frac{250}{500}$	Riga	YLZ	571	525	10000
Montpellier	*******	1049	286	200	LITHUANIA				
Nice (Juan-les-Pins) Nimes		$1219 \\ 1250$	$\frac{248}{240}$	$\frac{250}{500}$	Kovno	RYK	155	1935	700 0
Paris (Eiffel Tower)	FL	6124	49.0	40000	LUXEMBURG		10.44	0.30	10000
Paris (Luz Escarta da Rai)		171	1795	19700	Luxemburg	LOAA	1344	223	10000
(Les Essarts de Roi) Paris	*******	$174 \\ 901$	1725 331	$13500 \\ 500$	NETHERLANDS Bloemendaal		1220	246	
Paris	FPTT	671	448	1000	Amsterdam				
Paris	F8GC	825 4262	368 61	1500	(Hilversum)	PFBI	1004 160	$\frac{298}{1875}$	7000
Paris		968	310		Amsterdam				1000
Paris (Pontoise)	FYA	$7317 \\ 15235$	41 19.7	2000	(Hilversum)	PCJ	9590	31.3 16.9	40000
I alto (I ontoise)		11899	25.2		Amsterdam (Huizen) Amsterdam (Huizen)	PHI PH9	17775 1004	298	
Rennes		11308	25.6				160	1875	6400
Rheims		1103 777	272 386	1500 500	The Hague Scheveningen	PCF	1000 280	300 1071	$350 \\ 2000$
St. Etienne		1364	220	250	NORWAY	101	200		
Strasburg (Brumath) Toulon	SPTT	867 1200	$\frac{345}{250}$	6000 500	Aalesund	LKA	671	447	300
Toulouse	MRD	1175	255	1500	Bergen	LKB	824	264	1000
Tov'ouse		770	381	8000	Bodo Fredrikstad	LKD LKF	$\frac{662}{837}$	$\frac{453}{358}$	500 700
GERMANY Air la Chappulla		1210	907	900	Hamar	LKH	511	587	800
Aix la Chappelle Augsburg		1319 536	227 560	300 300	Kristianssand Notodden	LKK LKN	$\begin{array}{r} 1274 \\ 671 \end{array}$	$236 \\ 447$	500 900
Berlin		716	419	1700	Oslo	LKO	279	1071	75000
Berlin (Zeesen) Berlin (Zeesen)		$1635 \\ 9560$	184 31.38	35000 30000	Porsgrund Rjukan	LKP LKR	662 671	$\frac{453}{447}$	800 170
Berlin (Magdeburger					Stavanger	LKS	1247	241	500
Platz) Bremen	*******	1058 950	$\frac{284}{316}$	600 300	Tromsoe	LKM	662	453	110
- TORCH		900	010	300	Trondelag	LKT	608	493	500

[69]

					UNITED KINGDOM				
POLAND Katowice		734	409	10000	Aberdeen	G2BD	995	301	1000
Krakow		959	313	1500	Belfast	G2BE	1238	242 288	1000 1000
		779	385		Bournemouth Cardiff	G6BM G5WA	1040 968	288 310	1000
Poznan		896 9836	335 30.5	1500	Chelmsford		11750	25.5	
Warsaw (Raszyn)		203	1412	250 00	Daventry	G5GB	626	479	25000
Wilna	÷	779	385	500	Daventry	G5XX	193 1040	$\frac{1554}{288}$	25000 130
PORTUGAL					Dundee Edinburgh	G2DE G2EH	1040	288	350
Lisbon	CT1AA	1056	284	2000	Glasgow	G5SC	752	399	1000
T (1)	CT1AN	$6995 \\ 1056$	42.9 284	2000	Hull	G6KH	1040	288	130
Lisbon Lisbon	CTIBO	1056	284		Leeds and Bradford	G2LS	1500 1040	200 288	130
LIBOON		10710	28	150	Liverpool	G6LV	1040	288	130
Lisbon	CT1DH	1056	284	30	London				
Lisbon	CT1EB CT1GL	$1056 \\ 909$	$\frac{284}{330}$	30	(Brookman's Park)	G2LO	842	356	
Lisbon Oporto	PRP1	1249	240				1150	261	30000 1000
Oporto		1448	207	3000	Manchester Huddersfield	G2ZY	797	376	1000
RUMANIA					(Moorside Edge)		626	479	
Bucharest		759	394	12000	(Missinge Dage)		996	301	30000
SPAIN					Newcastle	G5NO	1148	261	10000
Almeria	EAJ18	1195	251	200	Plymouth	G5PY G6FL	1040 1040	$\frac{288}{288}$	130 160
Barcelona	T2 4 11	860	349	7500	Sheffi eld Stoke-on-Trent	G6ST	1040	288	130
(Mt. Tibidado) Barcelona	EAJ1 EZJ13	1119	268	10000	Swansea	G5SX	1040	288	130
Barcelona	EAJ25	6000	50		YOGOSLAVIA				
Barcelona	EAR25	6124	49.0		Belgrade		696	431	
Cartagena	EAJ15	1219	246	100	-		10000	30	2000
Madrid	EAJ2 EAJ7	750 708	400 424	750 1500	Llujbljana			$\frac{527}{307}$	3000 700
Madrid Madrid	EAM	9772	30.7		Zagreb		911	301	100
Madrid	EAR100	6976	43		RUSSIA Achkabad	RW19	334	898	4000
Madrid	EAR125	7025	42.7		Alma Ata	RW60	310	968	10000
Oviedo	EAJ19	1119	268	30	Arkhangelsk	RW36	770	390	10000
San Sebastian Monte	EAJ8	662	45 3	1000	Armavir	RV50	587	511	1000
Iguaido Seville	EAJ5	815	368		Artemovsk	RV 26 RW 35	811 435	370 690	1200 1000
Valencia	10.000	1118	268	1500	Astrakhan Baku	RW8	238	1261	10000
SWEDEN					Baku	RW43	238	1261	1200
Boden	SBE	250	1200	600	Bogorodsk	RA8	750	400	700
Boras	SCA	$1301 \\ 1220$	$\frac{229}{246}$	$\frac{150}{200}$	Dneipropetrovsk	RW30 RV21	$\frac{511}{343}$	587 875	4000 4000
Eskilstuna Falun	SCB	932	332	500	Erivan Gomel	RW40	621	483	1200
Gavle	SCC SCE	1470	204	200	Groznyi	RW23	636	444	1200
Goteborg	SBB	932	322	10000	Imeni Pop	RV58	273	1100	8000
Halmstad	SCE SCG	$ \begin{array}{r} 1391 \\ 1301 \end{array} $	$216 \\ 231$	$\frac{200}{200}$	Irkutsk	RW14	188 604	1600 497	10000 1200
Halsingborg Horby	SBH	1166	257	10000	Ivanovo-Vosnesensk Kazan	RW31 RW17	551	545	1000
Hudiksvall	SCF	1112	270	150	Kharbarovsk	RW54	4273	70.2	20000
Jonkoping	SCH	1490	202	250	Kharbarovsk		1053	285	500
Kalmar	SCI SAS	1220 11760	$\frac{246}{52.5}$	200	Kharkov	RW4	320 704	938 426	16000 4000
Karlsborg	SCJ	1530	196	200	Kharkov	RW20 RW9	368	815	10000
Karlskrona Karlstad	SCK	1373	218	250	Kiev Kiev	RW9	290	1034	36000
Kiruna	SCL	1220	246	200	Koursk	RA34	521	575	1000
Kristinehann	SCM	1480	203	250 60	Krasnodar	RW33	650	462	1000
Malmberget Malmo	SCN SBC	689 1301	436 231	60	Leningrad Leningrad	RW3 RV36	300 856	$\frac{1000}{350}$	20000 1200
Maimo Motala	SBG	222	1348		Leningrad (Kolpinsk)	RW53	300	1000	100000
		3030	99		Makhatch Kala	RW27	796	377	1000
NT 1 7	800	$\frac{6065}{1112}$	49.5 270	30000 250	Minsk	RW10	429 6420	700 46.7	4000 100
Norrkoping Orebro	SCO SCV	1265	270 237	200	Minsk Moscow	RW62 RW1	203	46.7 1481	100000
Ornskoeldsvik	SCV SCW	1373	218	200	Moscow	RW2	417	720	20000
Ostersund	SBF	1373 770	390	600	Moscow	RW37	793	379	1000
Saffle	SCP	1220	246	400 75000	Moscow	RW38	5515	54.4	300
Stockholm (Spanga)	SBA	689	436	1000	Moscow Moscow	RW 39 RW 49	793 230	379 1304	300 100000
Stockholm Sundsvall	SBD	554	542	10000	Moscow	RW61	51724	5.8	750
Trollhattan	SCQ SCR	1112	266	250	Moscow	RW58	269	1117	
Uddevalla	SCR	1058	286	50 20		DW/60	273	1110	40000
Umea	SCS SCT	1301 662	231 453	20 150	Moscow	RW59 RW51	6000 748	50 401	20000 1200
Upsala Varberg	SCU	1058	283	300	Nalchik Nizhni Novgorod	RW42	394	761	4000
SWITZERLAND	~~~~	2000			Nikolaev	RW42 RV43	820	366	
Basel		244	1229	500	Novorossiisk	RA33	268	1117	4000
Berne		246	1220	500	Novo Sibirsk	RW6 RW13	230 668	1260 450	4000 4000
Beromunster		000	459 760	60000 1200	Odessa Omsk	RW13 RW44	472	430 636	1200
Geneva (Lancy) Lausanne		395 441	680		Orenburg	RW45	462	650	1000
Sottens		743	408	25000	Oufa	RW22	444	675	2000
				r 77	01				

Penza	RW56	640	469	1200	Okayama	JOKK	700	429	500
Petropavlovsk	RW46	687	437	1200	Osaka	JOBK	750	400	10000
Petrozavodsk	RW29	469	640	1200	Sapporo	JOIK	830	361	10000
Piatigorsk	RW24	865	347	1200	Sendai	JOHK	770	390	10000
Pokrovsk Bostov - De-	RW55	730	411	1000	Shidzuoka	JOPK	778	386	500
Rostov on Don Restov on Don	RW12	354 271	849 1106	4000 4000	Taihoku, Formosa (Taipeh, Taiwan)	JFAB	7590	39.5	
Samara	RW16	522	575	1200	Tokyo	JFAK	670	448	10000
Samarkand	RW18	343	875	2000	Tokyo	JIAA	8105	37	10000
Suratov	RA32	714	420	200	Tokyo	JOAK	870	345	
Sevastopol	RA9	375	800	250	10490	00	590	508	10000
Simferopol	RW52	630	476	4000	NETHERLAND EAST				
Smolensk	RW24	531	565	2000	Bandoeng	PLE	9410	31.9	
Stalino	RW26	370	810	1200	Dimuocing		18860	15.9	30
Stavropol	RW32	608	493	1200	Bandoeng	IBR	5170	58	1000
Stchelkovo	RV49	320	937		Batavia	PK1AA	3998	77.5	500
Sverdlovsk Sverdlovsk	RW5 RV43	364	825	36000	Djokjakarta	PK2AF	5 9 96	50	500
Tashkent	RW11	541 256	$554 \\ 1170$	25000	Makassar	PK6KZ	11993	25	500
Tashkent	RW47	421	712	23000	Malabar	PLF	17640	17	
Tiflis	RW7	280	1071	10000	Palembang	PK4PA	59964	5	24 0
Tiraspol	RW57	838	354	4000	Semarang	PK2AG	7890	38	· · · · ·
Tomsk	RW48	645	564	1200	Surabaya	PK3AN PK3CH	6040 662	49.7 45	250
Tver	RA44	690	435	1200	Surabaya Surabaya		0140	140	250 500
Ulyanovsk	RA51	600	500	20	Tandjong Priok		6045	49.6	
Veliki Oustug	RW41	560	535	1200	Tandjong Frick		9579	31.3	
Vladivostok	RW28	636	472	300			15336	19.6	
Vologda	RA41	338	875	1200	SIAM				
Voronezh	RW25	386	778	3000		HSP1	856	350	2500
					Bangkok Bangkok	HSP2	9500	31.6	2000
BRITISH MALAYA	ASIA				Daugkok	1101 2	7300	41	2500
Johore Baru	VS3AB	7055	42.5		Bangkok	HS7PJ	923	325	
Kuala Lumpur	TOTAD	1000	42.0	1.11	Dunghon		810	370	
Singapore	VS1AB	7260	41.3		Bangkok	HSP3	937	320	· · · · · · · ·
CEYLON	101110	1200	11.0		Bangkok	HS2PJ	10167	29.5	500
Colombo		600	500	1750	Bangkok (Sala Daeng) HS11PJ	882	340	400
		000	300	1750		0000111			
CHINA					AUSTRALIA	OCEANIA			
Canton	CAB	689	435	1000	Adelaide	VK5AD	1310	229	
Hangehow	XGY	895	335	250	Aderaide	A ROUD	229	417	300
Harbin Mukden	COHB	674	445	1000	Adelaide	VK5CL	730	411	1000
Nanking	COMK XGZ	723 606	415	2000	Adelaide	VK5DN	960	313	100
Peking	XOPP	937	495 320	500 1000	Adelaide	VK5KA	1200	250	200
Shanghai	NKS	952	315	50	Albury	VK2AY	1320	227	
Shanghai	KSMS	1088	277	50			1480	203	50
Shanghai	RSC	1277	235	50	Ballarat	VK3BA	1300	231	50
Shanghai	XGX	1071	280	50	Ballarat	VK3BZ			
Shanghai	XGAH	938	320	50	Brisbane	VK4BC	880 1145	$\frac{341}{262}$	600
Shanghai	SCBL	1.000			D-:	VK4BH	1380	202	600
Shanghai	XCTE	5000	60		Brisbane Brisbane	VK4BK	1230	233	200
Shanghai	XOL	870	345		Brisbane	VK40G	760	395	2500
Tientsin		625	480	500	Broken Hill	VK4QG VK2XL	1365	219	50
FRENCH INDO-CHI	NA				Canberra (Kingston)	VK2CA	1050	286	50
Haiphong		3446	87	2500	Geelong	VK3GL	1400	214	50
Saigon Saigon	FZG FZR	13010	25		Gunnedah	VK2MO	1330	226	
Saigon (Chi Hoa)	F2R F21CD	12010	20.5	B			1500	200	50
wagon (out mos)	F31CD	6119 840	49.1 358	12000	Hamilton	VK3HA	1010	297	200
HONG KONG		010	999	12000	Hobart	VK7HO	890 1160	337 259	50
Victoria	ZBW	045	955	1-00	Hoheat	VL7ZL	580	517	600
INDIA	AD IY	845	355	1500	Hobart Kalgoorlie	VK6KG	1220	246	100
	VIID	010			Launceston	VK7LA	1100	273	
Bombay	VUB	840 6114	357	2000			1080	278	20
Calcutta	VUC	810	49.1 370	3000	Lismore	VK2XN	1340	224	50
Calcutta	100	11870	25.3	3000	Mackay	VK4MK	1190	252	100
Lahore	VUL	882	340	100	Melbourne	VK3AR	610	492	1000
Madras	VUM:	770	390	200	Melbourne	VK3DB	1180	255	100
JAPAN			0.00	200		VK3KZ	1350	222	200
Dairen, Manchuria	JOAK	760	395	1000	Melbourne	VK3LO	800	375	1000
Fukuoka	JQAK JOLK	680	393 441	1000 500	Malbourne	VK3ME	9369 9500	$\frac{32}{31.6}$	1000
Hirasio	JHBB	7995	37.5	300	Melbourne Melbourne	VK3ME	9300	322	
Hiroshima	JOFK	850	353	10000	vienout ne	1 12002	8820	34	100
Kanazawa	JOJK	710	423	300	Melbourne	VK3YB	1145	262	25
Keijo, Chosen					Moss Vale	VK2MV	1220	246	
(Seoul, Korea)	JODK	690	435	1000			1460	205	50
Kokura	JOSK	741	408	1000	Newcastle	VK2HD	1110	270	200
Kumamoto	JOGK	790	380	10000	Newcastle	VK2KO	1415	212	200
Nagano Nagoya	JONK JOCK	635 810	472	500	Newcastle	VK2NC	1245	241	2000
Nilgata	JOCK	810 625	370 480	10000 500	Perth	VK6ML	1010	$\frac{297}{264}$	300
	acau	020	400	500			1135	204	300

Perth	VK6PR	880	341	200	MAD	AGASC
Perth	VK6WF	690	435	1000	Tan	anariv
Rockhampton	VK4RK VK3SH	910 1080	330 278	2000 50	MOR	occo
Swan Hill Sydney	VK2BL	855	351	1.1.2	Cas	ablanc: ablanc
		9230	32.5	1000		ablane
Sydney	VK2FC	665 10520	451 28.5	1000		
Sydney	VK2GB	950	20.0 316	600	Ral	oat
Sydney	VK2KY	1070	280	300	Ral	oat
Sydney	VK2ME	9590	$31.3 \\ 28.5$		Ral	
		$10527 \\ 16330$	18.4		TUNI	
Sydney	VK2UE	1025	293	50	Car	thage stanti
Sydney	VK2UW VK3BO	$\frac{1125}{970}$	$\frac{267}{309}$	$100 \\ 200$	Tu	
Sydney Toowoomba	VK4GR	1000	300	200		N OF
Townsville	VK4TO	1170	256	200	Blo	emfont
Trafalgar	VK3TR VK3WR	1280 1260	$234 \\ 238$	50 50	Car	ю Tow rban
Wangarat ta Wollongo n g	VK2WL	1435	209	50	Joh	annest
	112112	1100				Marais
FIJI . Suva	VPD	14420	20.8		Pro	toria
NEW ZEALAND					116	101 121
Auckland	ZL1YA	910	329	500		_
Auckland	ZL1ZB ZL1ZJ	1090 1320	275	18 26		
Auckland Auckland	ZL1ZQ	1190	$\frac{227}{252}$	13		
Auckland	ZL1ZR	1090	275	40	540	
Christehurch	ZL3YA ZL3YA ZL3ZC	980 980	306 306	500 500	790	CMB
Christchurch Christchurch	ZL3ZC	1200	250	000	930 1070	CKX XEG
		6000	50	250	1420	KCM
Dannevirke	ZL2ZU	1100 648	273 461	71⁄2 500		
Dunedin Dunedin	ZLAYA ZLAZB	1080	279	20	890	WJA
Dunedin	ZL4ZL	1220	246	180	965 1070	CMB XEG
Dunedin	ZLAZM	$1080 \\ 1080$	$278 \\ 278$	45 30	1120	WDB
Dunedi n Ekatebuana	ZL4ZO ZL2ZE	1210	248	5		
Gisborne	ZL2ZJ ZL2ZM	1150	260	20	1000 1420	WOR WER
Gisborne	ZL2ZM	1147	$\frac{261}{366}$	$^{110}_{20}$	$1420 \\ 1500$	WER KNO
Greymouth Hamilton	ZL3ZR ZL1ZH	820 630	300 476	20 50	1900	KNU
Hastings	ZL2ZI	1330	226	15	6 9 0	VCX
Hastings	ZL2ZL	1330	226 259	15	740	
Invercargill Manurewa	ZL4ZI ZL1ZM	$1160 \\ 1210$	239	8 10	1420	
Masterton	ZL2ZD ZL2ZH	1180	254	214 15	830	WCIN
Napier New Plymouth	ZL2ZH	$1260 \\ 1230$	238 244	$15 \\ 100$	1210	WGN WPA
New Plymouth North Invercargill	ZL2YB ZL4ZP	1230	244	16	1310	KFU
Palmerston North	ZL2ZF ZL2ZO	1050 1120	286	150		
Palmerston North	ZL2ZO	$1120 \\ 820$	268 366	10 4	618. 1200	5 KZR WFB
Wairoa Wanganui	ZL2ZP ZL2ZK	600	500	120	1200	WPD
Wellington	ZLW ZL2XX ZL2YA	10990	27.3		1200	KER
Wellington	ZL2XX	4776 720	$62.8 \\ 416$	5000	1210	WMI
Wellington Wellington	ZL2ZR	600	500	150	1430 1450	WMI WFE KTB
Wellington	ZL2ZW	1120	268		1500	KDB
SAMOA						
Apia	5ZA	940	319		580	KGF
	AFRICA				940 1210	KGU KDF
ALGERIA	AFRICA				1420	KFY
Algiers		824	364	2400		
Algiers	F8KR	6667	45	200	940	KGU
CANARY ISLANDS			200		1 (00	TODAY
Las Palmas Teneriffe	EAR5 EAR58	$1071 \\ 7211$	280 41.6	500 500	1420	KFY
	13/11/0		11.0	000	CFCI	I N
EGYPT Cairo	SUS	9110	32.8		CHG	S Pr
Cairo				1000	CHN	S H
Cairo					CMC	R H A H
KENYA					CMB CMC CMC CMC	J H
Nairobi	VQ7LO	6000	50		CMC	UH
		6134 9616	48.9 31.2		CMD WFD	C H
		750	400	1000	XEB	M

MADAGASCAR				
Tananarive	1.000	5552	54	500
MOROCCO				
Casablanca	CNO	983	305	25
Casablanca	AIN	5879	51	
Casablanca	F8MC	10710	28	
		6875	43.6	
Rabat		724	416	
		6877	43.6	2000
Rabat		12830	23.4	6000
Rabat		9300	32.3	6
TUNISIA				
Carthage	TNU	162	1850	
Constantine	F8KR	7005	42.8	
Tunis	TUA	235	1275	500
UNION OF SOUTH	AFRICA			
Bloemfontaine		588	510	750
Cape Town	ZTC	810	370	1000
Durban	ZTD	731	410	1000
Johannesburg				
(Maraisburg)	ZTJ	667	450	
		6098	49.2	15000
Pretoria		1000	300	50

The Month's Changes

Frequencies Windsor, Ont., from 630. Havana, Cuba, from 970. BT Brandon. Man., from 540. Mexico City, Mexico, from 1360 Texarkana, Arkansas, from 1500. йC Power Providence, R. I., from 500 to 250. Havana, Cuba, from 150 to 250. Mexico City, Mexico, from 100 to 250. R BD ÊΟ Orlando, Florida, from 500 to 250. Calls York, Pa., from WGEO. Erie, Pa., from WEDH. Austin, Texas, from KUT. RK RE New Halifax, N. S. Portsmouth, N. H. Americus, Ga. Deleted М Jeanette, Pa. Pawtucket, R. I. AW Denver, Colo. Owners Manila, P. I., to Erlanger & Galinger, Inc. Knoxville, Tenn., to Virgil V. Evans. RM BC Chains Bakersfield, Cal., new CBS. Richmond, Va., new CBS. Manchester, N. H., new CBS. Shreveport, La., new NBC. Santa Barbara, Cal., new CBS. łN BG EA BS B Permit to Change Frequency Pierre, S. D., to 630. ŦΧ Honolulu, Hawaii, to 750. Casper, Wyo., to 1440. Abilene, Texas, to 1310. 'N ö Permit to Increase Power Honolulu, Hawaii, from 1000 to 2500. Permit to Change Location Abiline, Texas, to Lubbock, Texas. 0 Heard on Other Waves North Bay, Ont. 930 on 960. Prince Edward 1120 on 1135. Halifax, N. S. 815 on 925. Halifax, N. S. Havana, Cuba Havana, Cuba 1500 on 1460. 1225 on 1235. 620 on 630. Javana, Cuba Javana, Cuba Javana, Cuba 1285 on 1270. 660 on 675. 1310 on 1370. lome, Ga. Mexico City 1030 on 1070.

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The straight inside wire is connected to a ground at each end, while one end of the helically-wound wire goes to the aerial post of the set.

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