## THE NOVEMBER 1932



THE ALL.WAVE RADIO MAGAZINE


What the Market Offers in D. C. Sets Susie Sexton Interviews Gracie Allen Broadcasting Stations of the World Tuesday Time on the Air of all Stations

Stations underlined in red are"heard" but not werified as of $11 / 1 / 32$.

# NOVEMBER DX CALENDAR 

A. M. time is given as of the night before. Thus early Monday morning programs are listed under Sunday night. See time conversion table on page 66.

Standard Time: Eastern E; Central C; Mountain M; Pacific P.

## SUNDAY NIGHT

Nov. 6th
Mid.-2:00 E-CMCH, 1405, Havana, Cuba Nov. 6th, 13 th, 20 th, 27 th
11:30-Mid. C-KSOO, 1110, Sioux Falls, S. D. Mid.-1:00 E-WSAZ, 580, Huntington, W. Va.

## MONDAY NIGHT

Nov. 28th
2:00-3:00 M-KPOF, 880, Denver, Colo.
Nov. 14th
I:00-3:00 C-WHET, 1210, Troy, Ala. 3:00-5:00 C-KFBI, 1050, Abilene, Kans.

Nov. 7th. 14 th, 21st, 23th
Mid.-2:00 M-KOY, 1390, Phoenix, Ariz.
Mid.-2:30 E-WMIL, 1500, Brooklyn, N. Y. Mid.-4:00 C-WABZ, 1200, New Orleans, La. 5:00-6:00 E—WAWZ. 1350, Zarephath, N. J. $5: 15-5: 30$ E-WHP, 1430, Harrisburg, Pa.

## TUESDAY NIGHT

Nov. 1st
11 :00-Mid. P-CHWK, 665, Chilliwack, B. C. 3:00-6:00 E-WOPI, 1500, Bristol, Tenn.

## Nov. 8th

1:00-2:00 C-WJMS, 1420, Ironwood, Mich.
Nov. 29th
1:30-2:30 C-WCLO, 1200, Janesville, Wis.
Nov. 1st, 8th, 15th, 22nd, 29th $10: 30-\mathrm{Mid}$, C-KFUO, 550 , St. Louis, Mo. 11:00-Mid. C-XEH. 1132, Monterrey, Mex, Mid.-1:00 P-CEJC 1120, Kamloops. B. C. Mid.-3:00 C-WSOT, 880. Iowa City. Iowa 2:00-3:00 C-KFGQ, 1310, Roone, Iowa

## WEDNESDAY NIGHT

## Nov. 2nd

Mid.-2:00 C-KFJZ, 1370, Ft. Worth, Tex. Nov. 9th
1:00-3:00 M-10-BI, 1200 , Prince Albert, Sask. 2:00-4:00 C-WHBF, 1210, Rock Island, Ill.

Nov. 23rd
Mid. $\quad$ E-WNBH, 1310, New Bedford. Mass. 3:00-5:00 C-KgFW, 1310, Kearney, Neb.

Nov, 2nd, 9th, 16th, 23rd, 30th 11 :00-Mid. C-WHBL, 1410, Sheboygan, Wis. 11:30-1:30 P-CKWX, 730, Vancouver, B, C. Mid.- M-KFX.J, 1310,Grand,Junction, Colo. 1:30-3:30 C-KGFF, 1420, Shawnee, Okla.

## THURSDAY NIGHT <br> Nov. 3rd, 17 th

11:30-3:00 E-WMBC, 1420, Detroit, Mich. 2:00-4:00 C-KASA. 1210, Elk City, Okla. 2:00-4:00 C-KGFK, 1500. Moorhead, Minn. Nov. 24th
2:00-3:00 C-KDLR, 1210, Devils Lake, N. D. 4:30-6:00 E-10-BD, 1199, Wingham, Ont.

Nov. 3rd, 10th, 17th, 24th Mid.-1:00 M-CEAC 690, Calgary, Alta. Mid.-1:00 E-WTEL, 1310, Philadelphia, Pa. Mid.-2:00 P GLOV, 1200. Kelowna, B. C. Mid.-2 :30 E-WMTL, 1500, Brooklyn, N. Y.

## FRIDAY NIGHT

Nov. 4th
2:00-4:00 E-10-T3Q, 1200, Brantford, Ont.
Nov. 18th
$5: 00-6: 00 \mathrm{E}$-WJBU, 1210, Lewisburg, Pa.
Nov. 4th, 11th, 18th, 25th
11:00-Mici. M—ClCN. 985, Calgary, Alta 11:30-12:30 C-WCAN, 590, Lincoln, Nebr. 11:30-1:30 M-KGEK. 1200, Yuna, Colo. Mid- $1: 00 \mathrm{C}-\mathrm{WENC}, 1420$, Americus, Ga. 1:00-3:00 E-CKCL, 580, Toronto. Ont. 1:00-4:00 E-CKPB, 890, Ft. William, Ont.

## SATURDAY NIGHT

Nov. 5th
Mid.-2:00 C-WILL, 890, Urbana, Ill.
2:00-3:00 E-CHMJ., 880. Hamilton, Ont.
Nov. 12th
1:00-4:30 P-KROW, 930, Oakland, Calif.
Nov. 19th
2:00-3:00 E WTOC, 1260, Savannah. Ga
3:00-5:00 C-KGFI, 1500, Corpus Christi, Tex.
4 :30-6:30 M-10-BL, 1200, Prince Albert, Sask.
Nov. 5th, 19th
12:30-2:30 M-10-AB. Moose Jaw, Sask.
Nov. 26th
11:00-3:00 C-WIBW, 580, Topeka, Kans.
2:00-2:30 E-WEAS, 1210, White Plains, N. Y. Nov. 12th, 26th
Mid. C-KUSD, 890, Vermillion, S. D.
Nov. 5th, 12th, 19th, 26th
T:30-10:30 -KGU. 750, Honolulu. H. T. 11:30-1:30 P-CKWX, 730, Vancouver, B. C.
11:30-2:00 C-WB13Z, 1200, Ponca City, Okla.
Mid.-12:30 C-WKY. 900, Oklahoma City
Mid.- 1:00 P KDE. 1500, Santa Barbara. Cal.
Mid. $1: 00 \mathrm{E}$ M.JBK, 1370, Detroit, Mich.
Mid.- 2:00 P-001 1200, Kelowna, B. C.
Mid.- 2:00 C KRTD, 1040, Dallas, Tex.
Mit.- 2:00 F WCAH. 1430. Columbus, Ohio
Min- 2:00 E WGBI, 880. Scranton, Pa.
Mid. - 2:00 C-WGES, 1360. Chicago, Ill.
Mid- 2:30 C-WOW, 590, Omaha, Neb.
Mid.- 3:00 E-CMCD, 925. Havana. Cuba
Mid.- 3:00 E WWRL, 1500, Woodside, N. Y
Mid.- 5:00 E WTFI. 1450, Athens, Ga.
12:15-1:30 C-WOMT, 1210, Manitowoc, Wis.
12:30-2:00 C-KMAC, 1370, San Antonio, Tex.
12:30-3:00 M-10-K, 1200. Prince Albert. Sask. 1:00- E-KTV, 1380, Pittsburgh, Pa.
1:00-2:00 M-KFXF. 220. Denver. Colo.
1:00-4:00 M-KGCX, 1310. Wolf point, Mont.
1:00-5:00 C-MTRE, 1310, Eikhart, Ind.
$2: 00-3: 00 \mathrm{C}-\mathrm{WKBZ}, 1500$. Ludington, Mich.


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[^1]
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## RADIO'S "FORGOTTEN MAN" Relief Coming In D. C. Receivers

THE current political campaign has made frequent mention of the "forgotten man," a victim of present economic conditions. But he is not radio's forgotten man, the unfortunate victim of environment, who may be found in any "downtown" district where direct current only is provided by the electric light and power companies.

It seems that most radio manufacturers have failed generally to remember the user of 110 -volt direct current. Perhaps, before long, with a sudden desire for new business in this neglected field rather than a belated feeling of remorse, set builders will rush to the rescue of radio's forgotten man. There is no good reason why more d. c. receivers are not available to the thousands of persons who live in direct current areas in every large city.

Radio enthusiasts, who are compelled to use the direct current provided commercially in metropolitan areas, by individual power plants, or on board many ships of the world, are demanding radio receivers which are equal to those made exclusively for alternating current. The resident in a downtown area has very few 110 -volt d. c. radio receivers available, but his neighbor just across the restricting boundary in an a. c. distriet has the cream of a. c. instruments to choose from.

## Special Tubes Needed

Receivers made for alternating current cannot be operated on the direct current that is furnished to mid-town areas in practically every large American city. A d. c. receiver is little more than a battery set except that it uses a potential of 110 volts from the lighting current. It is designed for direct current and uses tubes that do not require an excess of 110 volts on the plates. Until re-
cently, the lack of good d. c. tubes-screen-grid, variable-mu, and pentode -has held down the full development of d. c. receivers, but it is hoped that the near future should show a decided trend toward this forgotten field.

Many persons will ask, then, why should a city be divided into two electrical districts-the downtown d. c. area, and the outlying and extensive a. c, regions.

Why a D. C. Area?
In the pioneer days of electricity the first generators were Edison d. c. dynamos, and power lines were short in length and restricted to the downtown areas. Mechanical and electrical equipment installed in buildings and factories was, therefore, only for direct current operation. But with the coming of alternating current, a more useful and economical system, the large and concentrated development in the heart of most cities made it impracticable and an unnecessary burden on electric consumers to make sweeping changes over to alternating current.

Since direct current cannot be transmitted more than a few miles at best without serious loss of voltage, and because of the prohibitive cost of

immense copper conductors, the more flexible alternating current is used to reach far out from the central d. c. districts. A small wire is capable of carrying a heavy alternating current which may then be stepped down to 110 volts as required, although hundreds of miles distant from the original source of power. This is the sole reason why the restricted central districts in our older cities are always surrounded by extensive a. c. areas.

## Needs No Rectifier

The d. c. radio receiver is a duplicate of some a. c. set, except that different types of tubes are used with plate potentials not in excess of 110 volts. While a d. c. receiver has no power transformer; it requires the usual arrangement of choke coils and filter condensers to smooth out the noise of the commutator ripple of the d. c. generators. No rectifying tube is needed, and the newer types of tubes, such as the $-36,-37,-38,-39$, 41 and 55, are used in most d. c. receivers. And in many cases an a. c. receiver can be easily altered so that it will operate satisfactorily on direct current.

A survey of modern radio receivers reveals an astonishing paucity of 110 volt d. c. sets. Only a few manufacturers are making d. c. models that are comparable to the better $a$. c. superheterodyne receivers. More battery sets are being offered than are furnished for d. c. operation on 110 volts, for most builders feel that the demand for d. c. sets is rather limited and will not justify the cost of construction and marketing. Yet, in 1932, we find a few of the leading makers coming out with efficient d. c. receivers, and it may be the trend is on the turn for the relief of downtown dwellers.

## Using a Converter

Some manufacturers would rather rebuild their standard a. c. sets for d. c. operation when needed. In many cases rotary converters (a small d. c. motor driving an a. c. generator) are used to provide the necessary alter-


The Crosley" "Senator" 110-volt D. C. Gonsole Receiver
nating current. The Janette Converter is a small, compact device made for a. c. sets that are to be used in d. c. areas. This is common practice in radio stores and shops where a large number of a. c. sets are demonstrated. And, when the concentrated consumption of alternating current justifies the effort, most power companies will run separate a. c. circuits into the downtown d. c. districts.

Philco's model 47 is the newest 110 -volt d. c. superheterodyne receiver. It uses two Philco 44 tubes, one -36 , three -37 s , and two 43 s . The latter is designed especially for d. c. operation and will afford adequate power to run the twin speakers of the larger types. The set is available also in several of the Philco (Continued on page 32)

# MOST LOVABLE DUMBBELL IN RADIO • • Susie Sexton Meets Gracie 

HOW does it feel to be the biggest dope in the world?" George Jessel inquired of Gracie Allen.
"You flatterer," giggled Gracie most original of comediennes in that disarming tone which is the despair of conversationalists but the delight of thousands of her radio listeners.

Brainlessness as a fine art has made fame and fortune for Gracie Allen. And in this year of Gracie and the Olympics it might be well to mention that Miss Allen holds all the women's international championships for dizzy characters-altitude distance and endurance. She has hurdled more quips from London to Hollywood with less time and effort than any other "dumberacker" of her sex. Gracie is head "ache" to her husband and partner, George Burns, on the Robert Burns Panatella program every Wednesday night at nine o'clock over the Columbia Broadcasting System.

The perfect foil for her artful artlessness is the scintillating, sparkling wit of George himself. A combination of their gifts results in one of the cleverest and more original acts heard in years.

Tuning in on Burns and Allen on Wednesday night between selections by Guy Lombardo and his Royal Canadians you picture garrulous Gracie as a tiny, harmless mite and George as a big gruff with a hoarse voice and testy manner.

George will say-
"Gracie, why don't you join a circus and walk a tight-rope five hundred feet above the audience without a rope?"
"What if I fall?" asks Gracie.
"Don't let that bother you," retorts George.

Later on, George, completely ex-
asperated, remarks:
"If you had a date with me tomorrow night at $8: 30$ and you didn't show up-it certainly would be all right with me."
"I'll bet you tell that io all the girls you meet," is Gracie's comeback.

This is the patter before the microphone or back of the footlights. George, harsh and terribly annoyed with Gracie, just a poor little girl who doesn't know any better. But if you meet these two charming and gifted young people away from stage orstudio you get a different picture. They had just finished their act with Norma Talmadge and George Jessel at the second show when I met them in their dressing room at the Paramount Theatre. Both wore Scottish kilts-having just finished a Jewish dance-not a cool costume for a sweltering August afternoon. It did not take them long to get rid of the make-up.

The dressing-room door was open for a breath of air so Gracie disappeared behind a long white sheet drawn from wall to wall. Black curls


Gracie Allen and George Burns
above the sheet and the tips of two black pumps beneath it-that was all could be seen of Gracie.

George played host. An alert, clever mind is George's-one that can juggle words or rip the heart out of a joke like chain lightning. A cleancut, good-looking light-haired young man. Studious and a tremendous worker, he is a type familiar to every campus-the student or professorbut not to many stages.

## An Irish Colleen

Gracie does not look as little as she sounds. She is taller than George's shoulder. If anyone asked me to describe the colleen of that old and popular tune, "I'll Take You Back, Kathleen," I would point out Gracie Allen. A perfect type of Irish beauty-black hair, white skin and long-lashed blue eyes. She weighs ninety-five pounds. Occasionally the scale slips around to one hundred and one. This is the only circumstance ever known to have hurried Gracie's speech. When it occurs she wrings her hands and moans she is getting "fat."
"Do you write all of these clever things," I asked George Burns. I did not expect him to admit it for he is a surprisingly modest young man.
"No," he said, "there are three of us working at it. Eugene Conrad, Al Boazberg and myself. You know it takes an enormous amount of humor to keep two people busy every day in the year and sometimes for four or five shows a day. So the boys send in anything that they think would be suited to the act and I work their ideas and my own into shape with Gracie."

If you think that telling a joke is the simplest form of art you are wrong. The telling and wording of these rippling laughs that come to you from your receiving set are the result of long and careful rehearsal. Sometimes the changing of a single word will spell the difference between a riot and a flat failure. So these two laugh-makers go over their price-

"Meyer, the Buyer" (Ted Rergman), whose domestic and financial troubles are "aired" each Saturday at 7:30 p. m. EST over the CBS
less lines a hundred times in the dressing room, at home, on the street or in the studio before such witticisms fall on your ears.
"My life," George admitted as he removed some Highland finery, "is made up of just two things. First, trying to make people laugh when I am on the radio. Second, trying to find the jokes to make people laugh when I get on the radio."
"And how about Gracie's part," I asked.
"Gracie is just Gracie," he answered. "She was the first to play that sort of a part, because when she went on with me for the first time I told her to act natural. Pretty soon everybody was copying her. And I suppose that type was a relief after the wise-cracking collegiates of a short time back."
"Tell me the story of Burns and Allen," I said.

It seems that George, who was born on the East Side in New York, went into a soft-shoe breakdown the first time he fell out of his cradle. A born dancer. Later his nimble in-
fant feet carried him over to Hamilton Fish Park near Pitt street, where all the local boys used to gather for skating parties. After becoming proficient skaters they determined to become dancing skaters. So at the age of fourteen George Burns and another lad teamed up and went into vaudeville.

## Throws his Skates Away

His Irish wit went along and so fond was he of a joke that bighearted George used to let his quips and jests fall where they might among the other actors in various houses where he played. Thereby raising their salaries but not his own. One day as he stood in the wings listening to a fellow player bring down the house with one of his own questions and answers George woke up. A quick comparison of the applause which followed the dancing skates and that which greeted the nimble wit. With rare business acumen George then and there decided to tell his own jokes.

Over in Union Hill, N. J., that night he threw his skates away. The next day he started looking for a girl to "feed" him his lines. His search began with a young dancer, Rene Arnold, who was on the same bill with George Burns and his partner, Billy Loraine, that week.
"Say, Rene," said George as he stopped at the door of her dressing room the night he decided to become a comedian instead of a dancer. "I'm looking for a girl to do an act with me. Know anybody?"

Rene was the kind of a girl who never lacks an answer.
"Of course, George, there's Gracie," she said, wiping off another inch of make-up.
"Who's Gracie?" inquired George.
"My girl friend," said Rene. "Dandy little Irish dancer, just arrived from the Coast. She's been dancing out there with Larry Reilly."

Gracie had been in town for weeks and could not find any kind of a job. Did not know where to look for one. So in due time she had forgotten the
clog and the shuffle and settled down to the sedate pace suitable for a downtown business school. There she studied the hooks and dashes of Pittman and Gregg, determined to become a stenographer instead of a second Pavlowa.

That was nine years ago. Gracie has been Mrs. George Burns for six of those years.

Their first act was called "Sixtyforty." George disguised himself with a big black cigar. Gracie appeared as Gracie. At first, in his new role, George answered the questions asked by his partner. Unfortunately the audiences laughed at Gracie's questions, but not at George's answers. So the positions were reversed. And Gracie, whose innocent self-starting prattle is guiltless of brakes or clutches, became a sensation.

Since then they have told George's jokes in Gracie's inimitable fashion all over the world, on the air and off. Not long ago they were heard over station BBC in London. Last season they had completed twenty-seven weeks over WABC for the Robert Burns Panatella, which will continue to sponsor them during the new season with Guy Lombardo and his Royal Canadians. Last year they appeared also on programs for Fleischmann's Yeast and as pinch-hitters for Harry Richman.

## Making the Movies

Their motion picture contracts have included fourteen or fifteen short subjects in each of which Gracie goes into a different line of business. Then, too, they were in "The Big Broadcast" recently made with Bing Crosby.

Gracie had been very quiet all during the interview. She was getting ready to go to the hairdresser. Of course, I could not be as informal or inquisitive as George Jessel, but I thought I would just inquire about her family.
"How's your brother, Gracie?" I ventured, as she threw a lovely white (Continued on page 31)

# RULES and REGULATIONS of DX <br> - Another Article for Beginners 

(NOTE-This is the second talk by the Editor of RADEX on the WGAR DX Club program.)

MOST hobbies are somewhat expensive. Rare postage stamps and old coins, for instance, cost money. The game of DXing, on the other hand, may be enjoyed fully without the expenditure of a single cent. Take your Radex and tune in any of the 800 stations listed. When you have clearly heard the call letters of any station announced, make a check mark, or indicate the date heard, opposite that station. See how many different calls you can bring in in an hour or a night. As your $\log$ increases, see if you can fill all the 97 channels or if you can complete the roster of the states. All the time, of course, you are building up your grand total of stations received.

While a great many DXers are content with merely logging the stations received, counting only those whose calls are caught beyond all doubt, yet a great many others want their reception of each station actually verified. Most broadcasting stations are glad to verify the reception of their programs providing you will write them a letter giving them data which will enable them to know definitely that it was their program you received. Be sure to give them the hour and minute you heard them, preferably in the time of the station's standard. Give the titles of as many of the musical selections and talks as possible. Quote something from their announcement. And be sure to send return postage. Do not send U. S. postage to other countries; they cannot use it. Send pennies. At any post office you can purchase International Reply Coupons which are good for the return of one first-class
letter from any courtry in the Postal Union.

A great majority of the broadcasting stations will send you a souvenir stamp which is imprinted with the call letters of the station. The price is usually ten cents. DXers mount these in a scrap book and save them exactly as other collectors do postage stamps. Some DXers have a collection of several hundred of these stamps. Your Radex shows which stations will send you these stamps and which ones will verify your reception.

From time to time, stations put on special DX programs particularly for distant listeners. A list of these appears in a monthly calendar in each issue of Radex. Stations welcome reports of the reception of these programs as they enable them to know how far their station is reaching out. Most such programs are after mid-

night and at an hour the station is not ordinarily on the air.

Stations as a rule will not verify reception of chain or network programs for inforriation regarding such features is readily available to anyone and consequently they do not constitute definite proof of actual reception. Your RADEX gives a list of these chain programs with the stations broadcasting each one. It will be necessary to consult this list and avoid asking for verification of your reception of these chain programs. A few stations devote their time almost wholly to chain programs. These make special announcements or have certain local features so it will be necessary for you to watch your chance and catch these particular times for your verification.

## Those "Anonymous" Stations

The Radio Commission rules call for the announcement of call letters every fifteen minutes as a general thing. The bane of the DXer is the station that ignores this ruling and announces its call letters only at long intervals. How the DXer hates the announcer who says "we." He is like the fellow that calls you on the phone and says, "Do you know who this is?" You'd like to swat him. Why is it that most announcers assume that everyone knows them? All over the country people are tuning them in and invariably wondering what station they have and all they hear is "We now present-" or "We will now give-" It would be just as easy, and much more courteous, to say "WXYZ now presents-" or "WXYZ now gives-" DXers everywhere would rise up and call that announcer blessed. After all, a broadcasting station must want to be known for there would be no money in conducting an anonymous station. Why, then, will they permit their programs to remain anonymous? If any announcers are reading this, I beseech them to forget this "we" stuff and use their call letters.

Assuming that you have a fairly good set, there are probably twenty
large near-by stations you can tune in practically at will, but there are a hundred others within a reasonable radius that can be brought in only with patience and very careful tuning. Radio is as temperamental as a prima donna but its very uncertainty makes it all the more fun. Some distant stations will be received when others with the same power very much closer, cannot be brought in at all. Thus, WSPD with 1000 watts in Toledo is rarely received in Cleveland, while many stations of 500 watts at a much greater distance can be brought in quite regularly. There


Elsie Hitz, heroine of "Evening in Paris Mysteries" CBS Mondaus $9: s 0$ p. m. EST. Photo by Oggiano-Mitchell, N. Y.
are many factors that affect radio reception-the weather, the amount of darkness, the aerial, the ground, the location of the set, the number and condition of the tubes and the skill and patience of the operator. I received a letter from one DXer a while ago who added several new stations to his list merely by moving his set from the dining-room to the kitchen. It is this idiosyncrasy of radio that makes it so intriguing. It wouldn't be much fun fishing if you
got a fish every time you threw your hook in the water. That would be business, not a sport.

## Matching Aerial to Set

Some DXers are of the opinion after years of experimenting that every radio set must have an aerial matched to it. One ardent fan tried every length of aerial from 50 to 600 feet and found that 250 feet was the correct length for best results with his particular set and location. Receiver manufacturers usually recommend about 50 feet for presentday sets and yet the best length cannot be prescribed for any set. Only experimenting can tell the story. The aerial plays so important a part in distant reception that it is well worth the DXer's time to experiment with aerials as to length and shape and direction.

Removing the ground entirely has often been found to double the volume, particularly on certain frequencies although sometimes the volume of other frequencies is diminished. Some sets are so built that they cannot be operated without a ground without danger of damage to the set. Usually the manufacturer of such a set gives a warning in his book of instructions against using without a ground. In a city the cold-water pipe is usually the best and certainly the most convenient ground, but sometimes other electrical apparatus are grounded to the same pipe and this tends to make it noisy. In such a case it is necessary to install a separate ground. DX clubs and magazines are constantly discussing the ground and aerial question as their members and readers try new experiments.

## Rules of the Game

Here are some of the rules of the DX game:
Do not $\log$ a station nor ask for verifications unless you are positive in your own mind of the identification of that station.
If a station moves to a new location or a new frequency, you may count it a second time.


JACK BENNY AND ETHEL SHUTTA
It will be a real disappointment to radio listeners to learn that these two popular entertainers will not be heard together after October soth. On that date Jack Benny goes Columbia with his Canada Dry program and will be heard every Thursday at 8:15 p. m. and every Sunday at 10:00 p. m. EST.
Ethel Shutta will remain with her husband, George Olsen, on the NBC but neither sponsor nor time has becn announced as yet.

Ted Weems' band will co-star with Jack on the new program.

Jack and Ethel have been one of the most amusing pairs radio has brought together. It is too bad to separate them.

If a station merely changes its call letters or increases its power, the second reception does not count.
If a station uses two different sets of call letters, you may log each of them. Your Radex shows which stations used these double and triple calls.
Stations outside the broadcast band such as police broadcasters may be logged if you hear them on your regular set.
Short-wave stations heard on harmonics of their regular frequency, such as airport stations, may be entered.

## WHY GOOD SETS GO WRONG <br> - Answers to Troubled Users

## BAFFLE FOR DYNAMIC SPEAKER

I have a Temple dynamic speaker which $I$ use as it is. But someone advised me to use it with a baffle and to get a piece of Celotex 18 inches square. How shall I prepare the Celotex and use the baffle?

Cut a circular hole in the center of the piece of Celotex with a diameter equal to that of the opening of the cone of the speaker. Drill holes around this opening in the Celotex so the speaker can be bolted firmly in place with the bolt holes provided in the metal rim around the cone and small stove bolts. Fasten the Celotex in a vertical position to a wood base with two ordinary shelf brackets. Baffling the speaker gives it better tone and brings out the vibrations of the lower notes. It is quite necessary for good tone reproduction.

## OBSOLETE ELIMINATOR TUBES

I have the Zenith ZE3 and ZE4 battery eliminators, one of which uses the $B$ type and the other the $B H$ type of tubes. I understand they are no longer manufactured and can you tell me u'hat tube to use as substitutes?

The type B is obsolete, but the BH is still being made. They are Raytheon tubes, and we suggest that you write the National Carbon Company, Eveready Raytheon Division, New York, N. Y., in an attempt to procure a new $B$ tube, for which we do not believe there is a suitable substitute unless that concern has devised a method of using the BH type in place of the B.

## STORAGE BATTERY CHARGER

Please explain how battery chargers work. How can I make an inexpensive charger for use at home?

There are a number of battery chargers-the tube or Tungar type,
the dry-unit rectifying type, and the wet rectifying or electrolytic type. In addition are others, such as the magnetic vibrating types. It is not practicable to attempt the construction of any of these types except the electrolytic rectifier, as they can be purchased at much lower costs than they can be built.

The purpose of the charger is primarily to take an alternating current and rectify it into a steady direct current at a reduced voltage suitable for charging a storage battery. When charging from 110 -volt direct current the method is simplified for it is then only necessary to reduce the voltage to a safe potential for the 6 -volt storage battery.

The simplest form of battery charger for use with alternating current is the wet electrolytic rectifier. A glass container about six inches across and


Here are the "Easy Aces" fixing up the next bridge game. Monday. Wednesday and Friday, 10:15 p. m. EST on the CBS Maurice Seymour Studios
of the same depth is nearly filled with a saturated solution of borax and distilled water. Two metal plates, one of sheet lead and the other of aluminum, each containing about ten square inches, are placed vertically in the solution but separated and insulated about one-half inch apart.

The aluminum plate is connected to the positive terminal of the storage battery; the lead plate to one lead of the 110 -volt a. c. supply; and a 100 -watt lamp inserted in series between the other a. c. lead and the negative terminal of the battery. The charger will pass approximately one ampere per hour through the battery.

## TELEVISION ANTENNAS

Much has been printed about antennas and ground, but nothing is said about television requirements. Are standard anternas suitable for television and short-wave work?

Since television is a newcomer and few persons have had antenna experience, Radex thinks it best to let the people who have had more television experience than any other organization in the world give their opinions.

The Jenkins Television Corporation has this to say: "We have found that a vertical aerial, approximately 60 feet high, to give the best results on television short-wave reception. The reason for this type of antenna is there is the least amount of fading due to the interference between sky and ground waves. A ground copper plate buried in damp earth with a heavy direct connection is the most effective ground we have yet found. It is well to put salt around this plate in the ground to be assured of the drawing and retaining of sufficient moisture for a good earth connection."

## NOISY LAST TUBE

What could cause a crackling and scratching noise in the last tube of my 8 tube superheterodyne set? Changing tubes does not help. How can I test my transformers to tell if

"Sueethearts of the Air," Ben Alley and Helen Nugent, in the Charis Musicul Revue, Tuesdays at $2: 15$ p. m. EST over Columbia
they are defective? I use a 6-volt "A" battery and 90 volts " $B$ " battery.

When a crackling noise appears in the last tube of a radio set, which is the power audio amplifier, we can look for trouble in several places. Of course, the first place to look is in the tube itself, but since you say replacing the tube makes no difference, that item can be eliminated.

The connection to the tube plate should be examined. The socket springs and contacts must be tested and made to fit good and tight. Any loose wire between the $B$ battery and the speaker and the plate of the last tube will cause these noises. The speaker itself must be examined for loose or broken wire contacts or chattering of the parts of the cone and magnet armature drive mechanism.

Very often, in battery sets, the B battery is at fault. If a ceIl in the battery becomes corroded it will cut on and off and cause crackling and scratching sounds at all times regardless of volume. And this trouble, if in the part of the battery used on
the last tube and speaker, will cause noise only in the last tube.

Transformers may be tested with a volt-meter and 45 -volt B battery. Connect the meter and battery across the primary (Plate and B) of the transformer. If the circut is good the meter will register some voltage but not the full 45 . Change the test to the secondary of the transformer (A and G) and the meter should register less voltage than when on the primary. If there is a break in the wiring no voltage will register on the meter. Test also between the primary and secondary and to the metallic case. If there is a movement of the meter, there is a shortcircuit and the transformer is defective. Most transformer failures are due to a break in the primary windings caused by burning out from too heavy current surges.

## REPLACEMENT PARTS

I have difficulty in obtaining the proper volume controls and transformers for replacements in radio sets. There are so many kinds and values that no local dealers handle such a wide variety. Where can the average experimenter and repairman obtain these parts without going to the factories?

Many of the large radio supply houses carry rather complete lines of replacement parts-condensers, volume controls, and transformers. These concerns are advertised in various publications. For volume controls you might write to the makers of the famous Yaxley line, P. R. Mallory \& Co., Indianapolis, Ind., and for transformers, to the Standard Transformer Corporation, 862 Blackhawk Street, Chicago, Ill. Both of these concerns issue catalogs of exact duplicate replacement parts for every set on the market.

## HIS - 22 TUBES BURN OUT

$I$ have a Scott SG. 9 radio and would like to know whether I can use adapters of some kind in my inter(Continued on page 32)

## SHORT WAVE EXPERIENCES

By EDWARD C. HOULGATE

IN ACCORDANCE with ye Editor's wishes for the DXers to give some of their experiences in the short waves during the summer, I am writing this letter. I built a SW converter (two tubes) last May and have been using it with my Philco 11-tube superhet. Results have been very much better than I expected. The first DX station that I tuned in was VK3ME at Melbourne, Australia, and when I got them I almost fell over. Since first receiving them I have tried for them about fifteen times and have tuned them in every time which gives me a batting average of 1000 per cent.

My complete list of foreigners now includes G5SW at Chelmsford, England; FYA, Paris, France; GBU and GBC, Rugby, England; DJA, DJB, DIQ, Germany; I2RO Rome, Italy; LSX, Buenos Aires, Argentina; EAQ, Madrid, Spain; CT1AA, Lisbon, Portugal; VK2ME, Sydney, Australia; VK3ME, Melbourne, Australia; PRDA, PPQ, Rio de Janeiro, Brazil; HKA, HKT, HKF, Columbia, and CMCI, CM5RY, Cuba. My other stations include W2XAD, W2XAF, W1XAZ, W8XK, VE9JR, VE9CL, VE9GW, VE9DR, W9XF, W1XAL, VE9BY, VE9CI, W3XL, W3XAL, W9XAA, W8XAL, W3XAU and W2XV. Also have PRADO at Riobamba, Ecuador. All of the foreigners have been received repeatedly at loud speaker volume and most of them have been received at different times with terrific volume. England and France have been received every day for two months. The Philco is supplied with a distance switch, but I do not ordinarily use it when listening to short waves. I have used it on occasion when I have had some friends listening and have brought in

Rome, Paris and Chelmsford with volume sufficient to be heard a block away.

I had always heard that SW reception was very freakish and have proved this for myself. There have been times when I could not hear W1XAZ at Boston, or W2XAF at Schenectady, and at the same time England and France would be booming in. In fact, reception has been much more consistent from the DX stations, like Australia, France, England, Germany, etc., than from the short-wave relays in the United States, with the exception of W3XAL at Bound Brook, N. J. This station always comes in perfectly here on 49.18 meters. They are on 16.87 meters during the week now and I receive them only occasionally on this wave. I listened to DJB (Germany) on July 24 th all afternoon and they came in here just as good as our local station in regard to volume and tone. I have never received any station coming in the way they did on that day. I could turn the volume control completely off on the Philco and the German station could be heard faintly.

## The PUZZLE ...CORNER

DID you try that sticker in the October issue? If you didn't, try it now before you read the solution which follows. You will find that it will give your brain a good daily dozen. All through? Here's the answer: $475 \times 398$ equals 189 ,050 .

If you failed to solve this problem, you will be interested in the method. Seeking for some key with which to start, we note that KOA multiplied by $P$ is KUOA. The product is therefore nearly ten times the multiplicand. Only 7,8 or 9 may be used as a multiplier to give a prod-
uct in which the first of four figures will be the same as the first of three in the multiplicand. No combination of figures in the place of OA can be multiplied by either 7 or 8 and give OA in the product. P must therefore be 9 . The only figure that may be multiplied by 9 and bring itself is 5 . A is 5. $9 \times 5$ gives 5 with 4 to carry. The letter " $O$ " $x 9$ plus 4 must give "O." Only 2 and 7 may be multiplied by 9 with 4 added to bring itself. " 0 " must be 7 , as 2 will not work out. Now restate the problem using 9 for $\mathrm{P}, 5$ for A and 7 for 0 . Studying the problem again we find that B plus 5 equals B which obviously must be naught. We see that G plus 7 plus 5 brings a naught so G must be 8. The rest is easy.


## THIS MONTH'S PUZZLE

Guy B. Welsh and Floyd Moyer of Reynoldsville, Pa., collaborate to provide the teaser for this issue. They call it the "Wheel Puzzle." We are filling in six of the circles to make it a bit easier. The problem is to fill in six station calls along the spokes, all reading from tire to hub, and six more around the circumference reading clockwise. All calls, of course, are to have four letters and no two are from the same state or province. An excellent two a. m. exercise for DXers.

## PERSONALITIES of the RADIO ""Betty" Tells their Stories

THE Human Side of the News" is the angle from which Edwin C. Hill reviews the march of world events in his nightly talks over the Columbia network. He was born in Aurora, Indiana, and had family tradition been stronger, he would have become a schoolmaster, for his father was a county superintendent of education and his mother was a teacher.

After having graduated from the Aurora high school, Mr. Hill enrolled as a student of the University of Indiana. It was at college that he decided he wanted to join the staff of the New York Sun. He majored in English at the University and the professor used the New York paper for purposes of illustration. The small town student became interested in the metropolitan daily and determined that some day his writings would appear in it.

Upon receiving his degree, Edwin


He dramatizes the news
C. Hill became a reporter for an Indianapolis paper. His inborn news sense and writing ability soon evidenced themselves. In quick succession he served editors in Fort Wayne and Cincinnati, in each case being given more and more important assignments. Eventually, he considered himself ready for metropolitan journalism. Without letters of introduction he presented himself at the desk of the New York Sun. The city editor liked the appearance of the persistent young Hoosier and gave him an assignment.

## Success as a Cub

Within four months Mr. Hill had established a record. Never before in the history of New York journalism had a eub reporter succeeded in being paid by space in less than eight months, and Hill reached this point in half that time.

For more than twenty years he has been the Sun's star reporter. His brilliant writing style has made him one of the most widely read correspondents. In two decades he has covered every leading New York murder case, most of the important criminal and civil trials and leading disa ters. His especial flair for human interest material has won him a large following and his discussions of the news from this point of view have made his talks among the most popular on the air.

His news commentaries are especially interesting because of his knowledge of the personalities whose activities result in headlines. He has built up a wealth of contacts through the many important interviews he has conducted and written. There are few outstanding figures, whether in the fields of statesmanship, industry or the arts, who have gone to New York and have not received Edwin C. Hill.

For several seasons he was associated with the motion picture industry. At one time, he was director of newsreels for one of the large film companies and later went to Hollywood to supervise scenario writing for the same organization. Eventually, he returned to New York and resumed the labors of his first love-newspaper reporting.

Mr. Hill is married to the former Jane Gail, one-time well known film actress. He is fond of horseback riding and golf, and is exceptionally happy when he can get into the low nineties. One of the joys of his life is his bull terrier.

A prominent New York columnist once referred to him as the best dressed newspaper man in the Metropolis. His studio appearances confirm that opinion. During the winter his favorite costume is the short black coat with striped trousers. His iron grey hair gives him an especially distinguished appearance from which a black silk ribbon for his pince-nez does not detract. Though he uses a manuscript for his radio talks, he manages to retain the freshness of an ad-lib performance.

Edwin C. Hill is heard over the Columbia network at 8:00 and 11:00 p. m. EST Monday, Wednesday and Friday; 8:15 p. m. EST Tuesday, Thursday and Saturday.

The Shoemaker's Son
The story of Donald Novis, sensational young NBC tenor, is the story of a cobbler's son whose voice couldnot be denied. From the moment that he first sang in public to a group of grizzled miners and lumberjacks in Northern Ontario his career as a vocalist was ordained.

To young Donald singing was sissified. He yearned for a career as an athlete. But nature blessed him with a voice that demanded expression. In a conflict between singing and sports waged within himself, singing won.

Donald's debut was made in Chapleau, a hamlet in the wilds of upper Ontario. His father had located there as the village shoemaker after migrat-


Donald Novis, NBC Tenor
ing from Hastings, England, where Donald was born March 3, 1907. It was the practice of the elder Novis to conduct community sings in his humble shop on the long winter nights. The rough and ready people of that rugged country hungered for entertainment and Novis supplied it. The shoemaker had been carefully cultivating the voice of his son. One night he suddenly announced that his son Donald would favor with a song. He lifted the lad to his cobbler's bench and urged him to sing a certain song of old England which he had taught him and which he loved to hear. Unabashed, little Donald sang with fine fervor. At the conclusion of the number the audience of bearded men stamped their boots upon the rough hewn floor and shouted, demanding another song from the boy. Donald obliged and was rewarded with another noise demonstration.

Donald continued to sing with his father for the edification of their neighbors until an Episcopal clergyman chanced to visit Chapleau. He came from Southern California with stories of warm, sunny climes that appealed to the elder Novis, wearied of
the rigors of the Canadian winters. Further he offered Novis, Sr., a position singing in his church. That clinched the decision and the Novis family moved to Pasadena.

Carefully coached by his father in singing, Donald progressed through Pasadena schools, entering heartily into juvenile sports. A healthy, robust youngster, his natural inclination was for athletics. While at school he became the star of the baseball nine. When he went to high school he excelled in football and basketball. By the time he reached Whittier College he had set his heart on becoming an athletic instructor. Pressed by his father, however, he studied voice culture, and learned French, German and Italian. His magnetic voice attracted wide attention and soon he was in demand for entertainments and amateur musicals.

## Wins Atwater Kent Audition

In 1927 Donald Novis won the state Atwater Kent Radio Audition, and the next year the national $\$ 5,000$ prize as America's most promising young singer. His fame reached Hollywood, and Mack Sennett engaged him for singing roles in "The Singing Plumber," and "The Singing Boxer." He became soloist with Gus Arnheim's Cocoanut Grove Orchestra at the Ambassador Hotel, Los Angeles. From Station KFI his voice was carried over the NBC Pacific networks and he became the sensation of the coast. His importation to New York and the nation-wide NBC networks was a logical sequel.

Donald Novis is heard over the NBC-WEAF net work each Monday, Wednesday and Saturday, at 6:45 p. m. EST, and each Sunday at 7:00 p. m. EST.

Jay C. Flippen has been appearing on various stages since boyhood with a long, unlit cigar, an ungovernable mop of hair, a face smeared with burnt cork, and a repertoire of weird but interesting gestures. Now, as radio's newest comic, he has discarded all but the ungovernable mop of hair.


Jack C. Flippen from "Arkansaw"
"Jay C. Flippen-of the Arkansas Flippens" was born at Little Rock in that state, in March, 1899, and he points with pride to the fact that he is part Chickasaw Indian. Baseball and blackface were the chief concerns of his youth, and his stage experience dates back beyond his memory of it. His mother, a frequent performer in home-town minstrel shows and amateur theatricals, took him on the stage with her for the first time when he was three. He first made up in blackface at nine and made his professional bow at a local vaudeville theatre at 14 , when he was hired to substitute for a performer who was a. w. o. l.

His first time on the air came when he served as master of ceremonies at a banquet which was broadcast. He was regularly engaged as an air entertainer early in the summer as the central personality of the Goodall Palm Beach program over the Columbia network, and shortly after the close of that series was signed as an exclusive Columbia artist. He now sings, gags, and acts as master of ceremonies in "Jay C. Flippen-cies,"
(Continued on page 31)

# KEEPING UP WITH THE ENGINEERS 

## - New Developments in Radio

IF OUR article in the September issue of this magazine gave the impression that the Midwest receiver was operated with two dials and consequently of older design, it was in error. A booklet just received from the Midwest Radio Corp., Cincinnati, Ohio, illustrates this popular set and shows it to be of the very latest in all-wave design. Among some of the distinctive Midwest features are the "Color-Lite" band selector. When the switch is turned to bring a certain band in operation, a colored light reflects on the dial to show just which band is coming in-blue for 15 to 30 meters, green for 30 to 75 , red for 75 to 100 and white for 200 to 550. A "Stat-Omit" Tuning Silencer that is said to eliminate automatically all between-station noises, swishing, cracking and frying. A thermal fuse which blows instantly on short-circuit but blows on overloads only if the overload is continued long enough to endanger the apparatus. A dualratio tuning dial which can be shifted from fast to slow speed in an instant providing a choice of either 6 to 1 or 30 to 1. The Midwest is available in $9-12$ - and 16 -tube models.

## The Sparton "Multi-Wave"

Still another of the all-wave receivers is the Sparton, manufactured by the Sparks-Withington Co., Jackson, Mich. "The Sparton Model 26-AW Multi-wave Superheterodyne receiver," says the maker, "was designed to afford the owner entree to the unlimited entertainment provided by the short-wave channels below 200 meters in addition to that obtained on the regular broadcast band, and to do this quickly and easily without the necessity of changing coils. Two separate groups of tuning controls
are employed to accomplish this simplicity of operation-the upper set is used on the broadcast band and the lower set on short waves." The Sparton emphasizes its Lafoy automatic volume control which, it is said, can be set at any point and forgotten. A station may fade or increase and yet make but slight change in the sound output of the speaker. This set has a slight hiss on either side of the center of the station and by tuning in directly on the station and keeping between the hiss, the operator knows just when he is exactly tuned in on the station. The band separation of the Sparton in meters is as follows: 11 to 19,19 to 41 , 40 to 73,81 to 200 and 200 to 545 - 550 to 26,000 kilocycles.

## Uses Any Current

A single radio receiver which may be used with either a. c., d. c. or battery current is being produced by the Insuline Corp. of America, 23 Park Place, New York, N. Y. The "Universal Companion" is of the portable type weighing but sixteen pounds and may be set up instantly in the woods, on board ship, at the summer cottage or in the automobile. The change from one type of current to another is accomplished merely by inserting the plug into the proper socket. No change of tubes is necessary. Only a short antenna or ground connection is needed. A jack is provided for headphone use although the set has a built-in speaker. The tubes are two -36 , three -37 and two -33 . Single dial control. A set that will use any current that may be available and that is ready for use in an instant, ought to prove a boon to the real radio addict.


The Akaformer with Shielded Lead-in
The "Akaformer"
"Noiseless Reception at Last" is the enticing promise held forth by Amy, Aceves \& King, Inc., of 11 West 42nd St., New York City, regarding their "AKAformer." Briefly, they say, the Akaformer is an impedance matching device which allows the use of shield lead-in wire of any length without loss of signal strength. The device is attached between the aerial wire proper and a shielded lead-in. The metal shield of the lead-in goes to the ground and the inner wire to antenna post.

## The 'Rejectostatic" System

In the October issue, Jesse Lausman of Louisville, Ky., asked about the Kolster Rejectostatic system. A booklet just issued by the Kolster Radio, Inc., 67 Broad St., New York City, describes this system in detail, which it is claimed, eliminates $98 \%$ of man-made static. "Each time an electric light is switched on or off, each time a small motor starts or stops, each time a spark of any kind takes place," says this booklet, "electrict waves are set up and if they reach a radio receiver direct or by way of the antenna or back through the power supply lines, they make themselves apparent by producing clicks, crashes, bangs and buzzes in the loud speaker. These noises are either intermittent or constant. A motor with a sparking commutator will produce a constant, grinding: noise, a violet-ray machine a terrific mushy crackling of extreme intensity.

Street-car lines, electric trains, power lines, elevator motor circuit-breakers, dial telephones, vacuum cleaners and many other devices all help the vast background of disturbing noise known as man-made static.
"These interfering waves may reach the receiver through the power circuits by feeding back through the 110 -volt connection in the base receptacle, through unshielded or improperly shielded coils or condensers, through exposed wiring, through exposed grid leads of the tubes in the set and through unshielded lead-in wires, and may also be carried into the set because of improperly located antenna."

## How it Works

Kolster engineers after long study of this problem of electrical interference, have designed the "Rejectostatic" system of transmission line antenna. Briefly the system incorporates an aerial antenna, a device called the antenna rejectostat, a receiver rejectostat and a copper braided shielded lead-in. The antenna itself may be erected 100,200 or even 1000 feet away from the set in the best possible location as high as possible and free and clear of all obstructions and possible sources of noise. At the base of mast or building nearest the set a lead-in from the antenna runs to the device called the Antenna Rejectostat. From this device one wire goes to the nearest good ground and the other through the shielded lead-in or transmission line cable goes to the second device, the Receiver Rejectostat. This transmission line can be buried in the ground or run to the set under the eaves of the house or in any convenient way for, as stated above, the length of this cable is immaterial. In other words, the antenna system may be located in an ideal place without being governed by the location of the set. Two other wires lead from the Receiver Rejectostat to the ground and aerial posts of the set.

With the conventional type of an-
(Continued on page 33)

## INTEREST GROWS IN SHORT WAVES <br> All-Wave Sets are Helping

"IN ORDER to keep up with RADEX, I am getting a new AllWave set," is the comment that comes to us from a number of readers. These late receivers with their convenient method of switching from one band to another, are enticing many people into the short wave field. A considerable number have written that they are awaiting the report of the Editor on his new SM-728-SW before changing to all-wave sets. This report will appear in the earliest possible edition. The Editor feels that in fairness to both his readers and the manufacturers of the particular set he is using, he should become thoroughly familiar with short wave operation, before attempting to set forth the results. One can test a broadcast receiver in an hour or two but no worth-while analysis of a short wave set can be made except after a very considerable experience.

Our readers with their greater experience in this fascinating part of radio, are much more competent to comment on short wave reception. Let us let them tell their stories.

From C. Edward Gates, 514 Ivy Street, Pittsburgh, Pa., who was one of the first pianists to broadcast over KDKA when ten and twenty miles were good DX, comes the following: "Your magazine is great. I consider it absolutely indispensable for DXing. And the list of short wave stations is the most accurate I have seen in any publication." Mr. Gates has both a Pilot Super-Wasp and a Crosley 41-S. His log on the Crosley is slightly over the 600 mark. On the short wave receiver his log is as follows: VE9GW, VE1CO (Prince Edward Island), VE1BT, VE1BR, VE1DQ (Nova Scotia), VE1BF (Newfoundland). VE9DR, VE9CL, VE9AP, VE9BY, VE3BT, VE4AR, VE1GW, GBK, GBX, GBS, GBU, GBW, G5SW, GBF, GBP, G4BY, G4AO, GCA, LSX, LSN, LSY, LOM, LSH (Argentine), VK2ME, VK3ME (Australia), PCJ (Holland), DBJ, DGK, DJA (Germany), FYA (France), I2RO. I3RO, I1AX (Italy) HRB (Honduras), HKT, HKM, HKC (Columbia), TI4NRH (Costa Rica, VRT,

Radio listeners will learn their fine points of foothall from a master as Christy Walsh, sport writer and member of the All-America Board of Foothall, gives his weekly broadcast over the Columbia networli each Friday at 9 p. m. EST.

[21]

ZFBI (Bermuda), EAQ (Spain) and the following with no call letters given: Rio de Janeiro, Geneva, Switzerland, Bangkok, Siam. Mr. Gates says he has received numerous ships at sea, the most thrilling being reception of a ship one Sunday afternoon that announced its location as "six hours out of Athens, Greece-I didn't get the call letters or name of the ship, but Boy, what a thrill." Mr. Gates states that for about two hours before totality during the recent eclipse, the Europeans just wouldn't come in but about one hour afterwards, they came in fine.

> On the B. C. Band

From A. E. Armstrong, 2021 Bonita Drive, Glendale, California, comes this interesting report:

Possibly you will be interested to hear of my results on the Coast. I have been DXing on the broadcast band for the last six years and on the short waves for nearly a year. My present set is a 1931 Westinghouse WR6 and a Stewart-Warner short-wave converter. My aerial is 130 ft . and I use an ordinary waterpipe ground. To date I have a log, on the broadcast band, of 394 , representing 44 states in the U. S., 22 stations in Canada, 21 in Mexico, Cuba 7, N. Z. 3, P. I. 1, Hawaii, 2,

Japan 11, Formosa 1, and Manchuria 1. I have 84 stations 100 watts or less. My best catches are: WLBF, WMBH, WDZ, WGL, WSOC, WSPA, KZRM, CMCU (50 watts) and KEPL (when it was 15 watts).

## With the Converter

On the short waves, during the last eleven months, I have logged, besides the American stations, many police, and amateurs in all districts of U. S., as well as Canada, Mexico, and Hawaii, the following foreign: Canada VE9CS, VE9CL, VE9JR, VE9GW, VE9BY, VE9DR; Mexico XEW, XDA, XAM; Costa Rica TI4NRH; Colombia HKC, HKF, HKM, HKX, HKD; Venezuela YV11BMO; Ecuador PRADO; Argentina LSX; Brazil PRDA, PSH; Hawaii KHK, KRO, KEQ, KDK; Australia VK2ME, VK3ME; New Zealand ZL2ZX; Russia RV15; Japan J1AA; Indo-China F3ICD; Java PLV, PLW; England GBW, G5SW; France FYA; Italy I2RO; Spain EAQ; Germany DJA.

After almost a year's experience with the short waves I find that Australia and Eastern Asia come in consistently the year round, probably a little better in the winter months. South America comes in best in the winter. Europe comes in best in the summer. The only consistent Euro-

pean station seems to be FYA. I played England for the first time in July. In all G5SW was played about twenty times in July and August, once or twice with excellent volume, but mostly rather weak.

## Five Europeans

"When I last wrote you in May regarding my DX activities," advises K. P. Williamson, 1610 Sherbrooke St., West, Montreal, Que. "I was operating with a 5 -tube Echophone. Since then I have purchased a new set, a 7-tube Echophone with shortwave converter. My log for four months of active radio work is as follows: 340 stations, 45 states, nine countries. In the last ten days I have pulled in, on the shortwave band, stations G5SW, Chelmsford; DJA, Berlin; FYA, Paris; I2RO, Rome, and EAQ, Madrid, all clearly and with loudspeaker volume. Considering that first class DX weather is still another month or six weeks away, I think that the new set is capable of doing big things."

## A Battery Converter

"For s. w. work, I use a Kent, bat-tery-operated converter, using one 230 and one 232 tube,' states G. H. Coyle, P. O. Box 4056, Jacksonville, Fla. "This converter is attached to my No. 95 Philco. The range is from 18 to 32 meters. So far I have tuned in VK2ME, VK3ME, EAQ, 2RO, G5SW, XDA, XAM, HJV, DBJ, TI4NRH, PRBA, VE9JR, a number of the U. S. stations and Pontoise, France-the latter on three frequencies." On the b, c. band Mr. Coyle has logged over 400. He has two aerials, one 150 long including leadin, the other 350 feet with lead-in. For a ground he uses six pieces of water pipe spaced six feet apart, all connected with insulated copper wire.

## A Report from England

From H. Appleby, Jr., Stanley House, Tynemouth Road, Wellington Quay, Northumberland, England, comes the information that he receives regularly the following Amer-
ican stations: W2XAF, W8XK, W1XAZ, W3XL, W3XAL, W2XAD and VE9GW, also Rio de Janeiro and Buenos Aires. All of these are received on a four tube receiver of his own construction. The aerial is 15 feet of bare wire slung across an attic.
"The second day I had my Pilot Super Wasp, I heard I2RO, Rome, Italy, and the next day I heard G5SW in England," says William T. Wright, 3rd, 89 Faneuil Place, New Rochelle, N. Y. He receives VE9GW with plenty of volume but hasn't been able to bring in VE9CL for months. Mr. Wright encloses a clipping from the New York Sun containing the time of VK2ME Sydney and VK3ME Melbourne. The former broadcasts on 31.28 meters on Sunday only from 2 to 4 a. m., 6 to 10 a. m. and $10: 30$ a. m. to $12: 30 \mathrm{p} . \mathrm{m}$. The latter transmits on 31.54 meters on Wednesdays between 6 and 7:30 a. m. and on Saturdays between 6 and 8 a . m.

Who Can Identify?
Information about two s. w. stations which he has heard about five p. m. CST, is asked by C. R. Anderson, 1026 First St., N. E. Mason City, Iowa. One of these after playing a number shouts out "Hullo Hullo America" between 15 and 30 meters. The other, also an English-speaking station, which he picked up Sunday morning, Oct. 2, after playing some selections quoted something about 25 cents in coins. This was between 30 and 50 meters. Mr. Anderson has a de luxe Lincoln with which he says he can pick up 100 watts in Long Island or California and 250 watts in Cuba.

Replying to the inquiry by Harold Wagner, Roger Causse, radio operator of the SS Thermo, says that it is KEE at Bolinas, Calif., which relays the chain program to Coco Head for the Honolulu chain station. This is a commercial station and will not verify but they will verify when they are using the call W6XI. For Archie Ferrie, Mr. Causse states thatVE3EW
(Continued on page 31)

## LOOKING OVER RADIO WITH THE EDITOR

WELL, the storm is over. For a time the editorial air was filled with hurtling brickbats and bouquets. Criticisms and commendations were in the mail. We seem to be just about where we were before the whole thing started. The critics and skeptics seem to have established these two points:
(a) Reception of certain stations may be very, very improbable.
(b) Verifications may be secured from stations which the recipients do not deserve.

On the other hand, the following principles seem to be equally well established:
(a) Radio reception cannot be calculated.
(b) Freaks in transmission permit occasional astonishing reception.
"I know from my own experience that it is possible to play with excellent reception some small far-away station, under perfect conditions, one night, and never duplicate it again." Thus writes A. E. Armstrong, 2021 Bonita Drive, Glendale, California. "So I cannot understand why DX fans-some of them-seek to pick flaws in the verifications of others."

## Through the Barriers

This thought is illustrated by C. J. Dolph, Howell, Mich., who writes: "Several years ago, from Manistee County in western Michigan, I picked up the program of KFPM, Greenville, Texas, a fifteen-watter. The reception was clear and I verified by letter. I thought at the time that the station must have jumped up its power." Mr. Dolph never received the station again. What possible explanation can there be for occurrences like this? It is as though the barriers were suddenly broken down permitting some far-off station to come through for a time only to be shut off a few
minutes later never to come through again. When such a phenomenon occurs, when all the usual laws of radio transmission seem to be upset, can anyone say just which station can and which cannot come through?

## Location Affects Distance

"A friend of mine lives about a hundred yards from me and I have doubled the distance of a radio set simply by taking it from my home to his," points out W. N. Bird, Floral Park, N. Y., who adds, "Please keep up the good reports from the DXers and never mind the disgruntled ones who think that any station they can't get can never be brought in by anyone else."
"Here's one for your 'Believe It or Not'," writes B. L. Ahman, Jr., 3313 Westerwald Ave., Baltimore, Md., "I am in receipt of a verification from KLO, Ogden, Utah, which I received at 8:00 p. m. EST ( $5 \mathrm{p} . \mathrm{m} . \mathrm{MST}$ ) on September 19th while WCBM our local on 1370 and WTBO on 1420 and WHP on 1430 were broadcasting. Yet KLO on 1400 came through clearly for a fifteen-minute period then receded and I was unable to catch them again. Since it was still daylight in Utah and they use only 500 watts, I prize this as one of my best."

How a "Doubting Thomas" may change his point of view, is described by Charles Rowland, 257 Edison St., Pontiac, Mich. "I have been prompted to write by the current controversy in your pages. The poor old DXers are sure hearing plenty from the skeptics. One year ago when I read of Ollie Ross' record in your magazine, I wondered why the Lord gave Ananias the championship. But now I am glad I didn't voice my opinion for my first season's DXing has brought me a flock of verifications which the doubters might well question. Using a Philco 11-tube, I have listened to
stations from Prince Edward Island to Costa Rica and from Hawaii to Australia and New Zealand. How? By patience--trying for stations at hours when honest people were in bed, four and five o'clock nearly every other a. m. By trying every kind of antenna and ground. After three or four months of this effort you are finally rewarded by a few real catches and immediately you are criticised by some fellow who just turns the dials now and then."

An Alaskan Station
A sales prospectus issued by KFQD, Anchorage, Alaska, gives some idea of what radio must mean to the isolated communities of that territory. Following are some excerpts from letters received by KFQD: "-pounded down twenty miles of snow drifts today to hear KFQD," a trapper writes; "-your news items are a Godsend to this remote part of Alaska; my office is full of young and old," this from a postmaster; "一had the Eskimos in tonight to listen to your programs, but never again-I had a hell of a time getting them to go back to their village," a trader comments; a woman volunteers a five-dollar contribution and writes: "I do thank you' with a grateful heart for the fine service and programs you are giving us far away Alaskans."

Two stations have been marked for deletion by the FRC. The first is WMRJ at Jamaica, N. Y., and the other WPSC, State College, Pa. The latter is an old station and it hardly seems likely it will be permitted to go by default although the license was cancelled because the applicants failed to appear at the hearing. Pending definite action, we are permitting both stations to remain in our lists.

What is said to be the first school of "Aerial Journalism" ever established, is announced by Oglethorpe University, Georgia. The University owns station WJTL which will be used in laboratory and class-room work. A two-year course prepares the student for the position of Pro -
gram Director. The three-year course qualifies the student for a position as Studio Manager. The student is led step by step from the first principle of addressing the microphone to the responsibility of directing a complete radio program.
"Having noticed a query in a recent number of Radex relating to the location of Tuinucu, Cuba," writes Hedley Simmonds, 23 Clyde St., Hamilton, Ont., "I am sending on the following information contained in my verification of reception from the old station 6 KW , now CMHC. It reads as follows: 'Tuinucu is a plantation town right in the heart of Cuba on 80 degrees west longitude and almost exactly midway between the north and south coasts of Cuba. If you can find Sancti-Spiritus on your map, Tuinucu is eight miles northeast of that city.' In other words, it is located in W-25 on the Radex map."
"Tuning for CFRB last week, brought CKRO (?) indistinctly," says R. Rosenberger, 17 Janssen Place, Kansas City, Mo. "The announcer mentioned the Canadian National Railways and I think he said he was broadcasting from Montreal." The official Canadian list this month shows two new stations, CHCH at Montreal on 1200 and CHNC at Toronto on 840 , but no CKRO on 690.
"I would like to make a correction in Radex, where you list stations on 1430 kcys. (WHEC, WCAH, WHP, WOKO) as synchronized," suggests D. G. P. of Rochester, N. Y. "This is not so because these stations can broadcast their own local programs any time whenever they wish." Who can tell us if the arrangement for synchronization in this channel has been given up?

## Here's a Good One

"Your letter has prompted us to schedule another all-night broadcast for Sunday, November 13 th," writes KROW, 1520 Eighth Ave., Oakland, Calif. "This broadcast will begin at 1:00 a. m. of November 13th and
last until 4:30 a. m. PST. To avoid any possible confusion concerning the time of this broadcast let us explain that we sign off the air in favor of KFWI, San Francisco, at 11:00 p. m., November 12 th, which is our regular schedule. We will then be back on the air at 1:00 a. m. Sunday morning with the DX special program which will be broadeast from our Oakland and San Francisco studios.
"It has been customary during our DX programs to answer requests of listeners made in foreign countries, thru short-wave operators. The requests are first phoned to the shortwave operator in the vicinity of the listener, who relays them to our local short-wave operators, who, in turn, phone the requests to our studio. On our November 13th broadcast, we will again answer these distant requests.
"The nature of this program will be a variety of jamboree including musicians and entertainers." So-o-o-o, as Ed Wynn says, watch for this big special Sunday morning, November 13th beginning at $4: 00$ a. m. EST, 3:00 CST, 2:00 MST and 1:00 PST.

From Hawaii
KGMB Honolulu write that they do not schedule any DX programs for the reason that, due to the difference in time, their regular programs are practically DX programs for dialers in the United States proper. They add: "We are always glad to answer fan mail when three cents in stamps are enclosed. We use 250 watts on 1932 kcs. We are on the air till midnight every night (PST) and 1:30 a. m. Sundays. We are picked up regularly by fans in the antipodes."

CMDC at Havana on 675 is reported by Frank Switalski, Jr., 2819 Victoria Ave., Cincinnati, Ohio, but the new Cuban official list gives no station on 675 and no CMDC.

Stuard B. Leland, 82 St. John Place, New Canaan, Conn., heard station WESG broadcasting on 1270 kcs . from their studios in one of the
hotels in Elmira, N. Y. He feels he could not have been in error as he held them from $3: 30$ p. m. until $5: 00$. He says their signals were entirely too strong for the 50 watts the FRC allows them. We have had no notice of the removal of this station from Glens Falls, to Elmira. will some of our New York readers advise us about this? It hardly seems possible that WESG has changed location, frequency and power without notice from the Commission.

## Trolley Troubles

"I live on a street where there is a trolley car," laments Eugene Delmore, 2247 N. 15 th St., Philadelphia, Pa. "I get locals OK during the day but no distance whatever; in the evening I get some distance but always with a lot of static. When a trolley comes down the street, it makes a terrible noise until the trolley is away past." Mr. Delmore has an excellent receiver with a 20 -foot aerial and 20 feet of shielded lead-in. The aerial is well insulated and carefully constructed; the ground is a cold water pipe. This listener wants to take up DXing in earnest but under his present conditions finds it next to impossible. If any of our readers have ever had a similar condition and have been able to overcome it, we would like to publish their experience for the benefit of Mr. Delmore and others. In the last issue we described at some length the Filterizer and in this issue, the Rejectostat, both of which aerial systems are devised to eliminate the evils of which Mr. Delmore complains. Have any of our readers made use of either of these devices?

## The Battery Sets Next

In his article this manth, Mr. Dashiell presents information regarding the latest information of sets available for those who are limited to the use of direct current. Next month we hope to give similar information for that great multitude who must still depend upon batteries for their radio.

## OPENING A NEW SEASON with the DXERS

THAT new DX calendar is going over big and it is growing constantly. A lot of stations have not as yet arranged their winter schedule of special DX programs but promise to write us as soon as they do so so they can be scheduled in our calendar. We owe an apology to the users of the leatherette cover for printing this calendar where we have and we will have to find some other place for it next month.
"Just a line to let you know that this morning, October 2nd, thanks to your DX tips, I was able to pick up the broadcast of YV1BC at Caracas, Venezuela," acknowledges Bruce Vaughan, 1312 Tenth Ave., Huntington, W. Va. Among others reporting reception of this prize are Rudolph Kure, 3633 Vine St., Cincinnati, Ohio; Stanley A. Schmuch, 94 Otis St., E. Cambridge, Mass.; Walter W. Bronson, 1485 Chapel St., New Haven, Conn.; Frank Wheeler, 406 Eagle Point, Erie, Pa. On behalf of these DXers we want to thank the good friend who advised us of the Venezuela program in time for us to include it in the October calendar.
"I have had the thrill of my lifetime!" exclaims Russell Heller, 42 N. 5th St., Emaus, Pa. "On Sunday morning, October 2nd, I was doing a little dial twisting, when, to my surprise, I heard the announcement 'YV1BC broadcasting, Caracas, Venezuela.' I immediately sat down and took the program to verify. A short time before this I had received Mexico, stations XER and XEW. After YV1BC signed off, I tuned in another station. I waited a short time for the announcement and found I had WKAQ, San Juan, P. R. I also took this program to verify. After this station signed off, some electrical nuisance spoiled the rest of my DXing. On December 3rd, KOH will
run a special DX program. Do not as yet know the time."
"I sat up all night Saturday, October 1st," reports L. H. Donaghay, 222 Irving Ave., Bridgeton, N. J. "I added some nice catches: KTFI, Twin Falls, Idaho; YV1BC, Caracas, Venezuela; WKAQ, San Juan, Porto Rico; 10-AB, Moose Jaw, Sask., KVOR, Colorado Springs, Colo. and KSEI, Pocatello, Idaho." That's what we call a good night's work. Mr. Donaghay uses a five-tube Crosley "Litlboy" Super. He now has 400 on his log with all the main ones verified. He has fifty 2000 -milers verified.

Off to a Good Start
"I started the new DX season early Sunday morning, October 2nd, with lots of pep, although there was some interference caused by a transformer," reports Milford Voss, 1108 Wealthy St., Grand Rapids, Mich. "Besides numerous west coast stations I picked up CHML, a 50 -watter in Hamilton, Ont.; CHGS, 100 watts at Summerside, P. E. I.; CHWC, 500 watts at Regina, Sask.; 10-AB, 25 watts at Moose Jaw, Sask.; WKAQ, 1000 watts at San Juan, P. R., and last but not least, YV1BC, Caracas, Venezuela, S. A."
"Living in an apartment, close downtown, with all the necessary and unnecessary man-made static, I haven't much chance to DX, but with my Sparton ten superhet, I have no kick whatever as to its performance in such an impossible place for reception," writes Eugene L. Beebee, 210 Franklin St. W., Jackson, Mich. "I have only a short picture molding antenna, and only by making a long run to a water pipe could I have that sort of ground, so merely use the steam pipe for same. Not so good, but any number of times I have been able to pick up KFI as early as 8:00
p. m. EST. XEW is a fairly reliable station if I could only understand their announcements. To date I have logged 122 stations, on the loudspeaker, and all necessarily before 11 p. m. I have no trouble. separating XER from CKAC on one side and WSB on the other, with no cross talk except on nights of exceptionally poor reception when it is necessary to turn the volume control clear on."

## Passes Good Thing Along

"I do not save my copies of Radex," writes Dowling J. Couser, 376 Third St., Birmingham, Ala. "Instead I pass them on to new friends each month, with hopes that they, too, will become members of the Radex family. I have an Atwater Kent console Model 55, equipped with seven Cunningham tubes. This set has been in operation for forty months and nothing has been replaced. I am enjoying perfect reception and have a log of some 200 stations. I still have my first 'across the deep blue sea' station to receive. I don't know why but I have never been able to reach beyond Canada. I guess it's because I am situated in the heart of the Birmingham steel industry. I would like to hear from other Atwater Kent owners."

In answer to B. L. Ahman of Baltimore, Clyde W. Ham, Shelby, N. C., reports that he is one below the Dixie line that has received WEXL. He counts them among his 200 verifications of 100 -watters and less. He also has 19 Westcoasters of 100 watts or less. He claims seven Australians, seven Japanese, four Zealanders, two Hawaiians, one Alaskan, two European, two South American and three Central American. Mr. Ham reports the T-Ps coming through although the static is pretty heavy yet. He considers 2YA by far the best of the consistent stations in the Antipodes and would like to know what others in the East think. By the way, Clyde has worked out an effective way of attaching headphones to his Silver-Marshall G-6
which anyone may have for the writing.

Keeping track of the mileage of his log since 1925 , R. A. Butts, 203 South Main St., Ellensburg, Wash., finds that he has traveled by air 18,847,990 miles. He has tuned in but four trans-Pacific stations, all of them in 1926. He has used eight different types of sets. His ground is a copper plate and old $B$ batteries. Mr. Butts suggests that we get out a large wall map for radio use. This we could hardly undertake. If, however, any of our readers want the big original map from which the Radex map of the world was taken, they may secure one by sending 50 cents (not stamps) to the Hydrographic Office, U. S. Navy, Washington, D. C. This map shows all the time zones in colors.
"At present I am an enthusiastic BCL," advises E. Gordon Jones, Box 26, Winter Park, Fla., "who won't go out of his way, as far as unearthly hours are concerned, to receive DX programs, although I got an awful thrill last spring out of pulling KFI on ten consecutive nights with an Echophone midget 7 -tube superhet, with a cold-water pipe connection on the antenna post. And about the same satisfaction came when I received KFI for two nights, listening to a full half-hour program on each occasion, unmarred by fading or distortion, on a Majestic auto radio, only last week."

## Good Work in B. C.

WGH, Newport News, Va., writes to Gordon Wightman, 1171 West 32nd Ave., Vancouver, B. C., that his is their most distant report. This is certainly good distance for a hun-dred-watter. In June Gordon verified WICC, WHOM, WHP and WFEA. In July he had WSFA and WBNX and "this morning," he writes on Sept. 4th, "I pulled in WTBO, Cumberland, Md.; WMBH, Joplin, Mo., and WSPA, Spartanburg, S. C." That's pretty good summer DX. "Tell the fellows to try KGBU, Ketchikan,

Alaska, Sunday mornings up until 5:30 a. m. EST. They come in swell now and sound like a thousand watter instead of a 500 ."

With sixteen local stations within 25 miles, Bradley Brewer, 824 N. Crescent Heights Boulevard, Los Angeles, Calif., nevertheless has tuned in 203 stations in eighteen months. Among them are five Japs, nine Mexicans and six Canadians. He uses a Westerner 7-tube set, the circuit of which Bradley believes is identical with that of the Atwater Kent 55. He says it regenerates only from about 830 to 1500 kcs . and wants to know how he can make it cover the dial. Has any other reader improved his Westerner?

## His First Season

"I have just completed my first season of DXing and ended up with the following results," informs Herbert Weidman, 508 So. Eastern Ave., Joliet, Ill. " 460 stations logged; 430 stations verified; 135 100-watters or less; three 15 -watters; one 10 -watt. I have the following states complete: Colorado, Indiana, Kentucky, Louisiana, Nebraska, North Carolina, Utah, West Virginia, Manitoba. I have only five more to get in Texas and several states with only one more to get."

Bringing in 2YA on his very first early morning DX of the new season, set Murray D. Bryce, RMD 1, Royal Oak, Vancouver Island, B. C., off to a good start. It was his first Zealander. Mr. Bryce has a BrowningDrake regenerative sot and would like some help from other owners of this set. His trouble is that 540 kes. come in at $88-94$ on his dials while 1370 comes in at $9-0$. He is unable to get anything above 1370 and wants to know what change he must make in his wiring.

## Just Found the Thrill

"I never knew there was such a thrill in pulling in low-powered and distant stations," writes a new DXer, Clyde F. Hall, Lewisburg, W. Va. He has an 8 -tube Crosley and uses the entire surface of his metal lunch-car
in which his receiver is located, for an aerial. In the last two weeks, Mr. Hall has logged 19 Westcoasters and already has 39 states to his credit. He would like to hear from other Crosley users.

## Six in One Morning

"On Saturday morning, October 1st, I received six Australian stations, four of which I had never heard before," reports Raymond Corbett, 619 Twelfth St., Sacramento, Calif. "They were $5 \mathrm{CK}, 2 \mathrm{CO}, 3 \mathrm{AR}, 6 \mathrm{WF}$, 3 LO and 4QG. This makes my log 265 , and the thirty-fifth station $I$ have received 2000 miles and over. The stations are sure coming in fast, and expect to have about 350 before the winter is over."
"I have a Radiola 60 that is three years old," informs Evelyn Smith, 92 Spring St., Portland, Maine. "I started in January, 1932, to get as many stations as I could and by March I had every state in the U. S., except eight. I have started tuning in again this week and hope to locate the remaining states. I also have to my credit, which I think remarkable, CMHI, Santa Clara, Cuba."

Picks the Hardest Ones
"I hope this DX season will be a great one for all," says Milford Voss, 1108 Wealthy St., Grand Rapids, Mich. "I now have 647 stations, with 290 verified, since last December. I have no shortwave set or converter, just a Majestic 91 eight-tube. I enjoy DXing more than anything else and pick the hardest places on the dial to get them."
"I am an ardent reader of Radex and I don't know how anybody could get along without it," says George Burnett, 604 Sycamore St., Buffalo, N. Y. "I have been using an RCA Radiola 20 ( 5 tubes) and in less than a year have received 282 stations. The only foreign station I have received and verified is HIX."
"During the past two years I have logged 342 stations, including all of the west coast states, also Canada, Mexico, Cuba, Porto Rico, Haiti, Central and South America, all of
which were received between 540 and 1500 keys.," reports Thos. G. Hoff, 3205 Elgin Ave., Baltimore, Md.
'In nine months of DXing, 433 b . c. stations and 23 police are my reward," exults Leo J. Halpin, 17 Minder St., Rochester, N. Y. Among his catches are YV1BC, WKAQ and VAS. This is a remarkable record.

## Some Good Logs

"I am a new reader of your magazine and would like to hear from other DXers," says Manuel Velasques, 375 Bradford St., Brooklyn, N. Y. "I am using an Atwater Kent No. 55 and have logged 235 stations all on the loudspeaker."

Pulling in three Oceania stations within a single hour, was the unusual experience of Jim Blake, Box 868, Kenora, Ontario. Between four and five a. m. on Feb. 24th last, he received 3 YA, $3 L O$ and $2 Y A$.
"My log is now 263 stations. Reception is fair. Chicago comes in at 7:30 to 8:30 p. m. but fades away about midnight," writes Stanley Brown, 467 Congregation St., Montreal, Que.
"I use a two-tube set (battery) and have 300 stations logged with 70 verifications from 41 states and five foreign countries," is the excellent record of G. Dana Boylan, 2205 Monroe St., Wilmington, Del. "Some of my best verifications are KGFK , a $50-$ watter in Moorhead, Minn., KABC, a 100-watter in San Antonio, XEN, XEW, KTM, KOY, HIX, CMC, CMCD, CHNS, VAS, CFBO and KFOR, a 100 -watter in Lincoln, Nebr." For those who haven't yet logged Delaware, Mr. Boylan states that WDEL is on every night until $10 \mathrm{p} . \mathrm{m}$. EST., and that WILM signs off every night at $9 \mathrm{p} . \mathrm{m}$.
"On my home-made 3 -tube set, in a year, I have had 307 stations in 47 states and on all frequencies from 540 to 1500 ," advises Walter W. Bronson, 1485 Chapel St., New Haven, Conn. 'I am hoping to get Wyoming soon so as to have all the states."

Charles Meyer, Jr., 411 Blake St., St. Joseph, Mo., thinks blanks for reporting reception should be printed on government postal cards. Someone else thinks the report might be on a reply postcard with the one for verification attached. Either of these would be good for U. S. stations but would not be remailable from other countries. Charles counts WNBW and CKPR as the best of his 250 stations.

Wm. E. Gibbs, 649 Washington St., Camden, N. J., reports much trouble in securing verifications from Cuba and Mexico. Readers who are able to write Spanish say that verifications come in very much better when reports are made in that language. Looks like all DXers would have to learn enough Spanish to report reception. William has a 16tube Midwest and would like to hear from other owners of the same receiver.

## Should Changes Count?

"I think that if a station changes its call, it should be logged as a new station." David F. Thomas, Proctorville, Ohio, objects to one of the rules adopted by Radex. On the other hand, Mr. Thomas says he doesn't log a station that moves to a new location. We still think credit should be given for logging a new location and not for logging an old location a second time under a new call.
"HHK is still broadcasting from 8 to 9 p. m. EST," writes John H. Craig, 239 Oak St., Ridgewood, N. J. "Only yesterday I received a verification from them. They say that they broadcast a musical program and mixed with it is the gossip of Haiti. I wrote my letter to them in French and received my verification in less than two weeks." John's log now stands at 612 with 443 verifications.
"My official DX season began when I received the September Radex," advises Herbert Van Duyne, PO Box 88, Towaco, N. J., "as I find it quite indispensable to a seasoned DXer like myself. Was particularly interested
in your new feature of giving their time on the air, and also the rather complete information on each station with regard to Ekko stamps."

Howard R. Garrett, 171 Hillsdale Ave., E., Toronto, Ont., is collecting not only verifications but merchandise as well. He has received a large box of biscuits from WCAP, a $20-$ peso bill from XEA, an airways pass from KFBI and twenty cents worth of stamps from KGHF. He would like to hear from other owners of Victor R-35.
"I think it would be a good addition for the DX fans," suggests A. Curror, 900 Lincoln Ave., Schenectady, N. Y., "to state what make of receiver they operate when giving their records. This, I think, would be inspiring for any reader who might have the same make and model of receiver."

A letter to Meyer Tuchinsky, 3436 Filbert St., Philadelphia, Pa., from VPN at Nassau, Bahamas, indicates that that station is no more. It reads in part, "The operations of this station were only experimental and have now been prohibited." "Tuch" reports a grand total of 669 verifications to date.
R. M. Ballard, Route 3, Visalia, Calif., asks "Who is WIBS on 548 and who is F9?" He reports all but JOPK received in Japan and has received both stations in Alaska recently. He uses a Philco 96.

## On the Short Waves

(Continued from page 23)
calling W3RUX were two amateurs, the former being W. B. Clark, 48 Marmaduke St., Toronto

Earl Roberts of Cambridge, Ohio, enters the lists for s. w. stations on a b. c. set with 13 police calls between 1558 and 1712 and 15 from 2414 to 2470 . Then he has seven experimental and six airports. Earl reports that the call letters of the Iceland station are TFU and not TFA and that they are on 1200 meters and not 1200 kcs. They are on until
midnight their time which is three hours ahead of EST.

Harvey Kees, Beulah, N. Dak., has a $\log$ of eleven s. w. stations heard on a b. c. set without a converterpolice stations in Los Angeles, Cincinnati, St. Louis, Michigan and Chicago and amateurs as far away as Indiana and Kansas. Mr. Kees reports hearing CKCK Regina on 730 kes. Saturday, Oct. 1st.
"What station is WAT?" asks D. McNeil, 60 Chestnut Ave., Hamilton, Ont. "It is a police station close to WRDS," he adds. The official records show no WAT as yet.

## Radio Personalities

(Continued from page 18)
which also features Freddie Rich's 35-piece orchestra, vocal soloists and ensembles.

Jay C. Flippen has played in every state in the country, and every town of 10,000 or more. . . . Has made records for three leading phonograph companies. . . Is crazy about baseball and never misses a game at the Yankee Stadium. . . . Plays occasional golf and sometimes gets roped into a bridge game without too much enthusiasm. . . . Likes to watch prizefights. . . Gets his hair trimmed but once a month and never allows a pair of scissors to touch the locks on top. . . . His biggest thrill came when he played at the Garrick Theatre in Chicago, featured in "June Days," after the three years on Chicago lake boats when he had insisted that he would play there some day.

## Lovable Dumbbell <br> (Continued from page 8)

chiffon gown with cherry sash over the sheet.
"Ask her what her brother looks like," whispered George helpfully. I did.
"My brother," drawled Gracie, "Why he looks just like Uncle Oscar ought to look."

I persisted. There must be some details.
"Well, how does your Uncle Oscar look? Is he tall or short, or baldheaded?" I continued.
"I don't know," said Gracie. "He never took his toupee off."
"What's your recreation?" I asked.
"I'd like to play a good game of bridge." This was Gracie.
"As things are now," confided George, "if she opens with two spades and everybody passes, Gracie doubles."
"I read a lot-everything from history to fiction,' said Gracie, ignoring calumny.

This was too much for George.
"Do you like new writers or old ones?" he parried.

Gracie fell in through force of habit.
"Oh," she said, "I like old ones. My brother had new writers once and it was terrible."
My pencil was all worn out. I started to go.
"I'm having my portrait painted," Gracie called after me. "By Saint Armand."
"And she's all worked up about it," chimed in George.

## Good Sets Go Wrong

(Continued from page 14)
mediate frequencies so as to replace the present -22s with some other tube to give better selectivity. These -22s do not give proper service and have to be replaced every three months. I use a 6 -volt storage battery and power amplifier with two -81s and a power -50 tube. Can you suggest some efficient changes in this set?
You cannot well substitute any other type of tube for the -22 s now used in your i. f. stages. The - 24 tube comes nearest to being the proper substitute. It has a different base which can be taken care of by an adapter. But the -24 has an indirect heater and takes seven times the current that the -22 does, and with three of these tubes, such as used in your set, the drain on the battery would be excessive. The plates
take a higher voltage, and the screengrids likewise. Additional connections would be necessary, and considering everything, we do not recommend the change.

In view of the frequent failure of these tubes we suggest that the resistors in series with the negative leads to the -22 tubes to reduce the A current down to 3.3 volts used on the filaments of -22 s be tested. The proper resistance for each resistor is 15 ohms-exactly. Less than that will cause the filaments to be overloaded and shorten their life. You might try a -12 A tube in place of the -40 detector. Other than this we see no way to improve on this particular circuit if it has been assembled properly.

## The D. C. Models

(Continued from page 5)
standard cabinets at prices ranging from $\$ 59.95$ for the Baby Grand to $\$ 100.00$ for the new inclined sounding board model.

Atwater Kent presents their 110volt d. c. models in styles 558 D . C. and 469 D . C. The former is a compact superheterodyne set using eight tubes-three -39 s , one -37 , one -36 , one 85 and two 48 s . There is a fulltoned dynamic speaker, quick vision dial, automatic volume control and tone control. The cabinet is similar to model 627, alternating current, and is priced at $\$ 68.90$. The same set in a console cabinet, model 469 D. C., may be had for $\$ 89.75$.

RCA Victor expects to have a new d. c. model available within a few weeks which will be similar to model 71, a. c. mantel type, and using eight tubes. Many persons confuse all d. c. sets with battery sets, whereas a d. c. set is one that operates on the 110 -volt d. c. lighting circuits in the home. Also, it should be remembered that in all d. c. sets the total number of tubes is always one less than those used in an equivalent a. c. receiver; for instance, an eight tube set is comparable to a 9 -tube a. c. set since no rectifier tube is needed.

General Electric, at the present time, has no 110 -volt d. c. receiver, for they feel that any of their a.c. sets can be converted over to d. c. by the local distributors when required. The older d. c. models, therefore, have been discontinued.

Kolster Radio has several a. c. models available for direct current. The model $K 60$ is a midget superheterodyne using seven tubes, and it lists for $\$ 44.75$. Model K 70 is a console 8 -tube type that sells for $\$ 64.75$; model K 120 lists at $\$ 81.75$, and model K 1309 -tube console sells for $\$ 112.25$. The latter model is equipped with phonograph and shortwave converter attachments. All d. c. and a. c. models made by Kolster are fitted with the remarkable new Rejectostatic device for the control of outside electrical interferences and static.

The new Crosley d. c. model is called the Senator. It is a 110 -volt d. c. superheterodyne receiver using seven tubes-three -36 s , two -37 s , and two -71As-and lists for $\$ 69.95$. Pilot Radio Corporation has two midget d. c. receivers-models S 156 and S 158. The makers of Majestic do not offer a d. c. receiver, and General Motors has retired from the radio set field and is showing no new models. Sparton has no new d. e. receiver, but will bring out a new battery set, while Stewart Warner is not in the 1933 d . c. field.

## Photo is on Page 5

The Fada 110 -volt d. c. receivers are models 171 and 173 , both superheterodynes using eight tubes-four -36 s , two -37 s , and two 57 s . A d. c. receiver is made by U. S. Radio and Television Corp'n., and is known as model 33, using six tubes in a tuned radio-frequency circuit.

In the all-wave and short-wave fields most sets are a. c. operated but having duplicates for battery power only. Hammarlund Roberts, makers of the Comet-Pro short-wave receiver, an a. c. superheterodyne, advise that experiments are now be-
ing conducted with 110 -volt $d . c$. power and a receiver may be offered before long. National a. c. and battery short-wave sets are not made for d. c. operation. The same applies to Silver Marshall, Lincoln, Midwest and others. All radio makers now present one or more battery models which are widely used in d. c. and rural districts. These are designed principally for the Air-Cell battery and the 30 series of 2 -volt tubes.

The Scott a. c. and battery receivers are not adapted to d. c. operation, but the manufacturers recommend the use of the Janette rotary converter when their a. c. all-wave set is to be used on d. c. lines. For the information of readers of RADEX the Janette Converter lists at about $\$ 58.00$ and develops an a. c. output of 150 watts at 110 volts and 60 cycles. It is available for operation on 32 , 110 or 220 volts direct current, and the output is sufficient to operate the largest a. c. superheterodyne receivers.

## With Radio's Engineers

(Continued from page 20)
tenna the receiver had to be located close to the antenna lead to avoid a long lead-in which tended to sap the signal strength due to its high capacity effect. With the Kolster Rejectostatic system, the set may be placed anywhere choosing the best possible location for the antenna with no bad effects from the long transmission line lead.

## The Ozarka

A 16-tube broadcast receiver is presented by Ozarka, Inc., 1257 Fullerton Ave., Chicago, Ill. This company which has been manufacturing radio receivers since May 1st, 1921, counts its V16 as its greatest achievement. There are four 235 , seven 227 , three 245 and two 280 tubes. One of the 227 's is used as local oscillator. Two of the 227 s operate in parallel in the second detector circuit. After the second detector the system divides into two separate audio chan-
nels. In one channel a single 227 is used as an intermediate audio amplifier and in the other channel two 227 s in parallel are used in the intermediate stage. Likewise, two of the three 245 s are used in one audio channel and the third in the other channel. It will be noted that two 280 rectifier tubes are used.

Two Rola speakers are incorporated in the V16-one 10 -inch for the bass and one 8 -inch for the treble. These speakers are perfectly matched. As will be seen in the illustration, there are three controls; the center one for turning the illuminated, fre-
quency-calibrated dial; the one on the left controls a switch which provides for connecting a phonograph or television pick-up into the circuit; the volume control is on the right. The left control also governs the sensitivity of the set. Red and green lights are ingeniously provided as a "colortone control." To adjust the Ozarka V-16 to the exact pitch of the broadcast station, turn the knob until one-half of a slot of light is green and the other half red. Thus one does not need to depend upon the ear alone to tune the set at a point that will give the finest harmony.

# The Month's Changes 

| 570 | POWER |  |
| :---: | :---: | :---: |
| 730 | CMK | Havana, Cuba, 5000 to 3150 |
| 750 | Vowr | St. John's, Nfld, 500 to 750 |
| 810 | VOAS | St. John's, NAdd., 75 to 200 |
| 890 | CKPR | Ft. William, Ont., 50 to 100 |
| 890 | CMX | Havana, Cuba, 3000 to 500 |
| 893 | VOGT | Wabana, NHld, 100 to 400 |
| 930 | CMJF | Camaguey, Cuba, 225 to 200 |
| 950 | VONA | St. John's, Nild., 30 to 100 |
| 965 | CMBC | Havana, Cuba, 500 to 150 |
| 987 | CMGF | Matanzas, Cuba, 50 to 100 |
| 1030 | CMHI | Santa Clara, Cuba, 200 to 30 |
| 1040 | CMGH | Matanzas, Cuba, 150 to 15 |
| 1125 | CMHJ | Cienfuegos, Cuba, 75 to 40 |
| 1170 | CMJE | Camaguey, Cuba, 20 to 50 |
| 1170 | WCAU | Philadelphia, Pa., 10000 to 50000 |
| 1185 | CMW | Havana, Cuba, 1500 to 1400 |
| 1210 | CFNB | Fredericton, N. B., 50 to 100 |
| 1260 | CMJI | Ciego de Avila, Cuba, 112 to 5 |
| 1365 | CMCY | Havana, Cuba, 500 to 1000 |
| 1382 | CMJC | Canaguey, Cuba, 75 to 150 |
| 1405 | CMCH | Havana, Cuba, 100 to 50 |
| 1445 | CMBN | Havama, Cuba, 65 to 30 |
| 1485 | CMBR | Havana, Cuba, 15 to 40 |
|  |  | FREQUENCIES |
| 588 | CMCJ | Havana, Cuba, from 630 |
| 630 | CMCU | Havana, Cuba, from 1270 |
| 780 | CMBS | Havana, Cuba, from ${ }^{\text {c }} 90$ |
| 780 | CMCQ | Havana, Cuba, from 1140 |
| 1020 | AEFD | Tiajuana, Mex., from 810 |
| 1125 | CMEJ | Cienfuegos, Caba, from 1150 |
| 1175 | CM.JE | Canaguey, Cuba, from 806 |
| 1260 | CMJI | Ciego de Avila, Cuba, from 1335 |
| 1270 | CMBD | Havana, Cuba, from 965 |
| 1270 | CMCN | Havana, Cuba, from 925 |
| 1325 | CMCl | Havana, Cuba, from 1345 |
| 1325 | CMCW | Havana, Cuba, from 1270 |
| 1365 | CMCY | Havana, Cuba, Irom 1355 |
| 1405 | CMCH | Havana, Cuba, from 1395 |
| 1405 | CMCM | Havana, Cuba, from 1395 |
| 1405 | CMDB | Havara, Cuba, from 1395 |
| 1485 | CMBR | Havana, Cuba, from 1500 |
| 588 | CMDD | NEW |
| 834 | CMGA | Colon, Cuba |
| 840 | CHNC | 'loronto, Ont. |


| 850 | KIEV | Glendale, Calif. |
| :---: | :---: | :---: |
| 910 | YOGY | St. John's, Nfld. |
| 925 | CMDE | Havana, Cuba |
| 965 | CMAY | Havana, Cuba |
| 1010 | CMCX | Havana, Cuba |
| 1110 | CMJO | Ciego de Avila, Cuba |
| 1115 | YONF | St. John's, Nfd. |
| 1115 | XEN'T | Neuvo Laredo, Mexico |
| 1140 | CMBJ | Havana, Cuba |
| 1200 | CHCH | Montreal, Que. |
| 1210 | KIEM | Eureka, Calif. |
| 1210 |  | Chester Twph, N. Y. |
| 1225 | CMHK | Cruces, Cuba |
| 1240 | CMJN | Camaguey, Cuba |
| 1290 | CMHL | Cienfuegos, Cuba |
| 1310 | CMJP | Moron, Caba |
| 1365 | CMBF | Havana, Cuba |
| 1420 | WKEA | Hazleton, Pa. |
| 1485 | CMBK | Havana, Cuba |
|  |  | DELETED |
| 580 | CFCL | Toronto, Ont. |
| 660 | CMCO | Havana, Cuba |
| 790 | CMB' | Havana, Cuba |
| 870 | WBCN | Chicago, Ill. |
| 990 | WJEM | Tupelo, Miss. |
| 1150 | CMGI | Colon, Cuba |
| 1395 | CMCG | Havana, Cuba |
| 1444 | CMBI | Havana, Cuba |
| 1500 | CMBQ | Havana, Cuba |
|  |  | CALLS |
| 940 | XEFO | Mexico City. Mex, formerly XEO |
| 1270 | WESG | Ithaca, N. Y., formerly WEAI |
| 1300 | KaLE | Portiand, Ore., formerly KTBR |
| 1310 | WTRC | Elishart, Ind., formerly WJAK |
| 1370 | WGLC | Glens Falls. N. Y., formerly WESG LOCATION |
| 1210 | WJW | Akron, Ohio, from Mansfield, Ohio |
| 1400 | KLO | Salt Lake City, from Ogden, Utah |
|  |  | CHAINS |
| 600 | WICC | Bridgeport, Conm, new CBS |
| 1200 | WFAM | South Bend, Ind, new CBS |
| 1300 | KALE | Portland, Ore, new CBS |
| 1150 | PERMIT TO INCREASE POWER WHAM Hochester, N. Y., to 50000 |  |
|  |  |  |
|  | PERMIT TO CHANGE LOCATION |  |
| 1380 | KSO | Glarinda, Lowa, to Des Moines. Iowa |

## 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) $\qquad$ WABC NATIONAL, Red (R)........WEAF NATIONAL, Blue (B)
...W JZ

| Call | Dial | Call | Dial |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | Call | Dial | Call | Dial |  |  |
|  |  |  |  |  |  | Call | Dial | Call | Dial |
|  |  |  |  |  |  |  |  |  |  |

TIME-E Eastern Standard; C Central Standard; M Mountain Standard; P Pasific Standard. RAOEX is the only publication listing stations in alphabetical order for your convenience.

## MONDAY

E-8:30 a.m., C-7:30, M-6:30, P-5:30 R-Cheerio
CFCF CKGW KFYIR KPRC KSTP KTBS WAPI WBEN WCAE WCFL WCKY WCSH WDAF WEAF WEEI WFBR WFI WFLA WGY WIBA WIOD WIS WJAR WJAX WJDX WKY WOAI WOW WPTF WRC WRVA WSB WSM WSMB WTAG WTAM WWJ WWNC
E-9:00 a.m., C-8:00, P9-7:00, P-6:00 C - Little Jack Little
CFRB CKOK LFH KFJF KMBC KTRH WAAB WABC WBCM WBIG WBRC WBT WCAH WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFEA WGR WGST WHAs WHEC WHP WJAS WKBN WLBW WMAL WMBD WOKO WORC WPG WQAM WSFA WSPD WTAQ WTAR WTOC WWVA
E-10:15 a.m., C-9:15, M-8:15, P-7:15 B - Clara, Lu ' $n$ ' Em
KDKA KFYR KOA HOLL, KPRC KSL KSTP KVOO KWK WAPI WBAL WBZ WBZA WCKY WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WIS WJAX WIDX WJR WJZ WKY WMC WOAI WPTF WREN WRYA WSB WSM WSMB WTMJ WWNC

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

 C-Columbia RevueCFRB CKOK KDYL KFAB KFBK KFH LFJF KFRC LHHJ kLRA KLZ KOL KRLD KSCJ KTEH KYOR WABC WBBM WBIG WBT WCAI WCAO WDBJ WDBO WDOD WDRC WDSU WEAN WFAN WFBL WFEA WGR WGST WHAS WHEC WIBW WIP WISN WJAS WKBH WKBN WLBW WMAL WNAC WNAX WNOX WODX WOKO WORC WOWO WP( WQAM WREC WSFA WTAQ WTAR WTOC WWVA

## B - National Farm and Home Hour

 KDKA KFYR KO: KOLL KPIRC KSTP KTBS KTHS KYOO KWCR KWK KYW WAPI WBAL WB/ WBZA WCKY WDAF WDAY WEBC WFAA WFLA WGAR WHAM WHO WIBA WIOD WIS WJAX WJDX WJR WJZ WKY WLW WMC WOAI WOC WOW WPTF WRC WREN WRUA WSB WSM WSMB WTMJ WWNCE-5:45 p.m., C-4:45, M-3:45, P-2:45 B - Little Orphan Annie
KDKA WBAL WBZ WBZA WJR W.JZ

E-6:00 p.m., C.5:00, M-4:00, P-3:00 C-Irene Beasley
CFRB CHOK KDYL KFAB KFH

KPJF KLRA KMBC KSCJ KTRH KYOR WAAB WABC WBBM WBIG WBRC WBT WDAF WDBJ WDBO WDOD WDRC WDSE WFAN WFBL WFEA WGST WHAS WIBW WIP WISN WJAS WKBH WKBW WIBW WMAL WNAX WNOX WOKO WORC WOWO WQAM WREC WSFA WTAQ WTAR WTOC

## R - Waldori-Astoria Orchestra

KSD KYW WBEN WCAL WDAF WEAF WEEI WFBR WGY W1OD WJAR WMAQ WRC WSM WTAG WWJ WWNC
E-6:15 p.m., C-5:15, M-4:15, P-3:15 C-Reis and Dunn
CFRIS CHOK KDB KDYL ITFAB KFH KLIRA KLZ KMBC KIRLD KSCJ KTRH HAAB WABC \|BIG WBRE WBT WCAH WCAO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFAN WRBL WFEA WGR WGS WHAS WHEC WHP WIBW WIP WISN WJAS WKBH WKBN WLBW WNAX WNOX WOKO WORC WOWO WQAM WREC WSFA W TAQ WTAR WTOC
E-6:30 p.m., C-5:30, H-4:30, P-3:30 C-Vaughn DeLeath
KLRA WAAB WABC WBIG WBRC WUAE W"JBJ WDRO WDOD WDSU WFEA WGST WORC WREC WSEA WTAR WTOC
R Harding Sisters, Piano Duo
KSD KSTP WCKY WEAF WFBR WFI WHO WIBA WIOD WJAR WMAQ WMC WOC WRC WSB W丁AG WTAM WWJ WWNC
E-6:45 p.m., C-5:45, M-4:45, P-3-45

## C-The Funnyboners

CFRB CKOK KDYL KFAB KFH KFJF KLRA KLZ KSCJ K'RH WAAB WABC WBBM WBIG WFBIC WBT WCAI WCAO WCAU WDAE WDBJ WDBO WDOD WGST WHAS WHP WISN WIAS WKBH WKBN WKBW WTAW WSAX WNOX WOKO WORC WOWO WQAM WIREC WSFA WSPD WTAQ WTAR WTOC WWVA R-Donald Novis, Tenor
KECA KLS KFSD KGA KJR KOA KPOKSD WAPI WEAF WFISR WFI W!IO WIS WMAQ WOC WSAI WSB WSM WWJ WWNC

## B - Lowell Thomas

CKGW KDKA WBAL WBZ WBZA WGAR WHAM WJR WJZ WIW E-7:00 p.m., C-6:00, M-5:00, P-4:00 R - Harriet Lee and Her Leaders
KFI KFSD KGO KHQ KOA WBLN WEAF WJAR WMAQ WTAG

## C Myrt and Marge

CKOK KRLD WABC WADC WBT WC. 10 WCAU WDRC WEAN WFBL

WGR WHK WJAS WKRC WMAL WNAC WOKO WSPD WWVA
B - Amos 'n' Andy
CKGW KDKA WBAI WBZ WBZA WCKY WHLA WGAR WHAM WIOD WJAX WJR WJZ WLW WPTF WRC WRVA
E-7:15 p.m., C-6:15, M-5:15, P-4:15 C-Sid Gary
ChOK KFAB KFBK KFI KFPY $\mathrm{KGB} \mathrm{KL} / \mathrm{KMBC} \mathrm{KMOX} \mathrm{KOH}$ KRLD ISSC. K KirH KVI KVOR WABC WaCO WADC WBCM wBIG WBRC WBT WCAH WCAO WCAU WCCO WDBJ WDOD WDRC WEAN WFBM WGR WISN WJAS WKBN WLAC WLBW WLBZ WAAL WMT WNAC WNAX WNOX WOKO WORC WQAM WSJE WTAQ WTAR WWVA

## R-Wheatenaville, Ray Knight

KHQ WDAF WEAF WEEI WGY WHO WJAR WLIT WMAQ WOC WOW WRC WTAM
B-Tastyeast Jesters
KDİ WBAL WBZ WBZA WCKY $\mathrm{WJ} / \mathrm{h}$
E-7:30 p.m. C-6:30 M-5:30 P-4:30 C-Three X Sisters
WABC WCAO WCAU WDRC WEAN WFBL WFEA WGR WHEC WlIP WJAS WLBZ WMAL WNAC WOKO WORC
A - Billy Jones and Ernie Hare
WBFN WCAE WCSII WDAF WEAF WEEL WFBR WFLA WGY WIOD WIS WJAR WLIT WMAQ WOW WRC WRVA WSAI WTAG WTAM WTIC WWNC

## B-Stebbins Boys

KDEA KFI KGO KGW KHQ KOA KOMO KSL KWh WBAI, WBZ WBZA WCKY WENR WGAR WLAM WJR WJ/ WREN
E-7:45 p.m., C-6:45, M-5:45, P-4:45 c - Tito Guizar, Tenor
CFRB CKOK KFAB KFII KLZ KMBC KRLD KSC. KTRH WABC WBBM WBCM WBIG WBRO WBT WCAH WCAO WCAU WDAE WDB. WDBO WDOD WDRC WEAN WFBL WFBM WFEA WGR WGST WHAS WHEC WHK WHP WISN WJAS WKBN WMAL WNAC WNAX WNOX WODX WOKO WORC WQAM WREC WSEA WSPD WTAQ WTAR WTOC WWVA
R - The Goldbergs
KSD WBEN WCAE WCSI WDAF WEAF WEFI WENR WFBR WGY WJak wiat wow wre wsaI WTAG WTAM WWJ
B-Johnny Hart in Hollywood
WBZ WBZ WGAR WHAM WJZ WMAQ

MONDAY-Continued E-8:00 p.m., C-7:00, M-6:00, P-5:00 C-Edwin C. Hill
CKOK KMBC KMOX KRLD KTSA WABC WADC WBBM WBT WCAO WCAU WCCO WDRC WDSU WEAN WFBL WFBM WGR WHAS WHK WJAS WhRC WLaC WMal WNAC WOKO WSI'D

## R - Soconyland Sketches

WBEN WCSI WEAF WEEI WGY war wTaG wTic

## B - Carnation Contented Program

CFCF CKGW KDKA KFYR KOIL KPRC KSTP KVOO KWK WBAL WCHY WEBC WFAA WFLA WHAM WIOD WJAX WJZ WKY WLS WMC WOAI WIPTF WREN WRVA WSB wSM WTMJ
E-8:15 p.m., C-7:15, M-6:15, P-5:15 C-singin' Sam
CKOK RMBC KMOX WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WGR WHK WJAS WKRC WMAL WNAC WOKO WSI'D
E-8:30 p.m., C-7:30, M-6:30, P-5:30 C - Kate Smith, La Palina
CKOK KFAB KFH KFJF KMBC KMOX WABC WADC ABCM WCAH WCAO WCAU WCCO WFBL WFBM WGN WGR WHAS WHEC WHK WISN WJAS WKBN WKRC WMAL WOKO WSPD

## R - The Revelers, Quartet

CFCF CKGW KPRC KSD KTBS KTHS KVOO WAPI IWBEN WCAE WCSH WDAF WEAF WEEI WFAA WFBR WYLLA WGY WHO WIOD WIS WJAR WJAX WJDX WKY WLIT WMAQ WMC WOAI WOC WOW WPTF WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTIC WWJ WWNC

## B-Red and Ramona

KDKA KFYR KOIL KWCR WBAL WBZ WGAR WIIAM WIBA WJZ WLS WREN WTMJ
E-8:45 p.m., C-7:45, M-6:45, P-5:45 C -Fu Manchu Mystery Drama
CFRB CKOK KFBK KFH KFPY KGB KLRA KLZ KMBC KMOX KOH KSCJ KTliH KVI kVOR WABC WADC WBCM WBIG WBRC WBT WCAH WCAU WCCO WDB.J WDOD WEAN WFBM WFEA WGR WISN WJAS WKBW WLAC WLBW WLBZ WMBD WMT WNAC WNAX WNOX WORC WOWO $\because P G$ WQAM WREC WSBT WSJS WTAQ WTAR

## B - Pat Barnes in Person

KDKA WBAL WBZ WBZA WGAR WHAM WJR WJZ WLS WLW
E-9:00 p.m., C-8:00 M-7:00, P-6:00 R-A. \& P. Gypsies
KSD WBEN WCAE WCSH WEAF WEEI WGY WHO WJAR WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ
$B-S i n c l a i r$ Wiener Minstrels
KDKA KFYR KOIL KPRO KSTP KTBS KVOO KWCR KWK WBAL WBZ WBZA WDAY WEBC WFAA WrLA WGAR WHAM WIBA WIOD WIS WJAX WJDX WJZ WKY WLS WMC WOAI WPTF WREN WRVA WSB WSM WSMB WTMJ WWNC
E-9:15 p.m., C-8:15, M-7:15, P-6:15 C - Mills Brothers
CKOK KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL

WGN WHAS WHEC WHK WJAS WKBW W KRC WMAL WNAC WOKO WSPD
E-9:30 p.m., C-8:30, M-7:30, P-6:30 C - Evening in Paris Mystery
CKOK KMBC KMOX WABC WADC WBT WCAO WCAU WCCO WEAN WrBL WGN WHAS WHEC WHK WKBW WKRC WMAL WNAC WOKO WOWO WSPD

## R-Parade of the States

CFCF CKGW KDXL KFI KFYR KGIR KGO K(JW KHQ KOA KOMO KPR( KSD KSTP WBEN WCAE WCSH WDAF WEAF WEEI WENR WFAA WFBR WGY WHO WJAR WKY WLIT WMC WOAI WOC WOW WRC WSAI WSB WSM WTAG WTAM WTIC WTMJ WWJ
E-10:00 p.m., C-9:00, M-8:00, P-7:00 C - Music That Satisfies
CKOK KDB KDYL KERN KFBK KFH KFJF KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KRLD KTRH KTSA KYI KWG WABC WADC WBRC WBT WCAO WCAU WCCO WDBJ WDRC WDSU WEAN WFBL WFBM WGN WGST WHAS WHEC WHK WISN WJAS WKBW WKRC WLAC WLBZ WMAL WMBG WMT WNAC WOKO WOWO WPG WREC WRUF WSPD WTAR

## R-National Radio Forum

KFSD KFYR KGHL KGI? KGO KGW KOA KOMO KPRC KSD KSL KSTP KTBS KYOO WBEN WCSH WDAY WEAF WEBC WEEL WENR WYLA WGY WHO WIBA HIOD WJAR WJDX WKY WLIT WMC WOAI WOC WOW WPTF WRC WRVA WSAL WSB WSM WTAG WTAM WHJ WWNC

## B-Phillips Lord, Country Doctor

CFCF CKGW KDKA KOIL KWCR hWK WBAL WBZ WBZA WCKY WGAR WHAM WJR WJZ WMAQ WREN
E-10:15 p.m., C-9:15, M-8:15, P-7:15 C-Easy Aces
CFRB CKOK KDB KERN KPBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KSL KVI KWG WAAB WABC WADC WCAO WrCAU WCCO WDRC WEAN WFBL WFBM WGN WHAS WHK WJAS WKBW WKRC WMAL WOKO WOWO WSED

## E-10:30 p.m., C-9:30, M-8:30, P-7:30 B - Dramatic Sketeh

CFCF KDKA KFYR KOIL KTBS KWCR KYW WBAL WBZ WBZA WCKY WGAR WHAM WIBA WIOD WIS WJAX WJDX WJR WJZ WKY WMC WREN WSB WSM WWNC C-Charles Carlite, Tenor
KLRA WAAB WABC WDAE WDBJ WDBO WDOD WDRC WDSU WFEA WGST WLAC WLBZ WORC WQAS WREC WSFA WSIS WTAR WTOC E-10:45 p.m., C-9:45, M-8:45, P-7:45 C-Myrt and Marge
KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMBC: KMJ KMOX KOIN KOL KSL KVI KWG WBBM WCCO WDSU WFBM WILAS WLAC C-Col. Stoopnagle and Budd
CFRB CKOK WAAB WABC WADC WBCM WDRC WFBL WFEA WIEC WHK WJAS WKBW WLBZ WOKO WORC

B-Mildred Bailey
CFCF KDKA KSTP KTBS KHCR WBAL WCKY WGAR WHAM WIBA WIOD WIS WJZ WKY WMAQ WMC WREN WWNC
E-11:00 p.m., C-10:00, M-9:00, P-8:00 C-Edwin C. Hill
KERN KFBK KFPY KFRC KGB KHJ KLaZ kMJ KOIN KOL KSL KVI KWG

## C- Howard Barlow's Symphony

CFRB CKOK KLLRA KLZ KMBC KSCJ KTRH KVOR WAAB WABC WACO WADC WBCM WCAH WCAO WDAE WDBJ WDBO WDOD WDRC WDSU WFAN WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIP WISN WKBW WKRC WLAC WLBZ WMAL WMT WNAX WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WTAR WTOC B - Amos ' $n$ ' Andy
KDYL KFI KFSD KGO KGW KHQ KOA KOIL KOMO KPRC KSTP KTHS KWK WBAP W11LF WEBC WENR WIBA WJDY WKY WMAQ WMC WOAI WREN WSB WSM WSMB WTAIJ

## R - William Scotti and Orchestra

CFCF WEAF WEEI WPBR WFLA WHO WIOD WIS WJAR WLIT WOC WRC WTAG WTAM WTIC WWJ WWNC
E-11:15 p.m., C-10:15, M-9:15, P-8:15
R-Billy Jones and Errie Hare
KDYL KFI KFSD KGO KGIV
KDYL KFI KFSD KGO KGU kHQ KOA KOMO KTAR
E-11:30 p.m., C-10:30, M-9:30, P-8:30 C - Guy Lombardo and Orchestra CFRB CKOK KFH KIRA KLZ KMBC KSCJ KTRH KVOR WAAB WABC WACO WADC WBCM WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WGST WHAS WHEC WHK WHP WIBW WISN WKBW WKRC WLAC WLBZ WMAL WMBD WMT WNAX WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WTAR WTOC
R - Ben Bernie and Orchestra
WEAF WEFI WFBR WJAR WLIT WRC WTAG WTIC
E-12:00 m., C-11:00, M-10:00, P-9:00 c -- Eddie Duchin and Orchestra CKOK KDYL KFAB KFBK KFH KFJF KLRA KMBC KMOX KOL KRLD KSC.J KTPH KYOR WABC WBCM WBRC WBT WCAH WCAU WCCO WDAE TOBJ WDBO WDOD WDSU WEAN WPBL WFBM WGL WGST WHAS WHEC WHIP WIBW WISN WKBN WEBW WLBW WMAL WMBD WNAC WNAX WNOX WOKO WPG WQAM WREC WSFA WSPD WTAR WTOC WUVA

## B-Clyde McCoy's Orchestra

KDKA KWCR KYW WBAL WJZ WRC
R - Roger Wolfe Kahn Orehestra
CKGW KFYR KPRC KSTP KTBS WAPI WCAE WCKY WDAF WDAY WEAF WENR WFBR WFLA WHO WIBA WIOD WIS WIIT WMAQ WMC WOC WRYA WSB WSMB WTAM WWJ WWNC

[^2]
## TUESDAY

E－8：30 a．m．，C－7：30，M－6：30，P－5：30 H－Checrio，See Mondas
E－9：00 a．m．，C－8：00，M－7：00，P－6：00 C Little Jack Little，See Monday
E－10：15 a．m．，C．9：15，M－8：15，P－7：15 B－Clara，Lu＇n＇Em，Ser Monday
E－12：30 p．Ts．，C－11：30，M－10：30，P－9：30
c－Columbia Revue，Sep Monday
B－National Farm and Home，See Mon．
E－5－45 p．m．，C－4：45，M－3：45，P－2：45
B－Little Orphan Annie，See Monday
E－6：00 p．m．，C－5：00，M－4：00，P－3：00 C－Current Events，Kaltenhorn
CKOK KFH K゙GB KL\％KMBC KOH KSCJ KTRH KVOR WAAB WABC WICO WBIG WBRC WBT WCAH WCAO W＇1）UE WDBJ WDBO WDOD WDRG WHAN WFBL WFEA WHAS WJEC WIBH WIP WISN WJAS WKBN WKBW WLAC WLBW WLBZ WMAS WMT WさAX WNOX WOKO WORC WOWO WQLM WREC WSBT WSEA WSJS WTAQ WTAR WTOC WHVA
R－Waldorf－Astoria Orch．，See Mon E－6：30 p．m．，C．5：30，M－4：30，P－3：30 C－Jack Miller and Orchestra
KLRA WABC WBIG WBRC WDBJ WDBO WDOD WDSU WFEA WGST WNOX WORC WIREC WSFA WTAR WTOC
E－6：45 p．m．，C－5：45，M－4：45，P－3：45 R－Back of the News in Washington
KFI KRSD KGHL KGIR KGO KOA KNi）KTAR WAPI WPAF WFBR WTI WIOD WIS WJAR WJDE WAAQ WOW W＇PTF WRC W＇SM WSMB WTAG WWNC
B－Lowell Thomas，See Monday
C－Keenan and Phitlips
CKOK KFH KL\％KMBC KSC． KTRH KYOL WAAB WACO WaDC WBCM WCAH WCAO WDAE WDBJ WDBO WDOD WDSU WFBM WFLA WGST WHAS WHP WISN WJAS WKBW WERC WLAC WLBW WIBBZ WMT WNAS WORC WQAM WREC WSBT WSJS WTAQ WTAR WTOC
E－7：00 p．m．，C－6：00，BN－5：00，P－4：00 R－Mid－Week Hymis Sing
KEI KGIR KGO KO．KSD KTAR WAPI WBES WEAF WIAR WJDA WMAQ WSII WSMB WTAG
C－Myrt and Marge，See Monday
B－Amos＇n＇Andy，Sec Monday
E－7：15 p．m．，C－6：15，M－5：15，P－4：15 R－Ray Knight，Se Monlay
E－7：30 p．m．，C－5：30，M－5：30，P－4：30 R－Ray Perkins
KSD KYW W゙SEN WCAE WCSH WEAF WEEI WFBR WFI WGI WHO WJAR WOC WOW WRC WSAI W＇IAG WTAM WWJ
B－Stebbins Boys，See Monday
E－7：45 p．m．，C－6：45，M－5：45，P－4：45 C－Chase $\neq$ Sanhorn，Georgie Price CHOK KMBC KMOX WABC WBBM WCAO WCAU WGR WHK WJAS WKRC WNAC WOKO
R－The Goldhergs，See Monday
B－Jolinny Hart See Monday
E－8：00 p．m．，C－7：00 M－6：00，P－5：00 R－Blackstone，Sanderson－Crumit
KSD KSTP KYW WBEN WCAE WCSH WDAF WEAF WEBC WEEI WFI WGY WHO WJAR WOC WOW WRC WSAI WTAG WTAM WWJ

B－You and Your Government
CFCF CKGW KDKA LDYL KEX KFSD KGIR KJR KOA KOLL KPO KTAR KTBS KWCR KHK WBAL WBZ WB7A WCKY WENR IVFL． WGAR WHAM WIOD WIS WIZ WKY WMC WPTF WRLN WSB WSM WWNC

## C－Abe Lyman and Orchestra

（KOK KMBC KMOX WAls：WADC WCAO WCAU WUDRC WHAN WTBI WFBM WGN WGR WHAS WHK WTAS WKRC WMAL WNAC WOKO WSPD
E－8：15 p．m．，C－7：15，N－6：15，P－5：15 C－Edwin C．Hill
CKOK KMBC KMOX K\｜LD KTSA WABC WADC WBBN WBT WCAO WCAU WCCO WDR（ WDSE WHAN W1EBL WFBM WGR WHAS WHK WJAS WKRC WLAC WMAL WNAC WOKO WSPD
E－8：30 p．m．，C－7：30，M－6：30，P－5：30 C－Kate Smith，See Monday
B－Adventures in Health
KDKA KOLL KHCR KWK HBNL WBZ WHZA WHAM WJR WJZ WLS WREN
R－Wayne King and Orchestra
KSD WBEN HCAE WCSH WEAE WLBC WEEI WFBH WFI WGY WOO WJAR WOC WOW WRC WRVA WEAI WTAG WTAM WTAJJ WWJ

## E－8：45 p．m．，C－7：45，M－6：45，P－5：15 C－Musical Fast Freight

CKOK KFll KFJF KLRA KMBC KMOX WAAB WABC WADC WRBM WC：SO HCAV WI（＇O WDAE WDBJ WDBO WDRC WFAN WFBL WFBM WHK WJAS WKBW WKRC WMAT WOKO WOWO WQAM WSPD WTOC B－Pat Barnes，See Mondiy
E－9：00 p．m．，C－8：00，8．7－7：00，P－6：00 C－Music That Satisfies
CKOK KDB KERN K KBK KFH KFJF KFPY KFRC KGB KHJ KLRA KL／KMBC KMJ FMOX KOH KOIN KOL KRLD KSL KTRI KVI KWG WABC WADC WBRC WBT WC．IO WCAU WCCO WDBJ WDRC WDSU WEAN WFBL WFBM WGS WGST WHAS WHEC WHK WISS WJAS WKBW WKRC WLAC WLBZ WMAI WMBG WMT WNAC WOKO WOWO WPG WIREC WSID WTAR

## R－Ben Bernie and Orchestra

KPVR KOA KlRC KSTP WPAP WBEN WCAE WCKY WCSH WDAF WDAY WEAF WHEI WFBR WFI WGY WHO WTJR WKY WLS WMC WOAI WOC WOW WRC WRVA WS．II WSB WSM WSMB WTAG WTAM W゙WJ

## B－Musical Memories

KDKA KWK WBAL WB\％WBZA WHAM WJR W．JZ WMAQ WREN

## E－9：15 p．m．，C－8：15，M－7：15，P－6：15

 c Threads of Happiness（KOK KDB KDRN KFBK KFH KIJF KFPY KFRCKGB KHI，KLRA KLZ KMBC K\II KMOX KOIN KOL KRLD KSL KTRH KV KWG WAlsC WADC WBRC WBT WCAO WCAU WCCO WD（H）WDRC：WDSU WJAN WFBL WFBM WG V WGST WHAS WHK WJAS WKBW WKRC WLAC WMAL WNAC WOKO WOWO WSPD WTAR
E－9：30 p．m．，C－8：30，M－7：30，P－6：30
C Eno Crime Cluh
CKOK KMBC KMOK WABC WADC

WCAO WCAU WDRC WLAN WFBL WGN WHK WJAS WKBW WKRC VMAT，WNAC WSPD
R－Ed Wynn－Don Voarhees
CFCF KFI KFSD KFJR KGHL KGIR KGO KGW KITQ KOA KOMO KPR（：KSD KSI，KSTP KTAR KTBS KVOO WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFEI WFBE WFI WGY WHO WIBA WIOD WIS WJAR WJAX WWDX WKY WMAQ WMC WOAI WOC WOW WPTV WRC WRVA WSNI WSB WSAHB WTMG WTAM WTMJ WWJ WWNC

## B－Friendship Town

KDKA KOID KW゙K KYW WBAT WBZ WB\％WGAE WHAM WJR WHZ WREN
E－10：00 p．m．C－3：00 M－8：00，P－7：00 C－Jay C．Flippen－cies
CFRB CHOK KDYI，KFAB KFBK KFH KFJF KlPY KHJ kIRA kLZ EMBC KMOX KOL KRLD KTRH KVOR WABC WA（\％WBCX WBIG WBRC WBT WCAH WCAO WCAU WCCO WDAE WI B I HIMBO WDOD WDRC WDSU WFBJ WFBME WFEA WGI WGST WHAS WHEC WHP WIBW WTSN WJAS WFBBH WKBN WKBW WMAL WNAC WNAXWNOX WODX WORC WQAM WREC WPUF WSPD WTAQ WTAR WTOC WWVA R－Lucky Strike Dance Hour
KFI KPSD KPJR KGO FGW KHQ KOA KOMO KPRC KSD）KSL，KSTP KTAR KTBS KTHS LVOO WBAP WBEN WCAE WCSH WDAF WDAY WEAF WHBC WEEI WFNR WFBR WFI WFLA WGY WHO WIB W WOD WIS HJAR WJAY W．IDX WKY WMC WOAS WOC WOW WRC WRVA WSAI WSEB WSAE N゙SMB WTAG WTAM WTMT HWJ WWNC
B－Phillips Lord，See Momdy
E－10：15 p．m．，C－9：15，M－8：15，P－7：15 B－Sigmund Spacth，Tune Detective
CFCF KWCR WBZ WB\％：WViAR WJZ
E－10：30 p．m．，C－9：30，H月－8：30，P－7：30
B－Dramatic Sketeh，See Monday
C－Charles Carlile，He Monday
E－10：45 p．m．，C－9：45， $\boldsymbol{H}$－8：45，P－7：45 C－Myrt and Marge，See Monday B－Jane Froman and Orehestra
CFCH KWK WBAL WCKY WGAR W．JR W．JZ Wl．W WREN
E－11：00 p．m．，C－10：00，閣－9：00，P－8：00 C－Columbia Symph．Orch．，See Mon．
8 －Amos＇n＇Andy，Sce Monday

## E－11：15 p．m．，C－10：15，M－9：15，P－8：15

 B－National Grand OperaCFCl C＇KGW KFIRKGilR KOA KPO KPRC KSTP KTBS KWK WBUL WBZ WHZ．WCKY WCBC：WCNR WFEA WGAR WHADI WIBA WIS W．J！W\％\％WKY WMC WRC WREN WSM WWNC
E－11：30 p．m．，C－10：30，M－9：30，P－8：30 C Isham Jones and orchestra
CFRB CKOK KFH KLKA KMBC KSC．KlRH KVOR WAAB WABC WACO WADC WBCME WCAII WCAO WCAU WCCO WDAR WDMJ WDBO WDOD WDRC HDSU WGST WHEC WllP WISN WKBW WKRC WLAC WISBC WMAL WMBD WM＇T WNAS WOKO WORC WPG WQAM WREC WSBT W＇SFA WSJS HTAR W＇IOC

## TUESDAY-Continued

E-12:00 m., C-11:00, M-10:00, P-9:00 c- Don Redman and Orchestra CKOK KLZ KMBC KMOX ISSCJ KTRH KVOR WABC WBCM WCAH WCAU WCCO WDSU WFBL WGST WHas WHEC WHP WIBW WISN WKBW WKRC WLAC WMBD WMT WNAX WOKO WPG WREC WSBT WTOC

## R-George Olsen and Orchestra <br> WCAE WLAF WFBR WGY WMAQ WTAM WWJ WWNC

## B - Paul Whiteman and Orchestra

KDFA KWCR KWK WBAL WBZ WBZA went wGar wJZ whc WREN HTMMJ
E-12:30 a.m. C-11:30, M-10:30 P-9:30 R-Ben Bernie and Orchestra
KDYL KFI KFSD KGO KGW KHQ KOA KOMO KTAR

## WEDNESDAY

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, 用-7:00, P-6:00 C - Little Jack Little, See Monil:y
E-10:15 a.m., C-9:15, M-8:15, P-7:15 B Clara Lu 'n' Em, See Monday
E-12:00 p.m., C-11:30, M-10:30, P-9:30 C-Columbia Revue, See Monday
B - National Farm and Home, See Mon
E-5:45 p.m., C-4:45, R-3:45, P-2:45
B - Little Orphan Annie, See Monday
E-6:00 p.m., C-5:00, M-4:00 P-3:00 B - B. A. Rolfe and Orchestra
WBAL WCKY WGAR WJZ WLW WMAQ WREN
R - Waldorf-Astoria Orch. See Monday - Vaughn DeLeath

CFRB CKOK KFH KLZ KSC.J ETRH KVOR WAAB WABC WACO WADC WBCM HCAH WCAO WDAE WDB.I WDBO WDOD WDRC WDSI WFAN WFBL WFEA WGST WHAS WHEC WHK WIP WISN WJAS WHBH WKBW WIad WLBW WLBZ WMAL WMT HNAX WOKO WQAM WREC WSBT WSPA WSJS WTAQ WTAR WTOC WWVA
E-6:30 p.m. C-5:30 M-4:30 P-3:30 C-William Vincent Hall
KLRA WAAB WABC WBIG WBRC WDAE WDBJ WDBO WDOD WDSU WFEA WGST WORC WRLC WSFA WTAR WTOC

## B - Sheer Romance

KDKA hOIL WBAL WHAM WJZ WMAQ WREN
R-Harding Sisters See Monday
E-6:45 p.m., C-5:45, M-4:45, P-3:45
C Funnyboners, See Monday
R - Donald Novis, See Monday
B - Lowell Thomas, See Monday
E-7:00 p.m., C-6:00, Wh-5:00 P-4:00
C - Miyrt and Marge, See Monday
B - Amos 'n' Andy, See Monday
E-7:15 p.m. C-6:15, PA-5:15, P-4:15 B $\rightarrow$ Royal Vagabonds, Ward Wilson KDKA hFI KGO KGW KHQ KOA KOIL KOMO KPRC KWK WAPI WBAL WBZ WBZA WCKY WEBC WGAR WIOD WJAX WJDX WJZ WKY WMAQ WMC WOAI WPTF WREN WRYA WSB WSM WSMB WTMJ WWNC

R-Ray Knight See Monday
E-7:30 p.m., C-6:30, M-5:30, P-4:30
B - Stebbins Boys, See Monday
C - Three X Sisters, See Monday
R - Jones and Hare, See Monday
E-7:45 p.m., C-6:45, M-5:45, P-4:45 C- Angelo Patri
CKOK KMBC KMOX WABC WCAO WCAU WCCO WrBL WGR WHAS WHK WJAS WKRC WMAL WNAC R-The Goldbergs, See Monday
B - Johnny Hart, See Monday
E-8:00 p.m.; C-7:00, M-6:00, P-5:00 C-Edwin C. Hill, See Monday
R - The Shadow
WBEN WCSII WEAF WEEI WFRR WGY WJAR WLIT WRC WTAG WTIC
E-8:15 p.m., C-7:15, M-6:15, P-5:15 C-Singin' Sam, See Monday
E-8:30 p.1n., C-7:30, M-6:30, P-5:30 C - Kate Smith, See Monday
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 - Musical Fast Freight, See Tuesdiay Whitman's Sampler, Jack Denny

 KPRC KSD KTBS KVOO WBEN WCAE WCKY WEAF WFAA WFBR WFLA WGY WHO WIOD WIS WJAX WJDX WKY WLIT WMAN WAC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAM WW, WWNCE-9:00 p.m., C-8:00, M-7:00, P-6:00 c - Guy Lombardo-Burns and Allen
CKOK KFJF KMBC KMOX hTRII KTSA WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WHK WJAS WKBW WKRC WMAL WHK WJAS WhBW WKRC WMAL, WNAC WOKO WOWO WRR WSPD
R-Goodyear Program
KFYR KPRC KSD KSTノ KTjIS KVOO KYW WBEN WCAE WCSH WDAY WEAF WEBC WEEI WFAA WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WKIT WMC WOAD WOC WOW WPTF WRC WRVA WSAL WSB WSM WSMB WTAG WTAM WTIC WTMJ WWJ WHNC

## B-Sherlock Holmes

CFCl ${ }^{\text {C }}$ CEGW KDKA KWCR KWK WBAL WBZ WBZA WGAT WHAM WJR WJZ WLW WREN
E-9:30 p.m., C-8:30, M-7:30, P-6:30 C Eno Crime Club, See Tuesday R - The Pridgets, Comedy Sketch KDYL KFI KF YR KGO KGW KHQ KOA HOMO KPRC KSD KSTP ETAR KYOO WBEN WCAE WCSH WDAF WDAY WRAF WEBC WEEI WENR WFAA WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLIT WMC WOAI WOC WOW WRC WSAI WSB WSM WSMB WTAG WTAA WTIC WTMJ WWJ WWNC
E-10:00 p.m., C-9:00, M-8:00, P-7:00 C - Music That Satisfies, See Monday R-Corn Cob Pipe Club
KFI KGHL KGliz KGO KGW KHQ KOA KOMO KSD KSL WBEN WCAE WCSH WDAF WEAF WEEI WENIR WFBR WGY WHO W.JAR WLIT

WOC WOW WRC WRVA VSAI WTAG WTAM WTIC WWJ
B - Phillips Lord, See Monday
E-10:15 p.m., C-9:15, M-8:15, P-7:15
C-Easy Aces, See Monday
B-Jack Fulton, Tenor
KPYR WBAL WEBC WELA WIBA WIOD WIS WJAX WJZ WWNC
E-10:30 p.m., C-9:30, M-8:30, P-7:30 B - Dramatic Sketch, See Mon.lny
E-10:45 p.m., C-9:45, M-8:45, P-7:45
C-Myrt and Marge, See Mondav
C - Stoopnagle and Budd, See Monday B - Mildred Bailey, See Monday
E-11:00 p.m., C-10:00, M-9:00, P-8:09
C Columbia Symph, Orch., See Mon. R-Nellie Revell
CFCF CKGW IKSD WEAF WGY WLIT WRC WHJ
B - Amos 'n' Andy, See Monday
C - Edwin C. Hill, See Mondiay
E-11:15 p.m., C-10:15, M-9:15, P-8:15 C - Angelo Patri
KDB KERN KFBK KFPY KFRC KGB KHJ KMJ KOIN KOL KSL kiI KWG
R - Jones and Harc, See Monday
E-11:30 p.m., C-10:30, M-9:30, P-8:30
C - Isham Jones, See Tuestay
E-12:00 m., C-11:00 M-10:00 P-9:00
C-Don Redman, See Tuesilay
R - Roger Wolfe Kahn, Sce Nonday
E-12:15 a.m., C-11:15, M-10:15, P-9:15 B -- Sherlock Holmes
KDYl, KFI RFSD KGHL KGIR KGO KGW KIIQ KOA KOMO KTAR

## THURSDAY

E-8:30 а.тा., C-7:30, M-6:30, P-5:30 R-Cheeris, Sce Mon lay
E-9:00 a.m., C-8:00, M-7:00, P-5:00 C - Little Jack Little, See Mon lay
E-10:15 p.m., C-9:15, M-8:15, P-7:15 B - Clara, Lu 'n' Em, See Monday
E-12:30 p.m., C-11:30, M-10:30, P-9:30 C-Columbia Revue, See Monday B - National Farm and Home See Mon.
E-5:45 p.m., C-4:45, H-3:45, P-2:45 B - Little Orghan Annie, See Monday
E-6:00 p.m., C-5:00, RA-4:00, P-3:00 C-H. Y. Kaltenborn, See Tuesd y R - Waldorf-Astoria Orch., See Monday
E-6:30 p.m., C-5:30 M-4:30, P-3:30 B - Old Songs of Church
KEX hFSI KGA KJR KOA KOI\& KP() KTBS KWCR WBAL WGAR WIZ WKY WLW WMAQ WTEEN
E-6:45 p.m., C-5:45, M-4:45, P-3:45 B - Lowell Thomas, See Monday
E-7:00 p.m., C-6:00, M-5:00, P-4:00 C - Myrt and Marge See Monday
B - Amos'n' Andy, See Monday
$\mathbf{R}$ - The Rollicikers, Male Quartet
KGO KOA WAPI WBEN WEAF WFI WJAR WMAQ WTAM
E-7:15 p.m., C-6:15, M-5:15, P-4:15
R - Ray Knight, Sce Monday
B - Ward Wilson, See Wednesday
E-7:30 p-m., C-6:30, M-5:30, P-4:30
R - Ray Perkins, See Tuesday
B - Stebbins Boys, See Moulay
E-7:45 p.m., C-6:45, M-5:45, P-4:45
C-Georgie Price, See Tuesday
R - The Goldbergs, See Monday
B - Johnny Hart, See Monday

## THURSDAY-Continued

 E-8:00 p.m., C-7:00, M-6:00, P-5:00 R-Fleischmann, Rudy ValleeCFCF CKGW KFI KFYR IGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP KTAR KVOO WAPI WBAP WBEN WCAE WCKY WCSH WDAF WDAY WEAF WEBC WEEI WFBR WPI WFLA WGY WHO WIOD WJAR WJAX WJDY WKY WMAQ WMC WOA1 WOC WOW WPTF WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ
C - Abe Lyman, See Tuesday

## B - Regimentalists, Mate Chorus

KDKA KOIL KWCR KWK WBAL WENR WGAR WHAM WJZ WREN

E-8:15 p.m., C-7:15, M-6:15, P-5:15 B - Sigmund Spaeth, Song Sleuth
KDK KOIL KWK WBZ WBZA WGAR WHaM WJR WJZ WLS WLW WREN

## C-Canada Dry, Jack Benny

CFBB CKAC CKOK KMBC KMOX WABC WACO WADC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WHK WJAS WKRC WMAL WNAC WOKO WOWO WPG WSPD
E-8:30 p.m., C-7:30, M-6:30, P-5:30 B - Rin Tin Tin Thriller
KDKA KOIL KWK WBZ WRZA WGAR WHAM WJZ WLS WLW WREN
E-9:00 p.m., C-8:00, M-7:00, P-6:00 C - Music That Satisfies, See Tuesday R-Maxwell House Show Boat KDYL KFl KFSD KGO KGW KHQ KOA KOMO KPRC KSD KTAR KTBS WAPI WBEN WCAE WCSH WDAF WEAF WEEI WFBR WFI WFLA WGY WHO WIOD WIS WJAR WJAX WKY WMAQ WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ WWNC
B-Death Valley Days
KDKA KOLL KWCR KWK WBAL WBZ WRZA WENR WGAR WHAM WJR WJZ WLS WIW WREN
E-9:15 p.m., C-8:15, M-7:15, P-6:15 C - Mills Bros. See Monday
E-9:30 p.m., C-8:30, M-7:30, P-6:30 C-Omar Khayyam
CKOK KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KBMC KMJ KMOX KOIN KOL KSL KVI KWG WABC WADC WCAH WCAO WCAU WCCO WDRC WEAN WTBL WFBM WGN WHAD WHAS WHK WJAS WJSV WKBW WKRC WNAC WOKO WOWO WSPD
B-Virtuosos, Erno Rapee
KDKA KDYL KFI KFSD KGO KGW KHQ KOA KOLL KOMO KPRC KSTP KTAR KWCIR KWK KYW WAPI WBAL WBAP WBZ WBZA WEBC WFLA WGAR WHAM WIOD WJAX WJDX WJR WJZ WKY WLW WMC WOAI WREN WRYA WSB WSM WSMB WTMJ WWNC

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C-Andre Kostelanetz Presents
CFRB CKOK HLRA KLZ KMBC KMOX KSCJ KTRH KTSA KVOR WAAB WABC WADC WBT WCAO WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBL WFBM WFEA WGST WHAS WHEC WHP

WIBW WICC WJAS WKBH WKBW WLAC WLBZ WMAL WMBD WMT WNAX WODX WOKO WORC WPG WQAM WREC WSBT WTAR WTOC R - Lucky Strike, See Tuesday
B - Phillips Lord, See Monday
E-10:30 p.m., C-9:30, M-8:30, P-7:30 B-Three Keys
CKGW IVDKA KWCR WBAL WGAR WHAM WJZ WREN
C Charles Carlile, See Monday
E-10:45 p.m., C-9:45, M-8:45, P-7:45 C - Myrt and Marge, See Monday B - Jane Froman, See Tuesday
E-11:00 p.m., C-10:00, M-9:00, P-8:00 C-Columbia Symph. Orch., See Mon B-Amos 'n' Andy, See Monilay
R - Don Bestor and Orchestra
CFCF KSD WBEN WCAE WEAF WEEI WFBR WFI WFLA WGY WHO WIOD WIS WTAR WOC WOW WRC WTAG WTAM WWJ WWNC

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C - Isham Jones, Sce Tuesday

E-12:00 m., C-11:00, M-10:00, P-9:00 R - Cab Calloway and Orchestra
liSD WCAE WDAF WEAF WFBR WGY WHO WJAR WALAQ WOC WOW WWJ
C - Eddie Duchin, See Monduy
E-12:30 a.m., C-11:30, M-10:30, P-9:30 B - Pacific Serenaders
KFYR KOA KOLJ, KJIRC KTBS KTHS KYOO KWCR WBAI, WENR WFLA WHAM WIBA WJR WJZ WKY WLW WMC WREN WSM WSA13 WWNC

## FRIDAY

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, P1-7:00, P-6:00 C - Little Jack Little, See Monday

E-10:15 a.m., C-9:15, M-8:15, P-7:15
B - Clara, Lu 'n' Em, See Monlay
E-12:30 p.m., C-11:30, $\mathrm{KA}-10: 30, \mathrm{P}-9: 30$ C - Columbia Revue, See Monday
B - National Farm and Home, See Mon.
E-5:45 p.m., C-4:45, M-3:45, P-2:45
8 - Little Orphan Annie, See Monday
E-6:00 p.m., C-5:00, M-4:00, P-3:00 C - Irene Beasley, Sce Monday
R - Waldorf-Astoria Orch., See Monday
E-6:15 p.m., C-5:15, M-4:15, P-3:15 B - Don DeForest and Orchestra
KFYR KOH KSTP KWCR WBAI WGAR WHAM WIBA WJZ WLW WMAQ WREN
E-6:30 p.m., C-5:30, M-4:30, P-8:30 R - William Scotti and Orchestra
KFSD KGO KOA KSD KTBS WCKY WEAF WFI WJAR WTDX WMAQ WMC WHC WSB WTAG WTAM WWNC

[^3]WMC WOW WSB WSMB WTAG WTAM WWNC
8-Lowell Thomas See Monday
E-7:00 p.m., C-6:00, M-5:00, P-4:00
C - Myrt and Marge, See Monlay
B - Amos ' $n$ ' Andy Sce Monday
E-7:15 p.m., C-6:15, M-5:15, P-4:15
B - Ward Wilson, See Wedneslay
E-7:30 p.m., C-6:30, H-5:30, P-4:30
C - Thrse X Sisters, See Monday
R - Jones and Hare, See Monday
B - Stebbins Boys, See Monday
E-7:45 p.m., C-6:45, M-5:45, P-4:45
R - The Goldbergs, See Monday
B - Johnny Hart, See Monday
E-8:00 p.m., C-7:00, M-6:00, P-5:00
C-Edwin C. Hill, See Monday
R - Cities Service Orchestra
CKGW KOA KPRC KSD KSL KSTP KTBS KTHS KVOO KYW WBEN WCAE WCSH WDAF WEAF WEBC WEEI WFAA WFBR WGY WHO WJAR WKY WLIT WOAI WOC WOW WRC WSAI WTAG WTAM WTIC HTMJ WWJ

## B - Nestle's Program

KDKA KOIL KWK WBAL WBZ WBZA WCEY 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
E-8:30 p.m., C-7:30, M-6:30, P-5:30
C March of Time
CKOK KFPY KHJ KLRA KLZ KMBC KMOX KOH KSCJ KTRH KVI WABC WADC WBCA WBIG WBRC WB'T WCAH WCAO WCAU WDAE WDBJ WDBO WDRC WEAN WFBM WFEA WGR WHEC WHK WHP WIBW WISN WJAS WLAC WLBZ WMAL WMT WNAC WNAX WNOX WOKO WORC WOWO WPG WQAM WREC WSBT WSPA WSJS WSPD WTAQ WTAR WTOC
B - Adventures in Health, See Tuesday
E-8:45 p.m., C-7:45, M-6:45, P-5:45
B-Song Fellows, Wale Quartet
KDKA KOLL KWCR KWK WBAL
HBZ WBZA WCKY WFLA WGAR
WHAM WOD WJZ WLS WMC
WRE WSB WWNC
E-9:00 p.m., C-8:00, M-7:00, P-6:00 c Football Show, Christy Walsh
CKOK KDB KPRN KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KRLD KSCJ KVI KWG WABC KSL WADC WCAH WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WHAS WHK WISN WJAS WKBW WKRC WMAL WNAC WOKO WORC WOWO WSPD
R-Cliquot Club
KSD WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WHO WJAR WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

## FRIDAY－Continued

B－First Nighter
KDKA KDYL KFI KFSD KGO KGW KHQ kOA KOIT，KOMO KPRC KSTP KTAR KTBS KWK WBAL WBZ WBZA WCK WHAM WJZ WKY WOAI WREN WTMJ

E．9：30 p．m．，C－8：30，M－7：30，P－6：30 C－To the Ladies，Morton Downey CKOK KMBC KMOX KRLD WABC WADC WCAO WCAU WCCO WDRC WEAN WFRL WFBM WGN WGST WHAS WHK WJAS WKBW WKRC WMAL WNAC WOKO WSPD

## R－Pond＇s Program

KSD WBEN ICAE WCSH WDAF WEAF WENR WFBR WGY WHO WJAR WLIT WOC WOW WRC WSAI WTAG WTAM WWJ

## B－Armour Program，Eddie \＆Ralph

 KDKA KFI KGO KGW KHQ KOA LOIL KOMO KPRC ISSL ISTP KWK WAPI WBAL HBZ WBZA WFBC WFAA WGAR WHAM WIOD WJAS WJR WJZ WKY WMAQ WAC WOAI WREN WRVA WSB WSM WSMB WTMJ WWNC
## E－10：00 p．m．，C－9：00，M－8：00，P－7：00 C－Music That Satisfies，See Monday R－Paul Whiteman and Orchestra

 KFI KFYR KGO KGW KIIQ KOA KOMO KSD KSL KSTP WBEN WCAE：WCSH WDAF WDAY WEAF WLBC WREI WFBR WGY WHO WJAR WLIT WOC WOW WRC URYA WSAI WTAG WTAM WTIC WTMJ WW．JB－Phillips Lord，See Monday

## E－10：15 p－m．，C－9：15，M－8：15，P－7：15 C－Easy Aces，See Monday <br> －Concert Orchestra

CKGW KPRC WBAL WCKY WFLA WGiAR WHAM WIOD WIS WidAX WJZ WKY WMAQ WMC WOAI WREN WRVA WSB WSM WWNC

## E－10：30 p．m．，C－9：30，M－8：30，P－7：30 R－Elgin－Floyd Gibbons

CFCF CKGW KDYL KFI KFSD KFYR KGIIL KGIR KGO KGW KHQ KOA KOMO KPRC KSI KSTP KTAR KTBS WAPI WBEN WCAE WCSH WDAE WDAY WTAF Webc weli wenr wraa wrbir WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDE WKY WIIT WMC WOAI WOC WOW WhC WRYA WSAI WSB WSM WSMB WTAG WTAM WTIC WTAJ WHJ WWNC
B－Three Keys，See Thursday

## E－10：45 p．m．，C－9：45，M－8：45，P－7：45 C－Myrt and Riarge，Sce Monday C－Stoopnagle \＆Budd，Sce Monday B－Mildred Bailey，Sce Monday

[^4]E－11：15 p．m．，C－10：15，M－9：15，P－8：15
$\mathbf{R}$－Jones and Hare，See Monday
E－11：30 p．m．，C－10：30，M－9：30，P－8：30
C－Guy Lombardo，See Monday

## SATURDAY

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

E－9：00 a．m．，C－8：00，1－7：00，P－6：00 C－Little Jask Little，See Monday

E－5：45 P．m．，G－4：45，M－3：45，P－2：45 B－Litlle Orphan Annie，See Monday

E－6：00 p．m．，C－5：00，M－4：00，P－3：00
R－Waldorf－Astoria Orch．，See Morıday B－Litile German Band
KDKA KएX LFSD KFYR KGA KJR KOA KPO KCAR KTBA KhCR WBAL WFIAA WGAP WIBA WIOD WJZ WKY WREN WSB WWNC

## C－The Funnyboners

CFRB CKOK KFH FLZ KSCJ KTRII KVOR WAAB WABC WACO WADC WBCM WBT WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WFEA WGST WHAS WHEC WIIK WIIP WIBW WICO WISN WJAS WKBH WLBW WRRC WLAC WLBU WLBZ WMAL WMT WSAX WOKO WOROWQAM WREC WSBT WSFA WSJS WTAQ WTAI WTOC HWVA

## E－6：30 p．m．，C－5：30，M－4：30，P－3：30 R－Harlem Fantasy

KEX LFSD KGA KJR KOA KPO KTBS WCAE HLAF WIBA WKY WMC WRC WSM WWNC

E－5：45 p．m．，C－5：45，M－4：45，P－3：45
C－Jack Nifler and Orchestra CFRB CHOK KFH KLZ KMBC KMOX KSCJ KTII KVOR WAAB WABC WACO WADC WBCN WBT WC．AH WC10 WCCO WDAE WDBJ WOBO WDOD WDRC WDSU WEAS WFBL WFBM WFEA WGST WHAS WHIC WEP WISN WJAS WKBH WKRC WLAC WLBW WLBZ WMT WNAX WOKO WORC WQ．AM WREC WSBT WSF A WSJS WTAQ WTAR WTOC WWVA
R－Donald Novis，See Monday

## E－7：00 p．m．，C－6：00，M－5：00，P－4：00 C－Frederic William Wile

KFPK KFPY KGB KHJ KMBC KMOS KOH KTVH KVI KVOR WABC WACO WADC WBCM WBEG WアRRC WHT WC＇AH WCAO WCAT WDAE WDRC WFBM WFEA WGL， WGN WGIR WJAS WLAC WIBW WMAL WMT WNAX WNOX WOKO W（LASI WSFI WSPD WTOC WWV． B－Amos＇n＇Andy，See Monday R－George Olsen and Orchestra
KEX KFSD KGA K．JR KO．KPO KTBS WEAF WFI WIBA WIAR WKY WMAQ WMC WOW WRC WSM WTAG

## E－7：15 p．m．，C－6：15，M－5：15，P－4：15

 C－William Vincent HallCFRB CKOK KFBK KFH KFPY KFRC KGB K月J KLZ KMBC KMOX KOH KOL KSC．J KTRII KTSA KVI

KVOR WABC WACO WBBM WBCM WBIG WBRC WBT WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDSU WEAN WGR HGST WHAS WILC WHP WIBW WISN WJAS WKBH WNAC WNAX WNOX WOKO WORC WOWO WQAM WREC WSFA WSPD WTAQ WTAR WTOC WWVA B－Jack Fulton，Jr．，Tenor
INKA KOLL KWCK KWK WBAL WENR WFLA WHaM WIOD WIS WJR WJZ WRES WRVA WWNC

## E－7：30 p．m．，C－6：30，M－5：30，P－4：30 C－Meyer The Buycr

CFRB（KOK KFH KLRA KMisC KMOX KRLD hSCJ K＇lRH KVOR WABC WACO WIDC WBCM WBT WCAH WOAO WCCO WDAE WDB． WDBO WDOD WDRC WISSU WEAN WPAN WFBM WFEA WGR WUST WHAS WHEC WHK WHP WIBW WICC WIP WISN WJAS WLBH WKRC WLAC WLBW WLBZ WMT WNAC WNAX WOKO WORC WOAM WREC WSBT WSPL WSJ＇WTAQ WTAR WTOC WWVA
R－Three Jesters
WBEN HCSH WLAF WFBR WFI WGY WJAR WOW WRC WTAG B－Cuckos Program，Ray Knight
CKGW KEX ktia Kir KOA K＇TBS KWCR WBAL WFLA WGAE WHAM WIBA WJDN WJR WJZ WRES WRVA W＇SU WSME WITNC

E－7：45 p．m．，C－6：45，M－5：45，P－4：45 C－Keenan and Phillips
CTRB CKOK Kr＇H KIRA KMBC KMOS KRLD KSC．J KTRH KVOR WABC WACO WADC WBCM WCAH WC： 10 WCAU WCCO WDAF，WDBJ WDBO WDOD WDRC WDSL WFBM WFHA UGR WGST WHAS WHK WlIP WIBW WICC WISS W＇J．S WKBIT WKRPC WLAC WISBW WLBZ WMT WNAC WNAX WOKO WORC WGAM WREC WSBT WSEA HSJS WTAQ WTAR WTOC WVVA
R－The Goldbergs，See Tuesday

## E－8：00 p．m．，C－7：00，（S－6：00，P－5：00 C－Abe Lyman，Sce Tursday

R－Archer Gibson，Organist
CKGW KFSD KGO KGW KHQ KO． KPRC KSD KTISS WBEN WCSH WEAF WEBC WEEI WFBR WHI WFLA WHO WHB．WIOD WIS W．JAR WKY WMAQ WOC WRC WSAI WS：IB WTAG WTAA WWJ WWNC

E－8：15 p．m．，C－7：15，M．5：15，P－5：15 C－Edwin C．Hill See Nonday B－＂Whoopes＂
CKGiV KDKA KOIL KWCR KWK WBAL WCKY WGAR WHAM WJR WJZ W゙LS い゙REN

## E－8：30 p．m．，C－7：30，M－6：30，P－5：30 B－Trio Romantique

KDKA KWK WBZ WBZA WGAR WH．AM WJH WJZ WMAQ WREN C－Isham Jones and Orchestra CGRB CNOK KDYL KFBK KFH KFJF KFPY IFFRC KGB KHJ KLRA KIZ KMBC KMOX KOH KOL KSC．K＇TRH KVI KVOR WABC WBCM WBIG WBRC WBT WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDSU WEAN WFBL WFBM WFEA WGL WGST WHEC

## SATURDAY－Conimued

WHK WHP WIBW WISN WJAS WKBW WLBW WMAL WNAC WNAX WNON WOKO WORC WPG WQAM WREC WSFA WSPD WFAQ WTAR WTOC WWVA

## R－K－7 Drama

KFI KHYR KGO KGW KOA kOMO KSD ESL KSTP KTBS KVOO KY゙V WBEN WCAE WCSH WDMF WDAY WEAF WEBC WEEI WFBR WFI WFLA WGY WHO WIBA WIOD WJAR WAX WRY HOC WOW WRC WSAI WSM WTAG WTAM WWJ WWNC

## E－8：45 p．m．，C－7：45，M－6：45，P－5：45 B－Muriel Pollock－Vee Lawnhurst

WBAL WBZ WBZA WCRY WGAR WHAM WJR WJZ WMAQ WREN

E－9：00 p．m．，C－8：00， $\mathrm{M}-7: 00, \mathrm{P}-\mathrm{s}: 00$ C－Music That Satisfies，See Tuesday R－Erno Rapee and Orchestra CFCF CKGW KFI KFYR KGO KGW KHQ KOA KPRC KSD KSTP KTA民 よ゙TBS WBEN WCAE WCKY WCSH WDAF WL．AF WEEI HFBR WFl WFlal WGY WHO WIBA WIOD WIS WHAN WKY WMAQ WMC WOAI WOC WRC WSAI WSB W：SMB WTAG WTAM WWJ WWNC

## B－Gus Van，Pickens Sisters

KDKA KOIT KYRC KWCR KWK WAPl WBAL HBAP WB\％WBZA WGAR WHASI WJDS WJR WJZ WLS WMC WREN WSB WSA WSMB

## E－9：15 p．m．，C－8：15，M－7：15，P－6：15 $\mathbf{C}-\mathbf{D o g}_{\boldsymbol{r}}$ Re Mi Girls

CERB CKOK KFH KLRA KLZ KMBC KSCJ KTUH KTSA K Vo？ WAAB WABC WADC WBCM WB＇T WCAI WCAU WCCO Wi）AE WDB． WDBO WDRC WDSU WEAN WFBL WFBM WreA WGST WHAS WH？ WIBW WISN WJAS WKBII WKBW WL，WC WLBW WLBZ WMAL WMBD WMT WNAX WOKO WORC WQAM WREC WSBT WSEA WSJS WTAR WTOC

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E-9:30 p.m., C-8:30, M-7:30, P-6:30 E－S．R．O．，Comedy Sketeh
CFCF CKGV KDKA KWCR WBAL UBZ WBZA WGAR UIIAM WJR WJZ WLN WMAQ HHEN
E－10：00 p．m．，C－9：00，M－8：00，P－7：00 R－Lucky Strike See Tuesday
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E－10：15 p．m．，C－9：15，M－8：15，P－7：15 C－Public Affairs Institute
KDYL KFls K KFH KEJF KFPl KトRC KGB KHJ KLR 1 KLZ KMBC KMOS KOH KOL KSCJ K＇TRH KJSA KVI KVOR VAAB WABG WBBM WBCN WBIG WBRC WBT WC：10 WCCO WDNE WDBS WBBO WDOD WDSU WEAS WPBM WFEA WGST WHAS WHEC WHP WIBW WJAS WKBH WKRUV WLBW WMAL WNAX WNOX WOKO WORC WOWO WPG WQAM WREC WSFA WSPD WTOC

[^5]
## E－10：45 р．m．，C－9：45，M．8：45，P－7：45

 C－Vaughn DeLeathCFPB CKOK KDYL KFAB KFBK KFH KFJF KFPY KFRC KGB KHJ KLZ KMBC KOH KOL KSCJ KTRH KVI KVOR WABC WACO WBCM WBIG：WBRE WCAO WCAU WCCO WDB．WDBO WDOD WDSU WEAN WFBL WFEL WGR WGST WHP WJAS WKBH WMAL WNAC WNAX WNOX WOKO WORC WOWO WQAM WSFA WSPD WTAQ WTAR WTOC WWVA
$\mathrm{B}-$ Twenty Fingers of Harmony
CFCF CKGW KDKA WCKY WG IR WHAM WJZ WIREN

## E－11：00 n．m．，C－10：00，M－9：00，P－8：00 B－Amos＇n＇Andy，See Monduy <br> C－Giy Lombardo and Orchestra

CKOK KDYL KFAB KPBK KFJF KFI＇Y KFRC KCiB KHJ hたRA KLZ KMBC KMOX KOH KOL KRID KNCJ Kl＇PH KTSA KV［ KVOR WABC WBCM WBRC WB＇l WCAiI WC\＆0 WCAU WCO WDA1，WDB． WDBO WDDOD WDSU WEAS HFFBL， WFBAT WGL WGST WHAS WHEC WHK WHP W1BW WISN WKBW H LBW WMAI，WATBO WNAC WNAX WNOK WODX WOKO WOAM WREC WSPI WTAR WTOC WWVA

E－11：15 p．m．，C－10：15，M－9：15，P－8：15
B National Opera，See Tuestay
E－11：30 p．m．，C－10：30，P月－9：30，P－8：30 c－Harold Stern and Orchestra
CFRB CKOK KDY゙L KFAB KFBK KFH KFJF KFPY KFRO KGB KHJ KJRA KIZ KMBG KMOX KOH KRLD KSCJ KTRH KP＇sA KVI KVOR WAAB WABC WBCM Wi3＇＂ WCAO WCCO WDAE WDBJJ WDBO WDOD WDRC WDSU HEAN WFAN WFBAI WGL，WGST WHAS WHEC WHP WIBW WIP WISN WKBW WLBW WMAL WMBD WYAX WNOX WODE WOKO WORC WQAM WREC WSPD WTAR WTOC WWVA R－Paul Whiteman and Orchestra
KSD WCAE WCKY WEAF WELI WFI WGY WJAR WMAQ WRC WTAME WNJ

E－12：00 in．，C－11：00，
CA－10：00，P－9：00
California Nelodiss KFBK KFPY KL\％KMBC KOH KTEH KYOR WABC WADC WBCM WHER WBI WC：II WC．IL WFBL HFBM HGL WHAS WISN WKBW WCAC HMAL HMBD HATT WNAX WNOX WOKO WI＇G WS＇s）WWVA R－Roger Wolfe Kahn，See Monday B－Emil Coleman and Oreliestra
KDHA KOLL KHVCR KWK WBAL WBZ WBZA WGAL WHAM WJZ WREN

E－12：30 a．m1．，C－11：30，M－10：30，P－9：30
R Ben Bernie and Orchestra KOL KPRC KSD ATHS KlOO WBJN WCNE WCKY WDAF WEAF WEBC WFBR WFLA WHO WIBA WIOD WKV WOC WOW WRC WSB WSMB WTAM WWJ WWNC

## SUNDAY

E－11：30 a．m．，C－10：30，M－9：30，P－8：30 R－Major Bowes Family
KEX KFYR KGA KJR hol kPO

KSL KSTP KTBS WAPI WCSH WDAF WEAF WFLA WGY WIOD WLIT WMAQ WMC WPTF WRC WSM WTAM WWJ WWNC

## E－12：00 m．，C－11：00，M－10：00，P－9：00

 $\mathbf{C}$－Salt Lake Tabernacle ChoirCFRB CKOK KFAB KFBK KFPY KGB KL／KMBC KOH KSCJ hTOR WAAB WABC WADC WBIM WCAO WCCO WDB．J WDOD WFBL，WFEA WGR IUHAS WIIEC WHK WISN WHAS WKBN WLBZ WMAL WMBD WMT WNAX WNOX WOKO WORC WPG WQAM WREG WSB＇T WSJS WTAQ WTAR WHVA

## E－12：30 p．m．，C－11：30，M－10：30，P－9：30 R－Legion of the Lost

CKGW KEX KGA hJR KOA KPO KPRC KTBS WAPI WBEN WCKY WDAF WEAF WFBR WFI WFIA WGY WHO WIOD WJAR WKY WMC WOC WRC WSAI WSB WSM WSMB WSYR WTAG WTAM WWNC C－Reis and Dunn
CFRA KDYL KFAB KFBK KFJF KrIRC KILJ Klid KMBC KMOX KOI KRLD KiC．J KTRH KVOR WAAB WABC WBBM WBRC WCAH WCAU WCCO WDAE WDBJ WDBO WDOD WDSU WFBL WPEA WGR WGST WHAS WHP WIBW WJAS WKBH WKBN WMAL WMBD W NAX WNOX WODX WOKO WOHC WPG WQAY WREC WSFA WTAQ WTAR WWVA

E－12：46 p．m．，C－11：45，M－10：45，P－9：45 ©－Emery Deutsch and Orchestra CFRB CKOK hDYL KFAB KFBK KPJF KFRC KHF KMRA KMBC KOL KRLD KsCJ KTRH KIOR WAAB WABC WBEM WBCM NBRC WCAH WCAU WCCO WDAE WDBJ WDBO WDOD WOSU WFBL WGR WGSI WHAS WILEC WIBW WISN WIAS WKBH WKBA WLBW WMAL WMBD WODE WOKO WORC WOWO WPG WOAM WREC WSFA WTAQ WTAR W゙サ\1

## E－1：00 p－m．，C－12：00，M－11：00，P－10：00 n－Symphony Concert，Erno Rapee

 KDYL KEX KFYR KG：K．Jl KOA KOMO KRO KTAR KTBS WBEN WCAE WCKY WDAF WDAY WEAF WEEI WPI WPLA WGY WHO WIOD WJAF WMAQ WOC W＇RAM WWJ WWNCE－1：30 p．m．，C－12：30，M－11：30，P－10：30 C－Columbia Church of the Air
CFRB（KけK KFAB KFBK KFPY KLZ K\BC KOH KSCJ KTRII KVI IVOR WAAB WABC WADC WBCM WBIG WBRO WBT WCAH WU．JO WCAL WCCO WDB．J WDOD WDRC WFBL WGR WHEC WHK WISN WJAS WTBW WIBZ WMAL WWT WOKO WOWO WP（；WQLM WSBT WSis WraQ Wral WWVA

## B－Ciyde Doerr＇s Saxophone Oetet

KDHA KFI KFSD KGO KHQ KOA KOMO KWCR WBAL WDAY WGAR WH．MM WJZ WLW

## E－2：00 p．m．，C－1：00，M－12：00，P－11：00 C－Cathedral Hour

CFRB CKOK KPH KLRA KLZ KMBC KSCJ KTRH KTSA KYOR

## SUNDAY-Continued

WABC WACO WADC WBCM WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WFBL WFEA WGR WGST WHAS WHEC WHK WHP WIBW WISN WKBH WLAC WLBZ WMAL WMT WOKO WORC WQAM WREC WSBT WSJS WTAQ WTAR WTOC

## E-2:30 p.m., C-1:30, M-12:30, P-11:30 R - Moonshine and Honeysuckle KSD WCAE WCKY WCSH WDAF WEAF WEEI WFBR WGY WHO WJAR WLIT WMAQ WOC WOW WRC W'TAG WTAM WWJ

## B - Yeast Foamers

KDKA KFI KFSD KFYR KGHL KgO KGW KHQ LOIL KOMO KSTP KTAR KTHS kYOO KWCR KWK KYW WAPI WBAL WBZ WBZA WDAY WEBC WFAA WFLA WGAR WHAM WIBA WloD WIS WJAX WJDX WMR WJZ WLW WPTF WREN WRVA WSB WSM WSMB WTMJ WWNC

E-2:45 p.m., C-1:45, M-12:45, P-11:45 C - Hoosicr Editor, Frederick Landis CKOK KDB KFAB KFBK KPPY LFRC KGB KHJ KL.Z KMBC KMOX KOIN KOL hOMA lish KVI WABC WBBM WCAII WCAO WCAU WCCO WGR WHAS WHK WJAS WKRC WMAL WNAC WOWO WRR

E-3:00 p.m., C-2:00, M-1:00, P-12:00 R - Wayne King and Drchestra
KDYL KFI KFYR KGO KGW KHQ KOA KOMO KPRC KsD KSTP kTBS KTHS KNOO KYW WBLN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WGY WHO WIBA WJAR WKY WLIT WOAI WOC WOW WRC WSAI WTAG WTAM WTMJ WWJ

## C-N. Y. Philhar monic Orchestra

CFRBCKOK KFH KLRA KLZ KMBC KRLD KSCJ KTRH KVOR WABC WACO WADC WBCM WCAH WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WISSU WFAN WFRL WFBM WFEA WGST WHAS WHEC WHK WHP WIBW WIP WISN WRBH WKBW WhRC WLAC WLBW WT.BZ WMAL WMBD WMT WOKO WORC WQAM WREC WSBT WSFA WSIS W'TAQ WTAR WTOC WWVA

E-3:30 p.m., C-2:30, M-1:30, P-12:30 R - National Sunday Forum
KFYR KFHL KGIR KGO KGW KHQ KOA KPRC KSL KSTP KTAR KTBS KVOO KYW UBEN WCAE WCSH WDAF WEAF WEBC WEEI WFAA WPBR WFLA WGY WIBA WIOD WIS WJAR WIAX WJDX WEY WOAI WOW WPTF WTC WRVA WSAI WSB WSA WSMB WTAG WTAM WWJ WWNC

## B - 48th Highlanders Military Band

CKGW KDlia koil hwCr wbat WBZ WBZA WGAR WHAM WJR WJZ WLW WMAQ WREN

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

KMOX KSTP KYW WCAO WCAU WDRC WEAN WFBL WFEA WGAR WGR WHB WICC WJes WJR WLBZ WLW WMT WNAC WNBH WOC WOL WOKO WOR WORC

R - Iodent Program
KFI KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KSD KSL kTAR KTBS KTHS KVOO WAPI WBEN IVCAE WCSH WDAF WDAY WEAF WEBC WEEI WFAA WFBR WFILA WGY WHO WIBA WIOD WIS WJAR WJAX WJDE WKY WMC WOAI WOW WPTF WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ WWNC

## B - Temple of Song

KDKA KOIL KWCR WBAL VBZ WBZA WCKY WFLA WHAM WJZ WMAQ WIREN

E-4:30 p.m., C-3:30, M-2:30, P-1:30 B - Hightights of Bible
KDKA KFSD KFYR KGHL KGIR KGO KGW KHQ KOIL KOMO KIRC KSL KSTP KTAR KTBS KTHS KvOO KWCR KWE WaPI WBAL WPZ WBZA WCKY WDAY WEBC WENR WFAA WFLA WGAR WIBA WIOD WIS WJDS WJR WJZ WKY WMC WOAI WPTF WREN WRVA WSB WSM WSMB WWNC

## E-4:45 p.m., C-3:45, M-2:45, P-1:45 R - LeTrio Charmante

CKGW WBEN WCAE WCSH WDAF WEAF WEMI WENR WFBR WFI WGY WIIO WJAR WOC WOW WRC WSAI WTAG

E-5:00 p.m., C-4:00, RA-3:00, P-2:00 C - Roses and Drums
CKOK KMBC KMOX KRLD WAAB WABC WADC WBBM WCAO WDSU WFBM WGR WGST WIIK WJAS WKRC WMAL

## B - World of Religion

KFSD KFY'R KGHL KGIR KGO KGW KHQ KOA KOIL KPRC KTAR KTBS KTHS KVOO KWC? KVF LiYW WAPI WBAL WBAP WBZ WBZA WCKY WDAY WEBC WFLA WGAR WHAM WIBA WIOD WIS WJAX WJDX WJZ WMC WOLI WPTF WREN WIRIA WSB WSAIB WWNC
R-Pop. Concert, Walter Logan
CKGW KFSD KGO KGW KHQ KOA KSTP KTAR KTBS WAPI WFEN WCAE WCSH WDAF WEAF WEBC WEEI WENR WFBR WFI WFLA WGY WHO WIOD WJAR WKY WMC WOC WOW WRC WRVA WSAI WSB WSM WTAG WTAM WWJ WWNC

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

WAAB WABC WCAO WCAU WDRC WEAN WFBL WGIR WIIEC WHP WOKO

## R-8ig Ben's Dream Dramas

KDYL KFI KGO KOA KSD KSTP WBEN WCAE WCSH WDAF WHAF WEEI WENR WFBR WFI WGY WJAR WOW WRC WSAI WTAG WTaM WTMJ W'WJ

## E-5:45 p.m., C-4:45, M-3:45, P-2:45 R - Kremlin Art Quintet

CKCW KSD WBEN WCSH WDAF WEAF WERI WPBR WFI WGY WHO WJAR WOC WOW WICC WSAI WTAG WTAM WWJ

[^6]KSCJ KVOR WaBC WACO WADC WBCM WCAO WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WFBI, WFBM WFEA WGR WGST WHAS WHEC WHP WIBW WISN WJAS WKBH WLAC WLBZ WMAL WMT WNAX WOKO WORC WQAM WREC WSBT WSFA WSJS WTAQ WTAR WTOC WUVA

## R-Catholic Hour

KEX KFSD KFYR KGA KGHL KGIR K.JR KO KPO KPRC KSTP KVOO WAPI WBAP WBEN WCAE WCSH WDAF WEAF WEBC WEEI WENR WFBR WFLA WGY WHO WIBA WIOH WJAR WJAX WJDX WKY WLIT WMC WOAI WOC WOW WRC WRYA WSAI WSM WSMB WTAG W'TAM WWJ WWNC

## E-6:15 p.m., C-5:15, M-4:15, P-3:15

 C - Litile Jack LittleCFRB CKOK KFH KLZ KRLD IISCJ KSL KYOR WACO WADC WCAU WCCO WDAE WDB.T WDBO WDOD WDRC WDSU WFBL WFBM WFEA WGR WGST WHAS WHEC WHP WIBW WISN WJAS WKBH WKRC WIAC WLBW WLBZ, WMAL, WMT WNAX WOKO WORC WPG WQAM WREC WSBT WSFA WSJS WTAQ WTAR WTOC WWVA

## E-6:30 p.m., C-5:30, M-4:30, P-5:30 R Sweetheart Days

KEX KFSD KGA KTl? KOA KPO KSD KSTP KTAR KTBS KVOO WBEN WCAE WDAF WRAF WEEI WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WKY WMAQ WMC WOC WOW WPTF WRVA WSAI WSM WTAG WWJ
C - Irene 8easley, Round Towners
CFiRB CKOK KDYL KFAB KFBK KFH KFJF KFRC KHJ kLRA KMBC KMOX KOL KRLD KSCJ KVor Wabe WBCM Whig wBre WBT WCAH WCaO WCAU WCCO WDAE WDB.J WDBO WDOD WDRC WDSU WRAN WFBI, WFBM WFEA WGR WGST WHAS WHEC WHK WHP WIBW WISN WJAS WKBH WKBN WLBW WMBD WAAC WNOX WODX WOKO WORC WOWO WQAM WREC WSFA WSPD WTAQ WTAR WTOC WWVA

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

 R-Donald Novis, TenorKFSD KFYR KGO KGW KHQ KOA KSL KSTP KTAR KTBS KVOO WBEN WCSH WDAF WEAF WEBC WEEI WFBR WFLA WGY WHO WIBA WIOD WJAR WJDX WKY WLIT WMAQ WOC WOW WSAI WSM WTAG WTAM WWI WWNC C-World's Business, Dr. Klein
KFAB KFH KFPY KGB KLZ KMOX KOH KRLD KSCJ KTRH KVI KYOR WABC WICO WADC WRBM WBCM WBIG WBRC WBT WCAF WCAO WCCO WDBJ WDOD WDRC WEAN WFAN WPBL WFBM WFEA WGL WGR WHAS WHEC WIP WISN WJAS WLAC WLBW WLIBZ WMAL WMT WNAC WNAX WNOX WOKO WORC WPG WQAM WREC WSBT WTAQ WTAR WIVVA

## E-7:15 p.m. C-6:15, $\boldsymbol{\text { Lf }}$-5:15, P-4:15 H - Ray Knight See Monday C-New World Sy mphony

CKOK KFH KLZ KMBC KRLD KSCJ KTRH KVOR WABC WACO WADC WBCM WCAH WCAO WCAU WCCO

## SUNDAY-Continued

WDAE WDBJ WDBO WDOD WDRC WDSU WFBM WFEA WGR WGST WHAS WHEC WHP WIBY WISN WJAS WKBH WLBW WLBZ WMAL WMT WNAX WOKO WORC WQAM WREC WSBT WSJS WTAR WTOC WWVA

## B - Pickens Sisters

KWCR KWK WGAR WHAM WJR WJZ WREN

## E-7:30 p.m., C-6:30, M-5:30, P-4:30 B - Great Moments in History

KDKA KDYL KFI KFSD KFYR KGO KGV IHHQ KOA KOMO PKRC KSTP KTAR KVOO IVYK WBAL WBZ WBZA WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WJAX WJDX WJR WJZ WKY WLS WLW WMC WOAI WREN WRVA WSB WSM WSMB WTMJ WWNC R-Orchestral Gems
KSD WBEN WCAE WDAF WEAF WFBR WGY WJAR WLS WOW VSAI WTAG WTIC WWJ

## E-7:45 P-m., C-6:45, M-5:45 P-4:45 C - Angelo Patri, See Wednesday

E-8:00 p.m., C-7:00, M-6:00, P-5:00 B - Radio Luminaries
KDKA KPRC K TBS KVOO KWCR KWK WBAL WFLA WGAR WIBA WIOD WIS WIZ WKY WLS WMC WREN WRVA WSMB WWNC

## c-William Vincent Hall

CKOK KDYL IFFAB KFH KFIF KFRC KHJ KMBC KMOX KOL KSCJ KTRH KYOR WABC WBCM WBIG WBRC WBT WCAH WCAU WCCO WDAE WDBJ WDBO WDOD WDRC WDSU WEAN WFBM WFEA WGL WGR WGST WHAS WHEC WHP WIBW WISN WJAS WKBH WKBN WLBW WMAL IFNAC WNAX WODX WOFO WORC WQAM WREC WSFA WSPD WTAR WTOC WWVA R-Chase and Sanborn Hour
CFCF CKGW KFI KFSD KFYR KGO KGW KHQ KOA KOMO KPLC KSD KSL KSTP KTAR KTHS KVOO WAPI WBEN WCAE WCKY WCSII WDAF WDAY WEAF WEBC WFA: WFBE WFLA WGY WHO WIOD WIS WJAR WJAX WJDX WKY WLIT WLS WMC WOAI WOC WPTF WRC WRVA WSAI WSB IVSM WSMB WTAG WTAM WTIC WTMJ WWJ WWNC
E-8:30 p.mi., C-7:30, M-6:30, P-5:30 C-Roxy Concerteers
CKOK KFAB KFPY KGB KIPA KL/s KMBC KMOX KOH KRID KSCJ K'TRH KVI KVOR WABC WADC WBCM WBIG WBRC WBT WCAH WCAO WCAU WCCO WDBJ WDOD WDRC WEAN WFBL WFBM WFEA WGR WHAS WHEC WHK WISN WJAS WKBN WLBW WLABZ WMAL WMT WNAC WNAX WNOX WOKO WORC WOWO WQAM WREC WS.JS WTAR

## B - Russian Gaieties

CKGW DKKA KOIL KSTP KWCR KWK KYW WBAL WBZ WBZA WCKY WBBC WGAR WHAM WIBA WJR WJZ WLW WREN

[^7]WEAF WENR WFAA WFBR WFI WFLA WGY WHO WIOD WIS WJAR WJDX WKY WMC WOC WOW WPTF WRC WRVA WSAI WSB WSM WSMB WTAG WWNC

## B - Enna Jettick Melodies

CFCF CKGW KDKA KFI KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KOIL KOMO KSTP KTAR KWCR KWK KYW WBAL, WBZ WBZ WCKY WDAY WEBC WGAR WHAM WIBA WJAX WJR WJ/ WREN WRVA WTMJ

## C - Bath Club-Fred Allen

CFRB CKOK KLRA KLZ KMBC KMOX KSCJ KTRH KTSA KVOR WABC WADC WBCM WCAII WCAO WCCO WDAE WDBJ WDHO WDOD WDRC WDSU WFAN WFBL WFBM WPEA WGR WGST WHAS WHEC WHK WHP WIBW WIP WISN WJAS WKBH WKRC WLAC WLBW WLBA WMAL WMT WNAX WOKO WORC WQLM WREC WSBT WSJS WTAR WTOC

## E-9:15 p.m., C-8:15, M-7:15, P-6:15

 R-Album of Familiar MusicKFI KPSD KPYR KGO KGW KHQ KOA KOMO KPRC KSD KSL KSTP hear kTHS WapI WBEN WCAE WCSH WDAY WEAF WEBC WENR WFAA WFBR WFI WFLA WGY WHO WIBA WIOD WJAR WJDX WKY WMC WOAI WOC WOW WRC WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ
B-Red Adams, Sketch
CKGW KDKA KOIL KSTP KWCR反WK KYW WBAI WBZ WBZA WCKY WEBC WGAR WHAM WIBA WJR WJZ WLW WREN

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

CKOK KFJF KLRA KMBC KMOX KTSA WABC WADC WBRC WBT WCaO WCAU WCCO WDRC WEAN WFBL WGN WGR WGST WHEC WHK WHAS wKRC WLAC WLBZ WMAL WNAC WOKO WSPD

E-9:45 p.m., C-8:45, M-7:45, P-6:45 B-Sheaffer Lifetime Revue
CFCF CKGW KDKA KDYL KFI KFYR KGHL KGIP KCO KGW KHQ KOA KOII, KODO KPRC KSTP KTBS KTIS KWCR KWK WB.L WBZ WBZA WDAY WEBC WENR WGAR WHAM WIBA WJDX WJR WJZ WKY WMC WOAI WREN WSB WSM WSMB WTNJ
R - Ohman and Arden, Piano Duo
KSD WBEN WCAB WCSH WDAF WEAF WFBR WFE WGY WHO WJAR JMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

## E.10:00 $\mu$.m., C-9:00, 8 -8:00, P-7:00 C-Canada Dry-Jask Benny

CFRB CKAC CKOK KMBC KMOX WABC WaDC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN Wilas whk wJas whbw wkRC WMAL WNAC WOKO WOWO WPG WSPD

E-10:15 p.m., C-9:15, B-8:15, P-7:15 R-L'Heure Exquise
CKGW KFYR Klle KSD KSTP KTAR KTBS WBEN WCAE WCKY WDAF WPAP WEBC WEEI WFBR WFI WFLA WGY WHO WIBA WIOD

WJAR WKY WMC WOC WOW WRC WRVA WSAI WSM WSMB WTAG WTAM WTIC WWJ WWNC

## B - Old Singing Master

KDEA KFI KGO KGW KHQ KOA KOIL KOMO KSL KWK WBAL WBZ WBZA WGAR WHAM WJR WJZ WLW WMMO WREN

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

CFRB CKOK KDYL KFAB KFBK KFH KFJF KFRC KHJ KLRA KMBC KMOX KOL KRLD KSC.J KTRH KVOR WAIB WABC WBCM WBRC WBT WCAI WCCO WDAE WDBJ WIDBO WDOD WDRC WDSU WEAN WEAN WFBL WFBM WGL WGR WHAS WHL WHP WIBW WIP WISN WJAS WKBN WLBW WMAL WMBD WNOX WOKO WPG WQAM WREC WSFA WSPD WTAR WTOC

## E-10:45 p.m., C-9:45, M-8:45 P-7:45 R-Sunday at Sath Parker's

CFCF KECA KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRO KSD KSL KS「P KTAR KTBS KYW WaPI WBEN WCAE WCSH WDAF WDAY WEAF WLBC WEEI WFAI WFBR WFI WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDK WKY WMC WOA WOC WOW WPTF WRC WRYA WSAI WSB WSM WTAM WTAJ WWJ
E-11:00 p.m., C-10:00, M-9:00, P-8:00
B Thre Keys
KOIL KWCR IKWK WBAL WGAR
WHMM WJZ WMAQ WREN
E-11:15 p.m., C-10:15, M-9:15, P-8:15
R Hawaiian Serenaders
LFYR KGHL KGO KGW KHQ KTHS WCAE WEAF WENR WEBR WPI WFLA WGY WIBL WIOD WIS WJDY WMIQ WMC WRC WRVA WSMI WSB WSM WSMB WTAG WTAM WTIC WWJ WWNC
C - Angelo Patri, See Weinesday
E-11:30 p.m., C-10:30, M-9:30, P-8:30 R - Meladic Serenade
KFSD KFYR KGO KHQ KSTP KlAR KT'BS WCAE WCKY WEAF WENR WFBR WFLA WGY WIBA WIOD WIS WJAR WMC WRC WSAI WSB WS.I WlaM WUJ WWNC
c-Eddie Duchin's Orchestra
CFRB CKOK KLRA KTRH WABC WADC WBCM WCAO WCAU WCCO WDAE WDBT WDBO WDOD WDRC WDSU WFBL WGR WCS WHK WHP WISN WLAC WLBZ WMAL WOKO WPG WQDM WREC WSIS WTAR WTOC
B - Frankie Masters and Orchestra
KOIL. KWCR KWE WBAL WCKY WENR WHAM WJR WJZ WREN C- Pennzoil Parałe
KDYL KERN KFBK KFPV KFRC KGB KHJ KLZ KMJ KOIN KOL KVI KWG
E-12:00 m., C-11:00, Wi-10:00, P-9:00 B Win. Stoess and Orchestra
KGHL KGO KGW KOA KOIL KOMO KSTP KTBS KWCR WDAY WENR WFLA WGAR WHAM WIOD WJR WIZ WKY WLW WMC WREN WSB WWNC
R - Jae Furst and Orchestra
WCAE WCKY WDAF WEAF WFBR WHO WLIT WOC WTAM

# CLASSIFIED INDEX TO CHAIN PROGRAMS 

## Time in Eastern Standard

## BANDS

48th Highlanders, 3:30 p.m., Sunday, B.
Little German Band, 6:00 p.m., Saturday, B.

## CONCERTS

Howard Barlow Symphony, 11:00 p.m., daily, ex. Sat. and Sun., C.
Cities Service, 8:00 p.m., Friday, R
Gauchos, 10:30 p.m. Sunday. (
Kremlin Art Quintet, 5:45 p.m., Sunday. R.
L'Heure Lxquise. 10:15 p.m. Sunday, R.
Le Trio Charmante, 4:45 p.n., Sunday, R.
Walter Logan. 5:00 p.m., Sunday, R.
Melodic Serenade, 11:30 p.m., Sunday, R.
National Opera, 11:15 p.m. Tues. and Sat., B.
New World Sympliony, 7:15 p.m. Sund:ay, C.
New York Philharmonic, 3 p.m., Sunthy, (.
Orchestral Gems, 7:30 p.m., Sunday, R.
Erno Rapee, 1:00 p.m., Sunday; 9:60 p.m., Sat., R; 9:30 p.mi. Thurs., B

Roxy Concerteers. 8:30 p.m. Sunday, C.
Russian Gaieties, 8:30 p.m., Sunday, 13 .
Waldorf-Astoria, 6:00 p.m., daily, ex. Sunday, R.

## DANCE BANDS

Ben Bernie, 11:30 p mi., Mon.: 9:00 j.m. atud 12:30 a.m., Tues, : 12:30 a.m., Sat., R.
Don Bestor, 11 p.m, Thursday, R
Cab Calloway, 12 mid., Thursdiy, R.
E'mil Coleman, 12 mid., Saturday, B.
Don DeForest. $\mathfrak{b}: 15$ p.n., Friday, $B$.
Jack Denny, 8:4.5 p.m., Weinemday, R.
Lew Diamond, 12:30 :nn., Moutay, $B$.
Clyde Doerr, $1: 30$ p.m., Sundas. B.
Eddie Duchin, 11:30 p.m., Sun.; 12 mid. Mon. and Thurs. . C.
Joe Purst, 12 mid. Sunday. R.
Isham Jones. $11: 30$ pin. Tues., Wed. and Thurs., C
Roger Wolfe Kahn, 12 mid., Mon., Wed. and Sat., F
Wayme Kitur 3:00 p.m., Sund:y: $8: 30$ p.rn. J'uesday. R.
Guy Lombardo, 11:30 p.m., Mon. and Friday.; 9:00 p.m., Wer., (
Luchy Strike, 10:00 p.m. Tues., Thurs, and Sat., R.
Abe Lymann, 8:00 p.m., Tues., Thurs and Sit., C.
Frankic Masters, 1J:30 p.m., Sunday, B.
Clyde McCoy, 12 mid, Monday, B.
Jack Miller. 6:30 p.m. Tues. $\mathrm{t}: 45 \mathrm{p}$ p.m.. Sıt. C.
George Olsen, 12 mid., Tues.; 7 pm.m. Sat. R
Pacific Serenaders, $12: 30$ a.m., 'Thursday, 13.
Don Reiman, 12 mid., Tues and Wed., C.
B. A. Rolfe, 6:00 p.m., Wedriesiday, B.

Willian Scotti. 11 p.m., Mon.; 6:30 p.m., Fri., R.
William Stoess. 12 mid., Sunday, B.
Rudy Vallee, 8:00 p.m. Thursday, R.
Anson Wecks, 11 p.m., Fritay, R.
Ted Weenis, 10:00 p.in., Sun.; 8:15 p.m., Thurs., C.
Paul Whiteman, 10 p.m., Fri., $11: 30$ p.m., Sat., R.; 12 nid. Tues., B.

## DIALOG

Fred Allen, 9:00 p.m., Sunday C.
Amos 'n' Andy, 7:00 and 11:00 pim., daly, ex. Sunday, B
Pat Barnes, 8:45 pan., Mon, and Tues., B.
Burns and Allen, 4:00 p.m., Wednesday, C
Clara, Lu 'n' Em, 10:15 a.m., daily, ex. Sat. and Sun., B.
Easy dees, 10:15 1r.m. Mon., Wed. and liri. C.
Eddie and Ralph, $9: 30$ p.m., Friday B.
Funnyboners, $6: 45$ p.m., Mon. and Wed ; 6:00 p.nn, Sat., C
Johnny Hart, $7: 45$ p.m., daily, ex. Sat. and Sun., B.
Ray Knight, $\mathbf{7}: 30$ p.m., Saturday, I3.
Meyer the Buyer, $7: 30$ p.m., Saturdity, C.
Jack P'earl, 10:00 p.m., Thursday, R.
Ray Perkins, 7:30 pm., Tues and Thurs., R
The Pridgets, $9: 00$ p.m., Welnesday, R.
Reis \& Dunn, $12: 30$ p.m., Sun, 6:15 p.m., Mon., C.
S. R. O. Comedy, 9:30 p.m., Saturday, B.

Steblins Boys, 7:30 p.m., daily, ex. Sat, and Sun., B.
Stoopmagle \& Budd, 10:45 p.in., Mon., Wed., and Fri., C.

Tastyeast Jesters, $7: 15$ p.m., Monday, B.
Wheatenaville, 7:15 p.m., daily, ex. Fri. and Sit., R
Ward Wilson, 7:15 p.m., Wed., Thurs. and Fri, B.

## DRAMA

Red Adams. 9:15 p.m. Sunday; B.
Big Ben, 5:30 p.in. Sundity, R.
Death Salley Days. 9:00 p.rn. Thursday, B
Dramatic Sketch. 10:30 p.m., Mon., Tues. and Wed., B.
Eino Crime Club, 9:30 p.in. Tues. and Wed., C.
Evening in I'aris. 9:30 p.m., Monduy, C.
First Nighter, 9:00 p.m., Friday. B
Friendship Town, 9:30 p.m., Tuesday, B.
Fil Manchu. 8:45 p.m. Monday. (
Goldberas. $\overline{7}: 4 \overline{5}$ p.m., daily, ex. Sunday. R.
Sherlock Ilolines. 9:00 p.m. and 12:15 a.m., Wednesday, B
K-7, 8:30 p.mı, Suturday, R.
Omar Khayyam, 9:30 p.m. Thursday, C.
Legion of Lost, 12:30 p.m. Sunday. R.
Phillips Lord, 10:00 p.m. daily, ex. Sat. and Sun., B.
March of Time, 8:30 p.nı, Friday. C.
Moments in History, 7:30 p.m.. Sunday, B
Moonshine and Ionevsuckle, 2:30 p.m., Sunday. R
Myrt and Marge, $7: 00$ ard 10:45 p.m., daily, ex. Sat. and Sund. C.
Rin Tin Tin. 8:30 p.m., Thursday. B.
Roses and Drums, $5: 00$ p.m., Sunday, C.
The Shadow, 8:00 p.m., Wedneday. R.
Sheer Romance, 6:30 pin., Welnesday, B
Soconyland Sketches, 8:00 p.tn. Monday, R.
PIANO AND ORGAN
Archer Gibson, 8:00 p.m., Saturday. R
Harding Sisters, 6:30 p.m., Mon. and Wed., IR.; 10:45 p.m. Sat. B.
Keenan and Phillins, 6:45 p.m., Tues.; 7:45 p.m., S.ı $\dagger ., \mathrm{C}$ Ohman and Arden, 0:4.5 p.m., Sunday, R.
Muriel Pollock-Vee Lawnhurst, 8:45 j.m., Sat., B.

## POPULAR PROGRAMS

A. \& P. Gypsies, $9: 00$ p.rn., Monday, R.

Armour Program. 9:30 p.m., Friday, B.
Bath Club. 900 p. Sunday, C.
Jack Benny, 10:00 p.m. Sun. 8:10 p.m., Thurs., C.
Blue ("oal lieve, $5: 30$ p.m.. Sunday, C.
Major Bowes, $15: 30$ a.m. Sunday, I .
Carnation Contentel, 8:00 ;.m.. Monday. B.
Chase and Sanborn, 8:00 p.m., Sunday, R
Cliquot Club, 9:00 p.m., Fridsy, R.
Columbia Revue, 13:30 p.m., daly, cx. Sat. and Sun., C.
Enna Jettick Melohies, 9:00 p.n., Sunday, B.
Jay C. Flippen, I0:00 w,m., Tuesday. C.
Jack Frost Melody, $8: 30$ ?.m., Werlnesday, B
Goodyear I'rogram, $9: 00$ p.m. Wednesday. R.
Hawailan Serenaders. 11:15 p.m. Sunday, R.
Andre Kostelanetz, 10:00 p.m., Thursday, C.
Maxwell House Show Boat, 9:00 p.in. Thursday, R.
Musical Fast Freight, 8:45 p.in., Tues. and Wed, C.
Nestle's I'rogram, 8:00 p.1n.. Friday, R.
Parade of the States, $9: 30$ p.m., Monday, R.
Pemnzoil Parade, 9:30 and 11:30 p.m., Sunday, $C$.
Pond's Program. 9:30 p.m. Fritay, ll.
Shentier Revue. $9: 45 \mathrm{p}$ m., Sunday, B.
Sinetair Wiener Minstrels, $9: 00$ p.m., Monday, B.
Sweetheart Days, $\mathrm{j}: 30 \mathrm{p} . \mathrm{m}$. Suuday, R .
Whoopee, 8:15 p.m., Saturday, B.
Ed Wynn, 9:30 p.m., Tuesdny, R.
Yeast Foumers, 2:30 p.m., Sunday, B.

## QUARTETS

Corn Cob Pipe Club, 10:00 p.m., Wednesday, R.
Mills Bros., $9: 15$ p.m., Mon. and Thurs., C.
Revelers. 8:30 p.m., Mouday, R,
Rollickers, 7:00 p.m., Thursday. R.
Song Fellows, 8:45 p.m. Friday, B.
Cathedral Hour, 2:00 p.m. Sunday, C.
Catholic Hour, 6:00 p.m., Sunday, R

Church of the Air, 1:30 p.m., Sunday, C.
Rev. Chas. E. Coughlin, 4:00 p.m., Surday.
Highlights of Bible, 4:30 p.m., Sunday, B.
Mid-Week Hymn Sing, 7:00 p.m., Tuesday, R.
National Sunday Forum, 3:30 p.m., Sunday, R.
Old Songs of Church, 6:30 p.m., Thursday, B.
Seth Parker, 10:45 p.m. Suaday, R.
Salt Lake Tithernacle Choir, 12 noon, Sunday, C.
World of Religion, 5:00 p.m., Sunday, B.

## SINGERS

Mildred Bailey, 10:45 p.m., Mon., Wed. and Fri., B.
Irene Beasley, 6:30 p.m., Sun.; 6:00 p.m., Mon. and Fri., C.
Boswell Sisters, 10:00 p.m., Mon.; 9:00 p.m., Thurs., C.
Eddie Cantor, 8:00 p.m., Sunday, R.
Charles Carlile, 10:30 p.m., Mon,, Tues. and Thurs., C.
Vaughn DeLeath, $6: 30$ p.m., Mon.; 6 p.m., Wed.; $5: 45 \mathrm{p} . \mathrm{m}$. ,
Thurs.; 7:15 p.m., Fri.; 10:45 p.m., Sat., C.
Do Te Mi. 8:00 p.m.. Sunday, C.
Morton Downey, 9:30 p.m., Friday, C.
Jessica Dragonette, 8:00 p.m., Friday, R.
Ruth Etting, 10:00 p.m., Wed.; 9:00 p.m., Sat., C.
Jane Froman, 4:00 p.m., Sun., R.; 10:45 p.m., Tues. and Thurs., B.
Jack Fulton, 7:15 p.m., Sat.; 10:15 p.m., Wed., B.
Sid Gary, 7:15 p.m., Monday, C.
Tito Guizar, 7:45 p.m. Monday, C.
Wm. V'incent Hall, 8:00 p.m., Sun.; 6:30 p.m., Wed.; 7:15 p.m., Sat., C.

Harlem Fantasy, 6:30 p.m., Saturday, R.
Art Jarrett, 11:00 p.m., Thursday, R.
Jones and Hare, 7:30 and 11:15 p.m., Mon., Wed. and Fri., R.

Harriet Tfe, 7:00 p.m., Monday, R.
Harriet Jafe Little, $6: 15$ p.m., Sun.; 9 a.m., daily, ex. Sun., C.
Tommy McLaughlin, $9: 15$ p.m., Tuesday, C.
Frank Munn, $9: 15$ p.m., Sunday, R.
Musical Memories, $9: 00$ p.m., Țuestay, B.
Donald Novis, 7:00 p, m., Sun.; 6:45 p.m., Mon., Wed. and Sat., R.

Old Singing Muster, 10:15 p.m., Sunday, B.
Pickins Sisters, 7:15 p.m., Sun.; $9: 00$ p.in. Sit., B.
Georgie Price, 7:45 p.rn., Tues. and Thurs., C.
Red and Ramona, 8:30 p.m, Monday, B.
Regiment:lists, 8:00 p.m. Thursday, B.
Lanny Ross, 9:00 p.m., Thurs.; 6:45 p.m., Fri., R.
Sanderson-Crumit, 8:00 p.m., Tuestay. R'
Singin' Sam, 8:15 p.m., Mon., Wed. and Fri., C
Kate Smith, 8:30 p.m., Mon., Tues. and Wed. C.
Street Singer, 9:00 p.m., Tues.; 10 p.m., Fri., C.
Temple of Song, 4:00 pin., Sunday. B.
Three Keys, 11:00 p.m., Sun.; 10:30 p.m., Thurs., Fri and Sat., B.
Three X Sisters, 7:30 p.m., Mon., Wed. and Fri, C.
Trio Romantique, $8: 30$ p.m., Saturday, B.
Gus Van, 9:00 p.m., Saturlay, B.

## TALKS

Adventures in Health, 8:30 p.m., Tues and Fri, B.
Cheerio, 8:30 a.m., daily, ex. Sumday, R.
Foothall Show, 9:00 p.in., Friday, C.
Floyd Gibbons, $10: 30$ p.m. Friday, R.
William Hard, $6: 45$ p.m., Tuesday, R.
Edwin C. Hill, 8:00 and 11:00 p.m., Mon., Wed and Fri.; $8: 15$ p.m., Tues. and Sat., C.
H. V. Kaltenhorn. 6;00 p.m., Tues, and Thurs., C.

Dr. Julius Klein. 7:00 p.m., Sunday, C.
Frederick Landis, 2:45 p.m., Sunday, C.
David Lawrence, 9:00 p.m., Sunday, IR.
National Farm and Home, 12:30 p.m., daily, ex. Sat. and Sun., B.
Angelo Patri, 7:45 and 11:15 p.m., Wed. and Sun., C.
Poet's Gold, 6:00 p.m., Sunday, C.
Public Affairs Institute, $10: 15$ p.m., Saturday, C
Nellie Revell, 11:00 p.m., Wednesday, R.
Sigmund Spaeth, 10:15 p.m., Tues.; 8:15 p.m., Thurs.. B.
Lowell Thomas, 6:45 p.m.. daily, ex. Sat. and Sun., B.
You and Your Government. 8:00 p.m., Tuesday, B.
Frederic William Wile, 7:00 p.m., Saturday, C.

## KEY TO SYMBOLS

## As Shown in the Index by Freqencies and Dial Numbers

Frequency is given in kilocycles; wavelength in meters. Night power is shown in watts in third column. Daytime power is shown in parenthesis in fourth column in kilowatts, thus (.25) indicating 250 watts. Some stations outside the United States use a "split frequency." Their exact frequency is shown in fourth column. R-C indicates Remote Control. Where space permits, names of hotels or other buildings used in announcements are shown in parenthesis. These are not inail addressis.

## Second Column Symbols

| a | Verifies reception for return postage. | g. | Sends Ekko stamp for postage. |
| :--- | :--- | :--- | :--- |
| b | Verifies only occasionally. | h | Sends own stations stamp for 10c. |
| c | Does not verify. | I | Sends own station stamp for 5c. |
| d Verification 25c; reply card 10c. | J | Sends own station stamp for postage. |  |
| e Sends Ekko stamp for 10c. | k | Has no stamps. |  |
| f Sends Ekko stamp for 5c. | Z | Failed to reply. |  |

## Fourth Column Symbols

A These stations are synchronized
13 National "Blue" Network.
C Columbia network.
D Daytime only.
Dn Daytime with occasional evening hours.
Trans-Canada network.
F Canadian National Railways network.
G All Canadian networks.
H Yankee network.
J Orange and gold network.
$K$ Mexican networks.
$L$ Canadian Pacific Ry. network (Dominion).
$M$ Canadian Radio Corp network.
N National "Red" and "Blue" networks.
P Has construction permit only.

Q Great Lakes network.
R National "Red" network.
S Sunday maly.
T Don Lee System.
U Dixie network.
$\checkmark$ Maritime Broadeasting network.
W Curtis-Indiana network.
$X$ Has permit to increase nower.
Y Has permit to change location.
$Z$ Has permit to change frequency
a-b-c. Small letters show stations using same transmitter.
1-2-3. Figures denote stations sharing time.
... No information.

# INDEX BY FREQUENCIES AND DIAL NUMBERS 

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## FOR KEY TO SYMBOLS SEE PAGE 45

# 540 kilocycles 555.6 meters <br> CKOK ae 5000 CG <br> Windsor, Ont. 

Essex Broadcasters, Ltd.
550 kilocycles 545.1 meters

| KEDY | ae | 500 | (1) 1 | Brookings, S . |
| :---: | :---: | :---: | :---: | :---: |
| R10 | ae | 500 | 2 (1) | St. Louis, Mo. |
| CESR | ah | 1000 | $1 \mathrm{~N}(2.5)$ | Bismarck, No. Dakota |
| 6OAC | ak | 1000 |  | Corvallis, Ore. |
| ESD | ak | 500 | 2R | St. Louis, Mo. |
| QDEY | ae | 500 | D | Waterbury, Vt. |
| HCB | ae | 1000 | C | Buffalo, N. Y. |
| ULERC | ak | 1000 | C | Cincinnati, Ohio |

South Dakota State College
Evangelical Lutheran Church
Meyer Broadcasting Co.
Oregon State Agricultural College
Pulitzer Publishing Co.
Harry G. Whitehill
Buffalo Broadcasting Corp.
WKRC, Inc., Hotel Alms

560 kilocycles 535.4 meters

| KFDM | ak | 500 | (1) |
| :---: | :---: | :---: | :---: |
| KLz | ae | 1000 | C |
| kuab | ae | 1000 |  |
| WEI | ae | 500 | 1R |
| C1n80 | ae | 1000 | (1.5) a |
| M17T | ak | 500 | 1 R |
| crex | ak | 1000 | $\mathrm{C}(2)$ |
| mpec | ak | 500 | Sa |
| MOAM | ae | 1000 | C |

Beaumont, Texas Denver, Colo. San Francisco, Calif. Philadelphia, Pa. Chicago, 111 . Philadelphia, Pa. Knoxville, Tenn. Chicago, Ill. Miami, Fla.

Sabine Broadcasting Co., Inc Reynolds Radio Co., Inc.
Associated Broadcasters, Inc. WFI Broadcasting Co. Nelson Bros. Bond 8 Mtg. Co. Lit Bros. Broadcasting System, Inc. So. Carolina Broadcasting Co., Inc. North Shore Congregational Church Miami Broadcasting Co.

## 570 kilocycles 526.0 meters

| KGKO | $z$ | 250 | (.5) |
| :---: | :---: | :---: | :---: |
| EDIP | aeh | 500 |  |
| EVI | ae | 500 | C |
| TGW | $z$ | 50 |  |
| WEAO | ae | 750 | 1 |
| mab | ak | 500 | 1 |
| MMCA | ak | 500 | 3 |
| 804 | ae | 1000 | C |
| CNMY | ak | 500 | 3 |
| Desyt | ak | 250 | R2a |
| crume | ac | 1000 | N |

Wichita Falls, Texas Hollywood, Calif. Tacoma, Wash. Guatamala Columbus, Ohio Youngstown, Ohio New York, N. Y. Yankton, S. D. New York, N. Y. Syracuse, N. Y.

Wichita Falls Broadcasting Co. KMTR Radio Corp
Puget Sound Broadcasting Co.
Ohio State University
WKBN Broadcasting Corp.
Knickerbocker Broadcasting Co., Inc. House of Gurney, Inc.
Dept. of Plant \& Structures
Clive B. Meredith Estate (WMAC)
Citizens Broadcasting Co., Inc.

## 580 kilocycles 516.9 meters



[^8]Free Press Printing Co., Ltd
Louis Wasmer, Inc
Nebraska Wesleyan University Edison Electric Illuminating Co. WKZO, Inc., Burdick Hotel Woodmen of the World

| 600 kilocycles | 499.7 | meters |  |  |
| :--- | :--- | :--- | :--- | :--- |
| CNRO | ak | 500 | F | Ottawa, Ont. |
| KFSD | ah | 500 | $\mathrm{~N}(1)$ | San Diego, Calif. |
| WCAC | ak | 250 | 2 | Storrs, Conn. |
| WCAOS | ae | 250 | C | Baltimore, Md. |
| WICC | ae | 250 | $2 \mathrm{H}(.5) \mathrm{C}$ | Bridgeport, Conn. |
| WMT | ak | 500 | C | Waterloo, Iowa |
| WREC | $z$ | 500 | $\mathrm{C}(1)$ | Memphis, Tenn. |

Canadian National Railways
Airfan Radio Corp.
Connecticut Agricultural College
Monumental Radio Co.
Bridgeport Bdetg. Station, Inc.
Waterloo Broadcasting Co.
WREC, Inc.

## 610 kilocycles

| KFRC | ae | 1000 | $C$ |
| :--- | :--- | ---: | :--- |
| YDAF | ae | 1000 | R |
| W1P | ak | 500 | $C$ |
| XETR | ae | 500 | D |
|  | $z$ | 2500 |  |

## 491.5 meters

San Francisco, Calif.
Kansas City, Mo. Philadelphia, Pa .
Cleveland, Ohio Mexico City, Mexico

> Don Lee Broadcasting System
> Kansas City Star Co.
> Pennsylvania Bdctg. Co. (WFAN)
> Cleveland Radio Broadcasting Corp.
> Cia. Difusora Mexicana S. A.

620 kilocycles 483.6 meters


| ae | 1000 | N |
| :--- | ---: | :--- |
| ae | 500 | $\mathrm{NJ}(1)$ |
| ae | 1000 | $\mathrm{Na}(2.5)$ |
| ak | 500 | C |
| ae | 1000 | $\mathrm{Na}(2.5)$ |
| ae | 1000 | $\mathrm{~N}(2.5)$ |

Portland, Ore. Phoenix, Ariz. Clearwater, Fla. Bangor, Maine St. Petersburg, Fla. Milwaukee, Wis.

Oregonian Publishing Co. KTAR Broadcasting Co.
Florida West Coast Bdetg. Co., Inc. Maine Broadcasting Co., Inc.
Florida West Coast Bdetg. Co., Inc. Journal Company




CHRC, Ltd., Victoria Hotel Le Soleil, Ltd.
Mitchell \& Liddle
Earle C. Anthony, Inc.
American Insurance Union
State College of Agriculture

660 kilocycles

| CHWK | ak | 100 | 665 |
| :--- | :--- | ---: | :--- |
| CJRM | $z$ | 500 | 665 |
| CJRW | $z$ | 1000 | 665 |
| RHS | $z$ | 500 | 664 |
| WAA | agh | 500 | D |
| WEAE | ak | 50000 | R |

670 kilocycles
WMAQ ae $5000 \quad \mathrm{~N}$
680 kilocycles

| CMAE | ak | 1000 |  |
| :---: | :---: | :---: | :---: |
| Kee\% | ae | 2500 | D |
| RPO | ak | 5000 | N |
| PYeit | ae | 1000 | N Dn |
| XFG | z | 2000 | 683.3 |

454.3 meters

Chilliwack, B. C.
Moose Jaw, Sask.
Fleming, Sask.
Salvador
Omaha, Neb. New York City

Queen City Broadcasting Co.
National Life \& Accident Ins. Co.

Chilliwack Broadcasting Co., Ltd.
Jas. Richardson $\&$ Sons, Ltd.
Jas. Richardson 8 Sons, Ltd.
Republic of E1 Salvador
Omaha Grain Exchange
National Broadcasting Co., Inc.
447.5 meters Chicago, Ill.

WMAQ, Inc. (NBC Lessees)

## 440.9 meters

Havana, Cuba St. Joseph, Mo. San Francisco, Calif. Raleigh, N. C.
Mexico, Mexico

International Broadcasting Co.
Scroggin \& Co., Bank
National Broadcasting Co., Inc.
Durham Life Insurance Co.
Sria. de Guerra y Marina

## INDEX BY FREQUENCIES AND DIAL NUMBERS



## 700 kilocycles 428.3 meters <br> WLW ae 50000 B <br> Cincinnati, Ohio

The Crosley Radio Corporation

| 710 | kilocycles | 422.3 | meters |  |
| :--- | :--- | :--- | :--- | :--- |
| KMPC | $z$ | 500 | Dn | Beverly Hills, Calif. |
| KOR | ak | 5000 | X | Newark, N. J. |
| XEN | agj | 1000 | 711 K | Mexico City |

## 720 kilocycles 416.4 meters <br> WGN ak 25000 C

Chicago, Ill.
730 kilocycles 410.7 meters

| CHLS | ak | 100 | 1b | Vancouver, B. C. |
| :---: | :---: | :---: | :---: | :---: |
| CHYC | $z$ | 5000 | Sa | Montreal, Que. |
| Sac | ak | 5000 | CaM | Montreal, Que. |
| KCO | z | 100 | 1b | Vancouver, B. C. |
| KEC | ak | 50 | 1 | Vancouver, 13. C. |
| CKMO | $z$ | 100 | 1 | Vancouver, B. C. |
| KWX | ak | 100 | 1L | Vancouver, B. C. |
| MK | aeh | 3150 |  | Havana, Cuba |

$\begin{array}{lllll}740 & \text { kilocycles } & 405.2 & \text { meters } \\ \text { CICA }\end{array}$
750 kilocycles 399.8 meters

| KGU | aj | 2500 | NX |
| :--- | :--- | ---: | :--- |
| VOWR | ak | 750 | ( |
| HIR | ak | 10000 | B |
| XEQ | aeh | 5000 | $\ldots \ldots$ |



| 770 | kilocycles | 389.4 meters |
| :---: | :---: | :---: |
| KEAR |  | Lincoln, Neb. |



INDEX BY FREQUENCIES AND DIAL NUMBERS 800 kilocycles 374.8 meters
WBAP ak 10000 in Fort Worth, Texas
DEAS ak 50000 iN Dallas, Texas

Carter Publications, Inc.
Dallas News-Dallas Journal

810 kilocycles 370.2 meters

| CHNS | a | 500 | 815 aZG | H |
| :---: | :---: | :---: | :---: | :---: |
| CNRH | ak | 500 | $815 a z$ | Halif |
| VOAS | ak | 200 | ${ }^{\text {D }}$ |  |
| YCcio | ae | 5000 500 | C | Minn |
|  | ak | 500 | D | New |
| X | $z$ | 250 |  |  |
| 820 kilocycles |  |  |  |  |
| $\begin{aligned} & \text { CMGC } \\ & \text { WHAS } \end{aligned}$ | ${ }_{\mathrm{aj}}^{\mathrm{z}}$ | 30 25000 |  | Matanzas, Cuba Louisville, Ky. |
| 830 kilocycles 361.2 meters |  |  |  |  |
| CMG | ${ }_{\text {ak }}^{\text {a }}$ | 100 12500 | 834 $N J$ | Colon, Denver |
| EAU | ${ }_{\text {ak }}^{\text {ak }}$ | 12500 1000 | ${ }^{\text {D }}$ | Reading, $P$ |
| WHDH | ae | 1000 | DY | Boston, Mass. |
| QRUE | ae | 5000 | DnC | Gainesville, Fla |

Maritime Bdctg. Co., Ltd. Oprs
Canadian National Railways
Ayre \& Sons, ltd.
Northwestern Broadcasting, Inc.
Eastern Broadcasters, Inc.
KCYS
Gobierno del Estado de Aguascalientes

|  | MTRS |
| :--- | :--- |
| Oscar S. Mechoso  <br> The Louisville Times Co., Inc. 336.9 <br>  DIAL$.$ITA |  |

L. Valdes Figueroa

General Electric Co. (NBC Opr.)
Berks Broadcasting Co.
Matheson Radio Co., Inc.
State of Florida (Univ. of Fla.)
840 kilocycles 356.9 meters

| NNC | $z$ | 500 |  | Toronto, Ont. |
| :---: | :---: | :---: | :---: | :---: |
| CH | ae | 5000 | NEa | Toronto, Ont |
| CkLC | ak | 1000 | G | Red Deer, |
| CME | ${ }_{\text {a }}$ | 5000 | La | Toronto, Ont |

Canadian National Carbon Co., Ltd.
Gooderham \& Worts, Ltd.
Alberta Pacific Grain Co., Ltd
Cuban Telephone Co.
Canadian Pacific Co., Royal York Hotel

850 kilocycles 352.7 meters


Cannon Systems, Inc.
Hello World Broadcasting Corp.
WWL Development Co. (Loyola Univ.)

860 kilocycles 348.6 meters

| WABC | ae | 50000 | aC |
| :--- | :--- | ---: | :--- |
| YBOQ | ae | 50000 | a |
| WHB | ae | 500 | D |
| XFX | $z$ | 500 | 867 |

New York City New York City Kansas City, Mo. Mexico City, Mexico
$\square 1$
Atlantic Broadcasting Corp.
Atlantic Broadcasting Corp. (tests) W IlB Broadcasting Co.
Secretaria de Educacion Publica

870 kilocycles 344.6 meters

| WENB | ak | 50000 | Na |
| :--- | :--- | ---: | :--- |
| WHS | ae | 50000 | Na |
| XFF | $z$ | 500 | 875 |

Chicago, Ill.
Chicago, Ill.
Chihuahua, Mexico

Great Lakes Bdctg. Co. NBC Opr.
Agricultural Broadcasting Co.
Gobierno del Estado de Chihuahua

880 kilocycles 340.7 meters

| CHML | ae | 50 | 4 G |
| :--- | :--- | ---: | :--- |
| CICS | ak | 100 | G |
| CKCV | ak | 100 | $\ldots$ |
| CKPC | ak | 100 | 4 L |
| KFKX | ak | 500 | $2(1)$ |
| KLX | ae | 500 |  |
| KPOF | ae | 500 | 2 |
| WCOC | ae | 500 | $(1)$ |
| WGBI | ah | 250 | Q1 |
| WQAN | ak | 250 | 1 |
| WSUI | ae | 500 | $\ldots$. |

Hamilton, Ont.
Sydney, N. S.
Quebec, Que.
Preston, Ont. Greeley, Colo. Oakland, Calif. Denver, Colo. Meridian, Miss.
Scranton, Pa.
Scranton, Pa .
Iowa City, lowa

[^9][^10]
## INDEX BY FREQUENCIES AND DIAL NUMBERS

| VOGT | $z$ | 400 | 893 | Wabana, N. F. | The Gaiety Theatre |
| :--- | :--- | :--- | :--- | :--- | :--- |
| WGST | ae | 250 | C(.5) | Atlanta, Ga. | Southern Broadcasting Co. |
| WILI | ak | 250 | $2(.5)$ | Urbana, Ill. | University of Illinois |
| WIAR | ae | 250 | (.5)R | Providence, R. I. | The Outlet Co. |
| VKINy | aeh | 250 | (.5) | Fairmont, W.Va. | A. M. Rowe, Inc. |


| 900 | kilocycles |  |  | meters |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KGBU | 2 | 500 1000 |  | Ketchikan, Alaska |  |
| KHIEN | ae | 1000 | $\mathrm{CT}^{\text {C }}$ | Los Angeles, Calif. | Don Lee Broadcasting System |
| WBEN | ae | 1000 1000 | R | Buffalo, N. Y. | WBEN, Inc., Buffalo Evening News |
| MRI | geh | 1000 1000 | N | Jacksonville, Fla. Oklahoma City O | City of Jacksonville |
| WCBL | ae | 2000 | D | Stevens Point, Wis | Wis. Dept. Agriculture \& Markets |






| 950 |  | c |  | meters |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CMHD | 2 | 250 |  |  | Manual Alvarez <br> Warner Bros. Broadcasting Corp. |
| KEWB | ak | 1000 |  | Los Angeles, Calif. |  |
| KGHBC | ak | 1000 1000 | $\underset{\mathrm{C}}{\mathrm{NJ}}$ (2.5) | Billings, Mont. |  |
| yOPA | ${ }_{\text {a }}^{\text {a }}$ | 1000 100 |  | Kansas City, Mo. | Midland Bdctg. Co. (Pickwick Hotel) |
| VRC | ak | 500 | $\dot{\mathrm{N}}$ | Washington, D. C. | Lane, Gillard $\&$ Avery <br> National Broadcasting Co., Inc. |



## INDEX BY FREQUENCIES AND DIAL NUMBERS

## 970 kilocycles 309.1 meters

| KIR | ae | 5000 | N | Seattle, Wash <br> Ched |
| :--- | :--- | :--- | :--- | :--- |
| ak | 1500 | RX | Chicago, Ill. |  |

Chicago, Ill.

Northwest Broadcasting System, Inc.
Chicago Federation of Labor

980 kilocycles 305.9 meters

| CFCN | ak | 10000 | 985 FL | Calgary, Alberta <br> CAGF <br> $z$ |
| :--- | :--- | :---: | :--- | :--- |
| KDKA | ak | 5000 | 987 | B |

990 kilocycles 302.8 meters

| WBZ | ak | 25000 | BA | Boston, Mass. |
| :--- | :--- | ---: | :--- | :--- |
| Wsz, | ak | 1000 | BA | Springfield, Mass. |
| XEK | $z$ | 101 | $\ldots .$. | Mexico City, Mexico |

Westinghouse Elec. \& Mfg. Co
Westinghouse Elec. \& Mfg. Co.
Arturo Martinez

## 1000 kilocycles 299.8 meters

| KEVD | ak | 250 | Dn | Los Angeles, Calif. |
| :---: | :---: | :---: | :---: | :---: |
| MHO | z | 5000 | RAX | Des Moines, Iowa |
| WOC | ak | 5000 | RAX | Davenport, lowa |
| WORK | aj | 1000 | D | York, Pa. |
| XEC | $z$ | 50 |  | Toluca, Mexico |
| XEE | $z$ | 105 |  | Oaxaca, Oax., Mexico |
| XEFE | $z$ | 100 |  | N. Laredo, Tams., Mex. |
| XEFI | $z$ | 100 |  | Chihuahua, Mexico |
| XEFS | $z$ | 40 |  | Queretaro, Mexico |
| XEJ | ak | 100 | K | Juarez, Mexico |
| XEL | ak | 25 |  | Saltillo, Mexico |
| XETC | $z$ | 100 |  | Jalapa, Ver., Mexico |
| XETG | $z$ | 100 |  | Torreon, Coah., Mex. |
| XEU | ak | 100 | 1007K | Veracruz, Mexico |
| XEV | $z$ | 100 |  | Puebla, Pue., Mex. |
| XEY | $z$ | 105 |  | Merida, Yuc. |

Los Angeles Broadcasting Co. KCYS.
Central Broadcasting Co.
Central Broadcasting Co.
York Broadcasting Co
Jesus R. Benavides
Alfonso Zorilla B.
Rafael T. Carranza
Feliciano Lopez Islas
Salvador Sandhez
Juan G. Buttner \& Leo Allande
Antonio Garza Castro y J. T. Perez Juventino Sanchez
Feliciano Lopez Islas
Baltasat Pazos Sosa
Ciro Molina
Partido Socialista S. E.

## 1010 kilocycles 296.8 meters

| CKIC | ak | 50 |  |
| :---: | :---: | :---: | :---: |
| CMBZ | ak | 150 |  |
| CMCX | $z$ | 150 |  |
| KGGF | ak | 500 | 2(1) Y |
| kow | ae | 500 |  |
| Sutin | ae | 250 | 1 |
| yes | ae | 500 | N(1) |
| CINAD | ae | 500 | 2 |
| MPSAP | ae | 250 | 1a |
| COAO | ae | 250 | 1 a |
| पRNY | $z$ | 250 | 1 |

Wolfville, $\mathrm{N} . \mathrm{S}$.
Havana, Cuba Havana, Cuba So. Coffeyville, Okla.
San Jose, Calif. New York City Columbia, S . C . Norman, Okla. New York City New York City New York City

| Acadia University |
| :--- |
| Manuel \& Guillermo Salas |
| Diario "E1 Mundo"" |
| Powell \& Platz |
| Pacific Agricultural Foundation, Ltd. |
| Marcus Loew Booking Agency |
| South Carolina Bdctg. Co., Inc. |
| University of Oklahoma |
| Jersey Boullevard Corp. |
| Jersey Boulevard Corp. |
| Aviation Radio Station, Inc. |

293.9 meters
Chicago, Ill. Philadelphia, Pa. Tiajuana, Mex.

1040 kilocycles 288.3 meters

CMGH
KRLD
GTESS
GLSAR

15
10000 10000
ae 1000

Matanzas, Cuba Dallas, Tex. Hot Springs, Ark. East Lansing, Mich.
O. y J. Alvarez

KRLD Radio Corp. (Adolphus Hotel)
Chamber of Commerce
Michigan State College

| 1050 kilocycles 2 |  |  |  | 285.5 meters |
| :---: | :---: | :---: | :---: | :---: |
| CMJG | $z$ | 50 |  | Camaguey, Cuba |
| KEBI | ae | 5000 | Dn | Abilene, Kans. |
| KNX | ae | 5000 | X | Hollywood, Calif. |
| XEFC | 2 | 10 |  | Merida, Yuc. |
| XES | adk | 500 | 1055K | Tampico, Mexico |

1050 kilocycles
Jose Antonio Lefran
Farmers \& Bankers Life Ins. Co.
Western Broadcast Co.
Hugo Molina Font
Wendell Cox

| 1060 | kil |  |  | 282.8 meters |
| :---: | :---: | :---: | :---: | :---: |
| KEMU | ${ }_{\text {ae }}$ | 500 10000 | ${ }_{\text {Dn }}$ | Portland, Ore. <br> Baltimore Md |
| W1过 | ${ }^{\text {ak }}$ | 1000 50000 | ${ }_{\text {D }}^{\text {D }}$ |  |

$\square$
KWJJ Broadcast Co., Inc.
Consolidated Gas, Elec. L. \& Pwr. Co. Norfolk Daily News
Travelers' Bdetg. Service Corp.

John L. towers
Metropolitan-Radio de Cuba
Julius Brunton \& Sons Co.
Superior Bdetg. Service, Inc.
James L. Bush.
National Broadcasting Co., Inc.
Miguel Yarza

John L. towers
Metropolitan-Radio de Cuba Julus Brunton $\&$ Sons Co. Superior Bdets. Service, Inc
National Broadcasting Co., Inc. Miguel Yarza


## 1090 kilocycles <br> KMOX ak 50000 C <br> 275.1 meters <br> St. Louis, Mo.

Station WBT lnc.
Wilbur Glenn Voliva
Moody Bible Institute

| 1100 | kilocycles |  |  |
| :--- | :--- | :--- | :--- |
| KGDM | ak | 250 | D |
| $W L W L$ | ae | 5000 | 1 |
| $W P G$ | ae | 5000 | lC |

## 1110 kilocycles

| CMJO | $z$ | 15 |  |
| :--- | :--- | ---: | :--- |
| KSOQ | ae | 1000 | Dn $(2.5)$ |
| VONF | $z$ | 500 | 1115 |
| YRYA | ae | 5000 | N |
| XENT | $z$ | 50000 | 1115 |

## 272.6 meters

Stockton, Calif.
New York City Atlantic City, N. J.


Voice of St. Louis, Inc.

| 1120 kilocycles |  |  |  |
| :---: | :---: | :---: | :---: |
| ceca | ak | 500 |  |
| CFIT | ak | 100 | EL |
| Cloc | ce | 100 | VX |
| CMHJ | ${ }_{\text {ak }}$ | 100 |  |
| KELO | ae | 100 | D |
|  | ak | 500 | 3 |
|  | aeh | 500 |  |
| KRSC | ak | 100 |  |
| ETRH | ak | 500 |  |
| * | ${ }^{\text {aj }}$ | 250 | (.5) |
| WISA | ${ }_{\text {ae }}^{\text {ae }}$ | 250 | 1 C |
| AW | ae | 500 | 2 |

## 270.1 meters

Ciego de Avila, Cuba
Sioux Falls, So. Dak.
St. John's, N. F. Richmond, Va. Neuvo Laredo, Mex.

[^11]267.7 meters

Toronto, Ont.
Kamloops, B. C. Summerside, P. E. I Lethbridge, Alta. Cienfuegos, Cuba Spokane, Wash. Los Angeles, Calif. Los Angeles, Calif. Seattle, Wash. Houston, Tex. Wilmington, Del. Milwaukee, Wis. Milwaukee, Wis. College Station, Texas Agricultural \& Mech. College

American Radio News Corp.
Toronto Daily Star
The Kamloops Sentinel
R. T. Holman, Ltd.

Harold R. Carson
Victorino Lopez (Hotel Bristol)
Spokane Broadcasting Corp.
Echo Park Evangelistic Assn.
Dalton's, Inc. (Arcade Bldg.)
Radio Sales Corp. (Wash. Ath. Club)
KTRH Broadcasting Co. (Rice Hotel)
WDEL, Inc.
Marquette University

| KSL | ae | 5000 | C |
| :--- | ---: | ---: | :--- |
| WIJD | ze | 20000 | Dn |
| WOV | ae | 1000 | D |
| XEH | ak | 1000 | 1132 |

265.3 meters

Sait Lake City, Utah Radior Service Corp. of Utah
Chicago, Ill.
New York City
Monterrey, Mexico

WJJD, Inc. (Palmer House)
International Broadcasting Corp. Tarnava \& Cia

1140 kilocycles 263.0 meters

| CMBJ | $z$ | 150 | $\ldots$ |
| :--- | :--- | ---: | :--- |
| CMBW | $z$ | 150 | $\ldots$ |
| KVOO | ae | 5000 | iN |
| WAPI | aj | 5000 | $1 N$ |
| XETS | $z$ | 500 | $\ldots$ |

Havana, Cuba
Havana, Cuba
Tulsa, Okla.
Birmingham, Ala
Mexico City, Mexico

1150 kilocycles 260.7 meters

| CMJH | ak | 50 |  |
| :--- | :--- | ---: | :--- |
| WHAM | ae | 5000 | BX |
| XEA | ak | 500 | K1155 |
| $10-A T$ | $z$ | 25 | 1155 |

Ciego de Avila, Cuba
Rochester, N. Y.
Guadalajara, Mexico
Trail, B. C.

Emilio Perera Alvarez-Moris
Southwestern Sales Corp.
WAPI Broadcasting Corp.
Manuel Espinosa Tagle

Luis Marauri Mendoza
Stromberg-Carlson Tel. Mfg. Co.
Radiofonografica de Guadalajara, S. A. Trail Amateur Radio Assn.

| WWVA | 5000 | 1C $\quad$ Wheeling, $W$. Va |
| :--- | :--- | :--- | :--- |

Main Auto Supply Co.
West Virginia Broadcasting Corp.


1180 kilocycles 254.1 meters

| CMW | ae | 1400 | 1185 |
| :--- | :--- | ---: | :--- |
| KEX | ak | 5000 | 2 N |
| KOB | ae | 10000 | 2 |
| MDGY | ak | 1000 | Dn |
| WMNS | ae | 500 | $\ldots$. |
| WMAZ | ak | 500 | $\ldots$. |

## 1190 kilocycles <br> yOAS aeh 50000 N

1200 kilocycles

| CHCH | 2 | 100 |  |
| :---: | :---: | :---: | :---: |
| CKOV | ak | 100 |  |
| CMGB | 2 | 30 | 1205 |
| KBTM | ak | 100 | D |
| KERN | ak | 100 | CT |
| KFIB | ak | 100 | (.25) |
| EFWF | ak | 100 | 5 |
| RFXD | ae | 100 |  |
| 区GuE | ae | 100 | (.25) |
| Kady | ak | 100 |  |
| KGEK | ak | 100 | 9 |
| KGEW | ak | 100 | 9 |
| KGEI | ae | 100 |  |
| KGHU | ak | 100 |  |
| KGVO | ak | 100 |  |
| KMLB | ae | 100 |  |
| kvos | $z$ | 100 |  |
| KWG | aeh | 100 | CT |
| WABI | ak | 100 |  |
| WAB' | ak | 100 | 1 |
| WBBZ | ak | 100 |  |
| WBES | ak | 100 | 4 |
| WCAT | ak | 100 | D |
| WCAX | ak | 100 |  |
| WCLO | ak | 100 |  |
| WCOD | ae | 100 |  |
| WFAM | ak | 100 | 8C |
| WFBE | ak | 100 | (.25) |
| WHEC | ak | 10 |  |
| (7)B | ak | 100 |  |
| cIB8 | $z$ | 100 | (.3) |
| WIL | ae | 100 | $5(.25)$ |
| प 1 BC | ae | 100 | 6 |
| Whai | ae | 100 | 6 |
| W)BW | ak | 100 | 1 |
| WKIC | ae | 100 |  |
| WIAP | ae | 100 | (.25) |
| WNBO | aeh | 100 |  |
| WNBW | $z$ | 10 | (.1) |
| WORC | ak | 100 | CH |
| Mertr | ae | 100 | (.25) |
| WREL | ak | 100 |  |
| WWAE | ach | 100 | 8 |
| D-AB | ak | 25 |  |
| D-AK | ak | 15 |  |
| 10-81 | ak | 25 |  |
| 10-BP | ak | 25 | 1199 |
| 10-30 | ak | 15 |  |
| $10-\mathrm{BC}$ | $z$ | 15 |  |

252.0 meters

San Antonio, Texas
Troncoso y Gil
National Broadcasting Co.
N. M. Coll. of Agr. \& Mechanical Arts

George W. Young
American Radio News Corp.
Southeastern Broadcasting Co.

## INDEX BY FREQUENCIES AND DIAL NU MBERS



| ak | 500 | E | Vancouver, B. C. |
| :---: | :---: | :---: | :---: |
| ak | 100 | 8 | Cobalt, Ont. |
| ak | 100 |  | Elk City, Okla. |
| ak | 100 |  | Devils Lake, N. Dak. |
| ak | 100 |  | Klamath Falls, Ore. |
| ak | 100 | (.25) | Lincoln, Neb. |
| ak | 100 |  | Fort Smith, Ark. |
| ae | 100 | 6 | Cape Girardeau, Mo. |
| ab | 100 | 9 | San Bernardino, Calif |
| an | 100 |  | Watertown, S. Dak. |
| ak | 100 |  | Dodge City, Kans. |
| ak | 100 |  | Olympia, Wash. |
| $z$ | 100 | DP | Eureka, Calif. |
| ak | 50 | 9 | Pasadena, Calif. |
| $z$ | 100 |  | Shreveport, La. |
| ae | 100 |  | Zanesville, Ohio |
| ae | 100 | 1 | Wilkes-Barre, Pa. |
| ak | 100 | 7 S | Richmond, Va. |
| ak | 100 | 2 | Springficld, 11. |
| ae | 100 | 4 | Chicago, Ill. |
| ae | 100 | 6 | Harrisburg, Ill. |
| $z$ | 100 | 4 | Chicago, Ill. |
| ak | 100 | 3 | White Plains, N. Y. |
| ae | 100 | 3 | Freeport, N. Y. |
| ae | 100 | 5 | Gulfport, Miss. |
| ae | 100 |  | Rock Island, 111. |
| aj | 100 |  | Anderson, Ind. |
| ak | 100 | D | Troy, Ala. |
| ae | 100 |  | Poynette, Wis. |
| ak | 100 | 3 | Red Bank, N. J. |
| ae | 100 | 1 | Lewisburg, Pa. |
| ach | 100 |  | Gadsden, Ala. |
| $z$ | 100 | PD | Hagerstown, Md. |
| ae | 100 |  | Akron, Ohio |
| ak | 100 | 5 | Greenville, Miss. |
| aj | 100 | ${ }^{7} \mathrm{C}$ | Richmond, Va. |
| ak | 100 | 3 | Jamaica, N. Y . |
| ak | 50 |  | Jamestown, N. Y. |
| ae | 100 |  | Manitowoc, Wis. |
| ak | 100 | a | Providence, R. I. |
| ak | 100 | a | Providence, R.I. |
| $z$ | 100 |  | Thomasville, Ga. |
| $z$ | 100 | 4 | Chicago, Ill. |
| ak | 100 |  | Columbus, Ohio |
| ae | 100 |  | Springfield, Tenn. |
| ac. | 100 |  | Gastonia, N. C. |
| 2 | 100 | 2 | Springfield, Ill. |
| $z$ | 500 |  | Mexico City, Mexico |
| $z$ | 50 | P | Chester Twp., N. Y. |

George C. Chandler
R. L. McAdam
E. M. Woody (Casa Grande Hotel)

KDLR, Inc.
KFJI Broadcasters, Inc.
Howard A. Shuman
Southwestern Hotel Co.
Oscar C. Hirs
J. C. 8 E. W. Uee
Greater Kampeska Radio Corp.
Dodge City Broadcasting Co.
KGY゙, Inc. (Capitol Park Bldg.)
Harold H. Hanseth
Pasadcna Presbyterian Church
Hello World Broadcasting Corp.
WALR Broadcasting Corp.
John H. Stenger, Jr. (Morris Bldg.)
Grace Covenant Pres. Church
Chas. H. Messter \& Harold L. Dewing
Clinton R. White
Harrisburg Broadcasting Co.
Emil Denemark, Inc.
Westchester Broadcasting Corp.
Harry H. Carman
Great Southern Land Co.
Beardsley Specialty Co. (Harms Hotel)
Anderson Broadcasting Corp.
Troy Broadcasting Co.
Wm. C. Forrest
Monmouth Broadcasting Co., Inc.
Bucknell University
Ingrams Broadcasting Co.
A. V. Tidmore

John $F$. Weimer
J. Pat Scully

Havens \& Martin, Inc.
Peter J. Prinz
A. E. Newton

Francis Mangin Kadow
Cherry \& Webb Broadcasting Co.
Cherry \& Webb Broadcasting Co.
Stevens Luke
World Battery Co., Inc.
Columbus Bdctg. Corp. (Seneca Hotel)
638 Tire \& Vulc. Co. (R/C WLW)
WSOC, Inc.
WTAX, Inc.
Excelsior, Cia Editorial S. A.
Peter Goelet

## 1220 kilocycles 245.8 meters

CMHK


| $z$ | 15 | 1225 |
| :--- | ---: | :--- |
| ae | 500 | 1 |
| $z$ | 1000 | 2 |
| ae | 1000 | $2(2)$ |
| ak | 500 | D |
| ae | 1000 | R |
| ak | 1000 | C |
| ak | 1000 | 1 B |

Cruces, Cuba
Lawrence, Kans.
Seattle, Wash. Pullman, Wash. Canton, N. Y. Pittsburgh, Pa.
Tampa, Fla.
Lawrence, Kans.




## INDEX BY FREQUENCIES AND DIAL NUMBERS



| ak | 1000 |
| :--- | ---: |
| ak | 500 |
| ak | 1000 |
| ae | 1000 |
| ak | 1000 |

1 Fort Worth, Texas
Twin Falls, Idaho
Waco, Texas
San Juan, P. R.
Detroit, Mich.

KTAT Broadcast Co., Inc. Radio Broadcasting Corp. of Idaho Central Texas Broadcasting Co.
Radio Corp. of Porto Rico
Kunsky-Trendle Broadcasting Corp.

| aj | 1000 | 2 |
| :--- | ---: | :--- |
| ae | 1000 | CT |
| ae | 1000 | $1(2.5)$ |
| ae | 1000 | 2 |
| ak | 1000 | $C$ |
| ak | 250 | 1 |
| ak | 1000 | 2 |
| zap | 1000 | 1 |
| ae | 1000 | 2 |
| $z$ | 250 | $\ldots . .$. |

## 1260 kilocycles



| ak | 1000 | 5 |
| :--- | ---: | :--- |
| ak | 1000 | B |
| ae | 500 | 1 |
| ak | 500 | P |
| $z$ | 500 | 1 |
| ae | 500 | C(1) |
| ak | 250 | $D$ |
| ae | 500 | CU |

## 238.0 meters

## 239.9 meters

Northfield, Minn.
Long Beach, Calif. Newark, N. J. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn.
Paterson, N. J. Minneapolis, Minn.
Mexico City, Mexico
Carleton College
Carleton College
Nichols $\&$ Warinner, Inc.
WAAM, Inc.
St. Olaf College
Jos. H. Uhalt
May Radio Broadcasting Co.
University of Minnesota
Richard E. O'Dea
Minnesota Broadcasting Corp.
Manuel F. Murguia

## 1270 kilocycles




Ciego de Avila, Cuba
Council Bluffs, Iowa
Harlingen, Texas Tucson, Arizona Brownsville, Texas Erie, Pa. Springfield, Vt. Savannah, Ga.
Gilberto Gessa Lopez
Mona Motor Oil Co.
KRGV, Inc. (Rio Grande Na. Life Bldg.)
Robert M. Riculfi
Frank P. Jackson
Bradcasters of Pennsylvania, Inc.
WNBX Broadcasting Corp.
Savannah Broadcasting Co., Inc.

Gilberto Gessa Lopez
KRGV, Inc. (Rio Grande Na. Life Bldg.) Robert M. Riculfi
Frank P. Jackson
Broadcasters of Pennsylvania, Inc.
Savannah Broadcasting Co., Inc.

## 236.1 meters



Havana, Cuba Havana, Cuba Decorah, lowa Seattle, Wash. Colorado Springs, Col. Decorah, Iowa Grand Rapids, Mich.
Ithaca, N. Y.
Baltimore, Md. Jackson, Miss. Grand Rapids, Mich. Kunsky-Trendle Broadcasting Corp.
1280 kilocycles


| aeh | 1000 | $(2.5)$ |
| :--- | ---: | :--- |
| aeh | 500 | 1 |
| ae | 500 | 1 C |
| ae | 1000 | $\mathrm{C}(2.5)$ |
| ae | 500 | $\mathrm{~N}(1)$ |
| aeh | 500 | 1 |
| aeh | 500 | C |

234.2 meters

Great Falls, Mont.
Camden, N. J. Asbury Park, N. J.
Chattanooga, Tenn.
Madison, Wis.
Trenton, N. J.
Dallas, Texas
Luis Perez Garcia
Antonio Ginard
Chas. W. Greenley
Seattle Broadcasting Co.
Reynolds Radio Co., Inc.
Luther College
Kunsky-Trendle Broadcasting Corp.
Cornell University
Baltimore Radio Show, Inc.
Lamar Life Insurance Co.
Kunsky-Trendle Broadcasting Corp. KYCS.
1300
Buttrey Broadcast, Inc. MTRS.
City of Camden (City Hall Tower)
Radio Industries Broadcast Co.
WDOD Bdetg. Corp. (Hotel Patten)
Badger Broadcasting Co., Inc.
Trenton Broadcasting Co.
City of Dallas (Hilton Hotel)

## 1290 kilocycles



## 232.4 meters

| $z$ | 20 | $\ldots$ |
| :--- | ---: | :--- |
| ak | 1000 | $\dot{N}$ |
| ak | 500 | 1 |
| $z$ | 50 | $D$ |
| ak | 1000 | $1 C(2.5)$ |
| $a e$ | 1000 | $\mathrm{~N}(2.5)$ |
| ak | 1000 | $C(2.5)$ |
| $z$ | 50 | $D$ |

Cienfuegos, Cuba Salt Lake City, Utah Galveston, Texas Blytheville, Ark. San Antonio, Texas Superior, Wis. Pittsburgh, $\mathbf{P a}$.
Saranac Lake, N. Y.

Oscar Zayas
Intermountain Broadcasting Corp. News Publishing Co. (Buccaneer Hotel) C. L. Lintzenich

Lone Star Broadcast Co. (Plaza Hotel)
Head of the Lakes Broadcasting Co.
Pittsburgh Radio Supply House
Smith 8 Mace

## 1300 kilocycles 230.6 meters


a
ak
aj
ae
ag
aed
ae
$z$
ae
ae
\& 250 .......

Guantanamo, Cuba Portland, Ore.
Los Angeles, Calif.
Wichita, Kans.
Portland, Ore.
Brooklyn, N. Y.
New York City
New York City
Troy, N. Y.
Miami, Fla.
Kiamsas City, Mo.
Tampico, Tams,

## Luis Morlote <br> KALE, Inc.

Los Angeles Broadcasting Co.
Wichita Eagle-Hotel Lassen Ashley C. Dixon-KFJR, Inc.
Peoples Pulpit Assn:
Debs Memorial Radio Fund, Inc.
Defenders of Truth wociety, Inc.
Rensselaer Polytechnic Institute
Isle of Dreams Broadcasting Corp.
Unity School of Christianity
Maria T. de Gutirrez

## 1310 kilocycles



| $z$ | 7.5 |  |
| :---: | :---: | :---: |
| ak | 100 | D |
| ak | 100 | C |
| ak | 100 | 7 |
| ck | 100 |  |
| ae | 15 |  |
| ak | 100 |  |
| ak | 100 | (.25) |
| $z$ | 100 | (.25) Z |
| ae | 100 |  |
| ak | 100 | (.25) |
| aj | 100 |  |
| ah | 100 |  |
| ak | 100 |  |
| ak | 100 |  |
| ak | 100 |  |
| $z$ | 100 | a |
| ak | 100 |  |
| $z$ | 100 |  |
| ak | 100 |  |
| $z$ | 100 |  |
| ae | 100 | $b$ |
| $z$ | 100 | a |
| ae | 100 | Q(.25) |
| ak | 50 |  |
| ae | 100 | 3 |
| ae | 100 |  |
| ae | 100 | 5 |
| ae | 100 |  |
| ak | 100 | 4 |
| ak | 100 | 7 |
| ae | 100 | 3 |
| ae | 100 |  |
| ae | 100 | b |
| $z$ | 100 |  |
| $z$ | 100 |  |
| ak | 50 | 6 |
| ak | 100 |  |
| ae | 100 | H(.25) |
| ae | 100 |  |
| ak | 100 | 5X |
| ak | 100 |  |
| ae | 100 |  |
| ae | 100 | C |
| ae | 100 | 4 |
| ak | 100 | (.25) |
| ak | 50 | 6 |
| $z$ | 100 |  |
| ak | 100 | 1315 |
| ak | 150 |  |

Moron, Cuba
Jerome, Arizona
Sacramento, Calif.
Boone, Iowa
Dublin, Texas
Greenville, Texas
Grand Junction, Colo.
Oklahoma City, Okla.
Lubbock, Texas
Springfield, Mo.
Wolf Point, Mont.
Kalispell, Mont
Kearney, Neb.
Yakima, Wash.
Medford, Ore.
Shreveport, La.
E1 Paso, Texas
Aberdeen, Wash.
Marquette, Mich.
Terre Haute, Ind.
Wilkes-Barre, Pa.
Joliet, Ill.
El Paso, Texas
Buffalo, N. Y.
Royal Oak, Mich.
Altoona, Pa.
Flint, Mich.
Lancaster, Pa.
Newport News, Va.
Philadelphia, Pa.
Ottumwa, Iowa
Johnstown, $\mathbf{P a}$.
Laconia, N. H.
Joliet, IIl.
Birmingham, Ala.
Galesburg, III.
Muncie, Ind.
Auburn, N. Y.
New Bedford, Mass.
Washington, D. C.
Reading, Pa .
Knoxville, Tenn.
Grove City, Pa .
Winston-Salem, N.C.
Philadelphia, $\mathbf{P a}$.
Jackson, Tenn.
Elkhart, Ind.
Laurel, Miss.
Monterrey, N. L., Mex.
Morelia, Mexico

Cesar Canals
Chas. C. Robinson
Jas. McClatchy Co.
Boone Biblical College
C. C. Baxter

New Furniture Co.
Western Slope Broadcasting Co.
Exchange Ave. Baptist Church
T. E. Kirksey

KGBX, Inc.
First State Bank of Vida
Donald C. Treloar
Central Nebraska Bdctg. Corp.
Valley Broadcasters, Inc.
Mrs. W. J. Virgin
KRMD, Inc. (Jefferson Hotel)
Tri-State Broadcasting Co., Inc.
KXRO, Inc. (Hotel Morck)
Lake Superior Broadcasting Co.
Banks of Wabash, Inc.
Louis G. Baltimore
WCLS, Inc.
Tri-State Broadcasting Co., Inc.
Howell Broadcasting Station
Royal Oak Broadcasting Co.
The William F. Gable Co.
Frank D. Fallain (Union Ind. Bldg.)
WGAL, Inc. (Lancaster Newsp. Bldg.)
Hampton Roads Broadcasting Corp.
Independence Broadcasting Co.
Iowa Bdetg. Co. (Hotel Ottumwa)

## WJAC, Inc.

Laconia Radio Club
Richard W. Hoffman
R. B. Broyles Furniture Co.

Permil N. Nelson
D. A. Burton-A. J. Marriott

WMBO, Inc. (Masonic Temple
New Bedford Bdetg. Co. (N. B. Hotel)
American Broadcasting Co.
Reading Broadcasting Co.
Stuart Bdetg. Co. (Farragut Hotel)
Grove City College
Winston-Salem Journal Co.
Foulkrod Radio Eng. Co., Inc.
Sun Publishing Co. (Sun Bldg.)
Elkhart Daily Truth
G. A. Houseman

Quintanilla y Stevenson
Carlos Gutierrez M.

## 1320 kilocycles 227.1 meters

| CMCR | $z$ | 150 | 1325 |
| :---: | :---: | :---: | :---: |
| CMCW | $z$ | 150 | 1325 |
| KGHE | ak | 250 | (.5) |
| KGMB | ak | 250 | C |
| kID | ae | 250 | (.5) |
| WADC | ae | 1000 | C |
| WSMB | ae | 500 | N |

Havana, Cuba
Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La.

Aurelio Hernandez
Jose Lorenzo
C. P. Ritchie \& J. E. Finch Honolulu Broadeasting Co. KID Broadcasting Co., Inc. Allan T. Simmons
WSMB, Inc.

1330 kilocycles 225.4 meters


| ae | 1000 | CT |
| :--- | ---: | :--- |
| ak | 250 | 1 $(2.5)$ |
| ah | 1000 | 1 CH |
| ae | 500 | CH |
| ae | 500 | $R(1)$ |
| ae | 1000 | $1 C$ |

San Diego, Calif. Tacoma, Wash.
Sioux City, Iowa
Hartford, Conn.
Cincinnati, Ohio
Eau Claire, Wis.

Don Lee Broadcasting System
KMO, Inc. (Hotel Winthrop)
Perkins Bros. Co.
WDRC, Inc.
The Crosley Radio Corp.
The Gillette Rubber Co.

Spokane, Wash.
Pensacola, Fla.
Toledo, Ohio

## 1350 kilocycles

| KIDO | ak | 1000 |  |
| :---: | :---: | :---: | :---: |
| KWK | ae | 1000 | B |
| WAW7 | ae | 250 | 1 |
| WBN8 | ae | 250 | $1 a$ |
| WCDA | ae | 250 | 1 a |
| WEHC | ae | 500 | D |
| WNSC | ae | 250 | 1a |

## 222.1 meters

Boise, Idaho
St. Louis, Mo.
Zarephath, N. J.
New York City
New York City
Emory, Va.
New York City
C. G. Phillips \& Frank Hill

Thomas Patrick, Inc. (Hotel Chase)
Pillar of Fire
New York Met. Broadcasting Corp
Italian Educ. Bdctg. Co., Inc.
Emory \& Henry College
New York Met. Broadcasting Corp.


| 1370 |  |  | 218.7 meters |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CMGE |  | 30 | 1375 | Cardenas, Cuba | Genaro Sebat |  |
| KCRC | ak | 100 | 2(.25) | Enid, Okla. | Enid Radiophone Co. (Oxford Hotel) |  |
| KFBL | ${ }_{\text {aj }}^{\text {aj }}$ | 50 100 |  | Everett, ${ }_{\text {Grand }}$ Forks , N. Dak. | University of North Dakota |  |
| KFt | $\frac{2 k}{\text { a }}$ | 100 |  | Fort Worth, Texas | Fort W'orth Broadcasters, Inc. |  |
| KFLx | $z$ | 100 |  | Galveston, Texas | George Roy Clough |  |
| KGAP | ${ }_{\text {ae }}^{\text {a }}$ | 100 100 | (.25) | Tucson, Arizona | Titchell Broadcasting Corp. |  |
| KGFG | bk | 100 | 2 | Oklahorna City, Okla | Oklahoma Broadcasting Co., Inc. |  |
| CGEI | zk | 100 | 4 | Santa Fe, N. Mex. | KGFL, Inc. |  |
|  | ak | 100 |  | San Angelo, Texas | KGKL, inc. (St |  |
| KICA | ${ }_{\text {ak }}^{2}$ | 100 100 | 4 | Clovis, Mox. Mex | Walmac Co., Inc. (Blue Bonnet Stud.) |  |
| KONO | ak | 100 |  | San Antonio, Texas | Mission Broadcasting C |  |
| kOOS | ae | 100 |  | Marshfield, Ore. | H. H. Hanseth, Inc. (Hall Bldg.) |  |
| KUJ | ${ }_{\text {ak }}^{\text {ak }}$ | 100 |  | Walla Walla, Wash. | KUJ, Inc. (Marcus Whitman Hotel) |  |
| KI | 2 | 100 | 3 | Seattle, Wash. | KVL, Inc. ${ }_{\text {Wilson Duncan Broadcasting }}$ |  |
| KMBTM | ${ }_{\text {ak }}$ | 100 |  | Kansas City, Mo. | Piedmont Broadcasting Cort. |  |
| WCBM | ae | 100 | $z(.25)$ | Baltimore, Md. | Baltimore Broadcasting Cor |  |
| WDAS | aeh | 100 | (.25) | Philadelphia, Pa. | WDAS Bdetg. Sta, Inc. (Elks Hotel) |  |
| W.GLC | ${ }^{2}$ | 50 |  | Glens Falls, N. Y. |  |  |
| WHIBD | ${ }_{\text {a }}^{\text {aeh }} \mathrm{bk}$ | 100 | C | Mount Orab, Ohio | ${ }_{\text {F. }}$ P. Moler |  |
| WHBO | ak | 100 |  | Memphis, Tenn. | Station WHBQ, Inc. (Hotel Clarid |  |
| WHDE | ${ }_{\text {a }}^{\text {akeh }}$ | 100 100 | (25) | Calumet, Mich. | Upper Michigan Broadcasting WIBM, Inc. (Otsega Hotel) | KCYs. |
| WIBEK |  | 150 | 1 Q | Detroit, Mich. | James F. Hopkins, Inc. (Curtiss Bldg.) | 1380 |
| CJEQ | z | 100 | ${ }_{6 P}$ | Williamsport, Pa. | Sun-Gazette Broadcasting Co | 1380 |
| WLE | ${ }_{\text {aeh }}^{\text {ae }}$ | 100 | (.25) | Atlanta, Ga, | Oglethorpe University | MTRS |
| WIVA | ck | 100 | 7 | Lynchburg, Va. | Lynchburg Broadcasting Corp. | 217.3 |
| WMBR | ak | 100 |  | Tampa, Fla. | F. J. Reynolds | 217.3 |
| QPFB | ak | 100 100 | D | Hattiesburg, Miss. | Hattiesturg broadcasting Co | DIAL |
| WRAK |  | 100 | 6 | Williamsport, | C. R. Cummins (Penn Central Bldg.) |  |
| WRAM | ae | 100 |  | Wilmington, $\mathrm{N} . \mathrm{C}$. | Wirmington Radio Assn, Inc. |  |
| WRDO | ae | 100 100 |  | Augusta, Maine | Racine' Bdetg. Corp. (Hotel Racine) |  |
| ESSES | ${ }_{\text {ak }}$ | 50 |  | Buffalo, N. Y. | Seneca Vocational School |  |
| XEFZ | ae | 100 |  | Coyoacan, Mexico | Manuel Zetina |  |


| $z$ | 150 | 1382 |
| :--- | ---: | :--- |
| $a k$ | 5000 | $C$ |
| $a k$ | 500 | 2 |
| $z$ | 500 | $\mathbf{Y}$ |
| $=$ | $\mathbf{a j}$ | 1000 |
| $\mathbf{a k}$ | 200 | $\mathbf{1 C}$ |
| $z$ | 125 | $\ldots \ldots$ |

Camaguey, Cuba Reno, Nevada Pittsburgh, Pa.
Clarinda, Iowa
LaCrosse, Wis.
Dayton, Ohio
Torreon, Coah., Mex.

Genaro Sebater
Enid Radiophone Co. (Oxford Hotel)
Leese Bros.
University of North Dakota
Fort worth Broadcasters, Inc.
Tucson Motor Service Co.
Mitchell Broadcasting Corp.
KGFL Inc.
KGKL, Inc. (St. Angelus Hotel)
W. E. Whitmore
W. Emac., Inc. (Bhue Bonnet Stud.)
H. H. Hanseth, Inc. (Hall Bldg.)

First Cong. Church of Berkeley
KUJ, Inc. (Marcus Whitman Hotel)
KVL, Inc.
Pilson Duncan Broadcasting Co
Piedmont Broadcasting Corp.
WDAS Bdetg. Sta., Inc. (Elks Hotel)
N. Parker and M. 11. Metcalfe
F. C. Zieg

Station WHBQ, Inc. (Hotel Claridge)
Upper Michigan Broadcasting Co.
WIBM, Inc. (Otsega Hotel)
tiss Bidg.)
Sun-Gazette Broadcasting Co
glethorpe University
Eynchburg Broadcasting Corp. 217.3
Hattiesburg Broadcasting Co.
A. J. St. Antoine \& E. J. Regan DIAL
C. R. Cummins (Penn Central Bldg.)

Rimington Radio Assn., lnc.
WRDO, Inc. (Augusta House)
Racine Bdets. Corp. (Hotel Racine)
Manuel Zetina

KCYS.
1380
MTRS.

DIAL

Feticiano Isaac
McClatchy Newspapers
KQV Bdetg. Co. (Investment BIdg.)
Iowa Broadcasting Co.
WKBH, Inc. (Radio Bldg.)
Stanley M. Krohn, Jr.
Jose A. Berumen

## INDEX BY FREQUENCIES AND DIAL NUMBERS

|  |  |  |
| :---: | :---: | :---: |
|  | ae ae a | 1000 |
| S00 | 发 | 1000 |

215.7 meters

Little Rock, Ark. Phoenix, Arizona Fayetteville, Ark. Cleveland, Ohio

| 1400 kilocycles |  |  |  | 214.2 meters |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CMCH | ak | 50 | 1405 | Havana, Cuba | Wifredo | Hum. Font | s Sa |
| CMCM | $z$ | 15 | 1405 | Havana, Cuba | Aurelio B | alino. |  |
| CMDB | ${ }_{\text {ze }}$ | 40 | 1405 | Havana, Cuba | Julio Po | ers |  |
| K20y | ${ }_{z}^{\text {ac }}$ | 500 250 | (.5) | Salt Lake City, Utah | Interstat College | Bcg. Corp. (H | Totel Bigelow |
| WBay | ak | 500 | ( | Lafayette, Ind. | Purdue ${ }^{\text {Com }}$ | niversity |  |
| WCCIT | ${ }_{\text {ae }}^{\text {ak }}$ | 500 500 | 2 | Brooklyn, N. Y. | Brooklyn | Broadcasting |  |
| WCMA | ${ }_{\text {ak }}$ | 500 |  | Brooklyn, N. | United ${ }^{\text {S }}$ | ates Broadcast | ing Corp. |
| WFOX | ak | 500 |  | Brooklyn, N. Y. | Paramou | nt Broadcasti |  |
| WKBE | ak | 500 | 1W | Indianapolis, Ind. | Indianap | lis Broadcasti | g, Inc. |
| XEP | aeh | 500 200 | 2 | $\xrightarrow{\text { Brooklyn, N. }}$ Laredo, Mexico | Voice of | Brooklyn, Inc. |  |




1430 kilocycles 209.7 meters

| KECA | ah | 1000 | N |
| :--- | :--- | ---: | :--- |
| RGSE | ak | 500 | D |
| WBAK | ak | 500 | $1(1)$ |

Los Angeles, Calif.
North Platte, Neb.
Harrisburg, Pa.

## INDEX BY FREQUENCIES AND DIAL NUMBERS

| WCAH | ae | 500 | CA | Columbus, |
| :---: | :---: | :---: | :---: | :---: |
| CFEEA | ae | 500 | CH | Manchester, N . |
| griec | ae | 500 | CA | Rochester, N. Y. |
| Whe | ak | 500 | 1CA(1) | Harrisburg, Pa. |
| MNBP | ae | 500 |  | Memphis, Tenn. |
| wOK0 | ae | 500 | CA | Albany, N. Y |

Commercial Radio Service Co. New Hampshire Broadcasting Co. WHEC, Inc. (Roch. Sav. Bank Bldg.)
WHP, Inc. (Harrisburg Telegraph)
Memphis Bdetg. Co. (WGBC)
WOKO, Inc. (Hotel Ten Eyck)

1440 kilocycles 208.2 meters

| CMBL | ak | 20 | 1445 | Havana, Cuba |
| :---: | :---: | :---: | :---: | :---: |
| CMBN | ak | 30 | 1445 | Havana, Cuba |
| KDEN | ak | 500 |  | Casper, wyo. |
| KLS | ae | 250 | D | Oakland, Calif. |
| KXYZ | ak | 250 |  | Houston, Texas |
| WBIG | ae | 500 | C(1) | Greensboro, N. C. |
| QCBA | ah | 250 |  | Allentown, Pa. |
| WMBD | ae | 500 | 3C(1) | Peoria, III. |
| TSAN | $z$ | 250 | a | Allentown, Pa . |
| WTAD | ak | 500 | 3 | Quincy, Ill. |

Julio C. Hidalgo
Armando Romeu Marrero
Donald L. Hathaway
Warner Bros.
Harris County Broadcast Co.
No. Carolina Broadcasting Co., Inc. B. Bryan Musselman

Peoria Broadcasting Co.
Allentown Call Publishing Co., Inc.
Illinois Broadcasting Corp.

1450 kilocycles

| KTBS | ae | 1000 | N |
| :--- | :--- | ---: | :--- |
| WBAS | ak | 250 | 1 |
| WGAR | ak | 500 | B |
| WHOM | ae | 250 | 1 |
| WSI | ak | 250 | 1 |
| WTFI | ak | 250 | 1 |
| ak | 500 | $\cdots$ |  |

206.8 meters

Shreveport, La. Hackensack, N. J. Cleveland, Ohio Jersey City, N. J. Newark, N. J. Fall River, Mass. Athens, Ga.


1470 kilocycles 204.0 meters

| KGA | ak | 5000 <br> MLAC <br> Me | 5000 |
| :--- | :--- | ---: | :--- |
| C |  |  |  |

1480 kilocycles

| CMBK | $z$ | 15 | 1485 |
| :--- | :--- | ---: | :--- |
| CMBR | $z$ | 40 | $\ddot{C}$ |
| GOMA | ek | 5000 | C |
| VKBW | ae | 5000 | C |

1490 kilocycles
WCKY ae 5000 N
1500 kilocycles

| KBD | ak | 100 | CT |
| :---: | :---: | :---: | :---: |
| CGIE | aj | 100 | (.25) |
| BGTES | ak | 50 |  |
| 6, ${ }^{\text {che }}$ | ak | 100 |  |
| CGB3 | bk | 100 |  |
| Kabl | ck- | 100 |  |
| KNOW | ak | 100 |  |
| KPIM | $z$ | 100 |  |
| KPO | aj | 50 |  |
| KREG | ak | 100 |  |
| EXO | - 2 | 100 |  |
| WEDY | ak | 100 |  |
| WHEF | ak | 100 | (.25) |
| WKBV | $z$ | 100 |  |
| GKBZ | ak | 100 |  |
| QLCOE | ae | 100 | (.25) |
| WMBS | ae | 100 | 1 |
| WMIL | ak | 100 | 1 |
| WMPC | ak | 100 |  |
| mine | ae | 100 |  |
| MOPI | ae | 100 |  |
| WPES | ae | 100 | (.25) |
| WRDW | ae | 100 |  |
| WSTB | aeh | 100 |  |
| WY/R | ak | 100 |  |
| WWSW | ae | 100 | X(.25) |

## 201.2 meters

Covington, Ky.

## 205.4 meters

St. Paul, Minn. Washington, D. C.

## Spokane, Wash. Nashville, Tenn.

Tri-State Bdctg. System, Inc. WBMS Broadcasting Corp. WGAR Broadcasting Co., Inc. New Jersey Broadcasting Corp. The Radio Investment Co., Inc. Doughty \& Welch Electric Co., Inc. Liberty Broadcasting Co.

National Battery Broadcasting Co. Old Dominion Broadcasting Co.

Northwest Broadcasting System
Life 8 Casualty Insurance Co.

## INDEX BY LOCATIONS WITH MAP KEY

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


## INDEX BY LOCATIONS WITH MAP KEY

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


INDEX BY LOCATIONS WITH MAP KEY
Columbia: C. National: Red, R; Blue, B; Both, N.


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

|  |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: |
|  | Watts |  | Kcys． |  |
| Saranac Lake F－26 | 50 | WMBZ | 1290 |  |
| Schenectady G－27 | 50000 | WGY | $R$ | 790 |
| Syracuse G－25 | 1000 | WFBL | C | 1360 |
|  | 250 | WMAC | 570 |  |
|  | 250 | WSYR | R | 570 |
| TroyG－27 | 500 | WHAZ | 1300 |  |
| Tupper Lake F－26 | 100 | WHDL | 1420 |  |
| UticaG－26 | 100 | WIBX | 1200 |  |
| Woodside I－27 | 100 | WWRL | 1500 |  |
| WhitePlainsH－27 bl | 100 | WEAS | 1210 |  |

NORTH CAROLINA

| Asheville M－23 | 1000 | WWNC N | 570 |
| :---: | :---: | :---: | :---: |
| Charlotte M－24 | 25000 | YRI C | 1080 |
| －Gastonia M－24 | 100 | WSOC | 1210 |
| Greensbora M－24 | 500 | WBIG C | 1440 |
| Raleigh M－25 | 1000 | WPTF N | 680 |
| Wilmigeton $\mathrm{N}-26$ | 100 | WRAM | 1370 |
| Winston－Salem M－24 | 100 | WSJS C | 1310 |



| 1000 | KFYR | N | 550 |
| :---: | :---: | :---: | :---: |
| 100 | KDLR |  | 1210 |
| 1000 | WDAS | N | 940 |
| 100 | KFIM |  | 1370 |
| 250 | KGCu |  | 1240 |
| 250 | KCPM |  | 1240 |

OHIO
Akron I－23
Canton I－23
Cincinnati K－22
Cleveland＿I－23
Columbus J－22
Davton J－22
Mount Orab K－22
Goung I－22
Zanesvilown I－23

| 1000 | Wanc | C | 1320 |
| :---: | :---: | :---: | :---: |
| 100 | WIW |  | 1210 |
| 10 | WIIBC |  | 1200 |
| 100 | WEBE |  | 1200 |
| 1000 | 立KRC | C | 550 |
| 50000 | WLiN | B | 700 |
| 500 | USSI | R | 1330 |
| 500 | WCAR | B | 1450 |
| 1000 | WHK | C | 1390 |
| 500 | WTAY |  | 610 |
| 50000 | WTAM | R | 1070 |
| 500 | WAU |  | 640 |
| 500 | HCAH | C | 1430 |
| 750 | WEAO |  | 570 |
| 100 | CSES |  | 1210 |
| 200 | WSM1K |  | 1380 |
| 100 | WHBD |  | 1370 |
| 1000 | $\underline{1}$ | C | 1340 |
| 500 | WKBN | C | 570 |
| 100 | WALR |  | 1210 |


| OKLAHOMA |  |  |  |
| :---: | :---: | :---: | :---: |
| Chickasha $\mathrm{N}-14$ | 250 | Kocw | 1400 |
| Euk City $\mathrm{N}-13$ | 100 | KASA | 1210 |
| Enic M－14 | 100 | KCRC | 1370 |
| Corman $\mathrm{N}-15$ | 500 | WVAD | 1010 |
| Oklahoma $\mathrm{N}-15$ | 100 | LEPR | 1310 |
|  | 100 | KGEG | 1370 |
|  | 5000 | LOMA | C 1480 |
|  | 1000 | JKY | N 900 |
| Ponca City M－15 | 100 | YBBZ | 1200 |
| Shawnce－15 | 100 | Kcar | 1420 |
| Tulsa M－15 | 5000 | KVOO | N 1140 |
| OREGON |  |  |  |
| Corvallis E－2 | 1000 | KOAC | 550 |
| Eugene－2 | 100 | FORE | 1420 |
| Klamath Falls G－3 c | 100 | kFI | 1210 |
| Marshfield F－I | 100 100 | koos | 1370 1310 |
| Medtord G－2 | 100 | KnEs | 1310 |


|  | Watts |  |  | Kcys． |
| :---: | :---: | :---: | :---: | :---: |
| Portland E－3 | 500 | KALE | C | 1300 |
|  | 5000 | KEX | N | 1180 |
|  | 100 | KPDS |  | 1420 |
|  | 500 | KFIP |  | 1300 |
|  | 1000 | LGV | N | 620 |
|  | 1000 | KOIN | C | 940 |
|  | 500 | KWI |  | 1060 |
|  | 100 | KXL |  | 1420 |
| PENNSYLVANIA |  |  |  |  |
| Allentoxio I－26 | 250 | WCBA |  | 1440 |
|  | 250 | WSAS |  | 1440 |
| Altoona I－25 <br> Carbondale 1 －26 <br> ErieH－24 | 100 | WFEG |  | 1310 |
|  | 10 | WNBW |  | 1200 |
|  | 100 | WERE |  | 1420 |
|  | 500 | wlisy | C | 1260 930 |
| Glenside I－26 rcGrove City $\mathrm{I}-24$Harrisburg $\mathrm{I}-25$ | 25 | WIBCT |  | 930 |
|  | 100 | WSAJ |  | 1310 |
|  | $\frac{500}{100}$ | WBAK |  | 1430 |
|  | 100 | WCOD | C | 1200 |
| Hazleton I－26 1 c Johnstown＿J－24 tancaster I－26 | 100 | WKEA |  | 1420 |
|  | 100 | WJAC |  | 1310 |
|  | 100 | WGAL |  | 1310 |
|  | 100 | WETC |  | 1200 |
| Lewisburg I－26 2hlacepais $1-26$ | 100 | VIEU |  | 1210 |
|  | 50000 | VCAU | C | 1170 |
|  | 100 | WDAS |  | 1370 |
|  | 500 | WFAN | C | 610 |
|  | 500 | WEI | R | 560 |
|  | 100 | NHIAT |  | 1310 |
|  | 500 | WIP | C | 610 |
|  | 500 | WIIT | R | 560 |
|  | 100 | WPEN |  | 1500 |
|  | 250 | WRA |  | 1020 |
|  | 100 | HTEE |  | 1310 |
| Pittsburgh J－24 | 50000 | KDKA | B | 980 |
|  | 500 | EQx |  | 1380 |
|  | 1000 | WCAE | R | 1220 |
|  | 1000 | WIAS | C | 1290 |
|  | 100 | WWSW |  | 1500 |
| Beadiagat 26 | 1000 | WEEU |  | 830 |
|  | 100 | WRAW |  | 1310 |
| Scranton H－26 | 250 | WGBL |  | 880 |
| State College I－25 | 500 | W＇PS |  | 1230 |
|  | 100 | WNBO |  | 1200 |
| Vilkes－Barre L－26 | 100 | ybar |  | 1210 |
|  | 100 | WBRE |  | 1310 |
| Williamsport I－25 | 100 | WRAK |  | 1370 |
|  | 100 | WJEQ |  | 1370 |
| YockI－25 tr | 1000 | WORK |  | 1000 |
| PHILIPPINES |  |  |  |  |
| Cebu | 500 | KZRC |  | 937.5 |
| Manila | 1000 | KZKA |  | 1110 |
|  | 50000 | KZRM |  | 618.5 |
| PORTO RICO |  |  |  |  |
| San Juan＿－ 1 － 34 | 1000 | WKム日Q |  | 1240 |
| RHODE ISLAND |  |  |  |  |
| Providence $\mathrm{H}-28$ | 250 | WEAN | C | 780 |
|  | 250 | VIAR | R | 890 |
|  | 100 | WPAE |  | 1210 |
|  | 100 | WPRO |  | 1210 |
| SOUTH CAROLINA |  |  |  |  |
| Charleston O－25 | 500 | WCSC |  | 1360 |
| Columbia ${ }^{\text {N－2 }}$ | 500 | WIS | N | 1010 |
| Spartanbürg N－23 | 100 | WSPd |  | 1420 |

## INDEX BY LOCATIONS WITH MAP KEY

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

| SOUTH DAKOTAWatts |  |  | Kcys. | VIRGINIA | Watts |  | Kcys. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Brookings H-15 | 500 | KFDY | 550 | Arlington J-25 | 1000 | NAA |  | 690 |
| Huron 1-14 | 100 | KGD | 1200 | Danville L-25 | 100 | WBTM |  | 1370 |
| Mitcheld I-14 | 100 | KCDA | 1370 | Emory L-23 | 500 | WEHC |  | 1350 |
| Pierre C-13 | 200 | KGFX | 630 | Lynchburg L-25 | 100 | WLVA |  | 1370 |
| Rapid City II-12 | 100 | HCAT | 1200 | Newport News L-26 | 100 | WGH |  | 1310 |
| Sioux Falls H-15 | 1000 | KSOQ | 1110 | Norfolk L-26 | 500 | WTAR | C | 780 |
| Vermillion I-15 | 500 | KUSD | 890 | Petersburg L-26 | 100 | WPHR |  | 1200 |
| Watertorim G-15 | 100 | KGCR | 1210 | Fortsmouth L-26 tc | 500 | TPOP |  | 780 |
| Yanktonl-15 | 1000 | WNAS C | 570 | Richmond K-26 | 100 | VBBE |  | 1210 |
|  |  |  |  |  | 100 | WMBG | C | 1210 |
| TENNESSEE |  |  |  |  | 5000 |  | N | 1110 |
|  |  |  |  | Rganoke L-24 | 250 | WDBJ | C | 930 |
| Bristol_L-23 | 100 | WOPL | 1500 |  | 250 | WRBX |  | 1410 |
| Chattanooga $\mathrm{N}-21$ | 1000 | WDOD C | 1280 | WASHINGTON |  |  |  |  |
| Jackson M-19 br | 100 | WTJS | 1310 |  |  |  |  |  |
| Knoxylle M-22 | 1000 | WNOX C | 560 | Aberdeen D-2 | 100 | KXRO |  | 1310 |
| Memphis $\mathrm{N}-19$ | 100 | WROL | 1310 | Bellingham C-3 | 100 | KVOS |  | 1200 |
|  | 100 | WHBQ | 1370 | Everett C-3 | 50 | KFBL |  | 1370 |
|  | 500 | WMC N | 780 | Olympia D-3 tl | 100 | KGY |  | 1210 |
|  | 509 | WNBR | 1430 | Pullman E-5 | 1000 | KWSC |  | 1220 |
|  | 500 | WREC C | 600 | Seattle S-3 | 5000 | KUS | N | 970 |
| Nashville_M-21 | 5000 | WLAC C | 1470 |  | 1000 | KR |  | 1270 |
|  | 50000 | $\xrightarrow[\text { WSM }]{ } \mathrm{N}$ | 650 |  | 1000 | KOMO | N | 920 |
| Springfield M-20 | 100 | WSIX | 1210 |  | 100 | KPCB |  | 650 |
|  |  |  |  |  | 100 | KRSC |  | 1120 |
| TEXAS |  |  |  |  | 1000 | KTW |  | 1220 |
| Amarillo $\mathrm{N}-12$ |  |  |  | SpokaneD-5 | 250 | K又 |  | 1370 760 |
|  | 1000 | KGRS | 1410 1410 |  | 100 | KEla |  | 1120 |
| Austin Q-14 | 1000 100 | KNOW | 1500 |  | 1000 | KFPY | C | 1340 |
| Beaumont $\mathrm{R}-17$ | 500 | KFDM | 560 |  | 5000 1000 | KGA | $\stackrel{\mathrm{B}}{\mathrm{N}}$ | 1470 590 |
| Brownsvilue U-15 | 500 | KWWG | 1260 | Tacoma D-3 | 1000 250 | KHO | N | 590 1330 |
| College Sta. Q-15 <br> Corpus Ctristi S-14 | 500 100 | WTAW | 1120 | Tacoma D-3 | 500 | KVI | C | 570 |
| Dallas P-15 | 100 10000 | KRED C | 1040 | Walla Walla E-5 | 100 | kOI |  | 1370 |
|  | 50000 | WFAA N | 800 | Wenatchee D-4 | 50 | kPQ |  | 1500 |
|  | 500 | WRRR C | 1280 | Yakima D-4 | 100 | KIT |  | 1310 |
| ${ }_{\text {D }}$ Dublin P-14 | 100 | KFPL | 1310 | WEST VIRGI |  |  |  |  |
| El Paso P-9 | 100 | KTSM | 1310 | WEST VIRG |  |  |  |  |
| Eort Worth-P-15 | 100 | WDAM | 1310 | Bluefield L-24 | 250 | WHIS |  | 1410 |
|  | 100 | KFIZ | 1370 | Charleston K-23 | 250 | WOBU |  | 580 |
|  | 1000 |  | 1240 | Fairmont ${ }^{\text {d }}$ - 24 | 250 | WMMN |  | 890 |
|  | 10000 | WRS N | 800 | Huntington K-23 | 250 | WSAZ |  | 580 |
| Galveston R-16 | 100 | kFLX | 1370 | Wheeling-24 | 5000 | WWVA | C | 1160 |
|  | 500 | KEUL | 1290 |  |  |  |  |  |
| Greenville O-15 | 15 500 | KFPM | 1310 | WISCONSIN |  |  |  |  |
| Houston R-16 | 500 1000 | ${ }_{\text {KRRRC }}{ }^{\text {K }}$ | $\begin{array}{r}1260 \\ 920 \\ \hline\end{array}$ | Eau Claire G-18 | 1000 | WTAQ | C | 1330 |
|  | 500 | KTREI C | 1120 | Fond dullac H-19 | 100 | KFIZ |  | 1420 |
|  | 250 | KXYZ | 1440 | Green Bay G-19 | 100 | WHBY |  | 1200 |
| Lubbock O-12 tr | 100 | KFYD | 1310 | Janesville 1-19 | 100 | WCLO |  | 1200 |
| San Angelo Q-13 | 100 | KGEI | 1370 | La Crosse $\mathrm{H}-18$ | 1000 | WKBH | C | 1380 |
| San Antonio R-14 | 100 | KABC | 1420 | Madison H-19 | 1000 | WHA |  | 940 |
|  | 100 | KMAC | 1370 |  | 500 100 | $\frac{\text { WIBA }}{\text { WOMT }}$ |  | 1280 1210 |
|  | 100 1000 | KONO | 1370 1290 | Manitowoc H-20 <br> Mitwaukee ${ }^{\text {H-1 }} 19$ | 100 250 | $\begin{aligned} & \text { WODIT } \\ & \text { WHAD } \end{aligned}$ |  | 1210 1120 |
|  | 1000 50000 | KTSA ${ }_{\text {KOA }}^{\text {Cod }}$ | 1290 1190 | Miwaukee 日-19 | 250 | WHAD | C | 1120 1120 |
| Tyler P-16 rc | 100 | KGKB. | 1500 |  | 1000 | WTMJ | N | 620 |
| Wichita Falls O-14 | 1000 250 | WACO CGK | 1240 570 | Poynette H-19 | 100 100 | WIBU |  | 1210 1370 |
|  | 250 | KGKO | 570 | Racinc 1-20 <br> Sheboygan H-20 | 100 500 | WRIN WHBL |  | 1370 1410 |
|  |  |  |  | Stevens Point G-19 | 2000 | WLBL |  | 900 |
| UTAH |  |  |  | Superior F-ry | 1000 | WEBC |  | 1290 |
| Salt Lake City I-7 | 2500 | KDYL N | 1290 | WYOMING |  |  |  |  |
|  | 500 5000 | $\begin{array}{ll} \mathrm{KLO}^{\mathrm{KSL}} & \mathrm{C} \end{array}$ | $\begin{aligned} & 1400 \\ & 1130 \end{aligned}$ | Casper H-10 | 500 | KDFN |  | 1440 |
| VERMONT |  |  |  | CANADA |  |  |  |  |
| Burlington F-27 | 100 | WCAX | 1200 | ALBERTA |  |  |  |  |
| Rutland ${ }^{\text {a }}$-27 | 100 | WSYB | 1500 |  |  |  |  |  |
| St. Albays S -27 | $\frac{109}{250}$ | WODM | 1370 <br> 1260 | Calgary B-7 | 500 10000 | CFAC |  | 690 985 |
| Whternuey $\mathrm{F}-27 \mathrm{c}$ | $\frac{250}{500}$ | WDDET | 1260 550 |  | 10000 500 | CECN |  | 985 690 |

INDEX BY LOCATIONS WITH MAP KEY
Columbia: C. National: Red, R; Blue, B; Both, N.


## INDEX BY LOCATIONS WITH MAP KEY



TIME CONVERSION TABLE

| Atlantic | Eastern | Central | Mountain | Pacific | Atlantic | Eastern | Central | Mountain | Pacific |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1:00 | 12:00 | 11:00 | 10:00 | 9:00 | 7:00 | 6:00 | 5:00 | 4:00 | 3:00 |
| 2:00 | 1:00 | 12:00 | 11:00 | 10:00 | 8:00 | 7:00 | 6:00 | 5:00 | 4:00 |
| 3:00 | 2:00 | 1:00 | 12:00 | 11:00 | 9:00 | 8:00 | 7:00 | 6:00 | 5:00 |
| 4:00 | 3:00 | 2:00 | 1:00 | 12:00 | 10:00 | 9:00 | 8:00 | 7:00 | 6:00 |
| 5:00 | 4:00 | 3:00 | 2:00 | 1:00 | 11:00 | 10:00 | 9:00 | 8:00 | 7:00 |
| 6:00 | 5:00 | 4:00 | 3:00 | 2:00 | 12:00 | 11:00 | 10:00 | 9:00 | 8:00 |

cFac
690 Calgary, Alta., MST
7:30-9 a.m.; 11:30 a.m.-1:30 p.
m.; 4:30-6 p.m.; 7-9 p.m.

CFBO $890^{\circ}$ St. John, N. B.
CFCA 1120 Toronto, Ont., EST.
7:15-noon; 1-10:30 p.m.
CFCF 1030 Montreal, Que., EST. 8 a.m.-mid
CFCH 930 North Bay, Ont., EST.
8-8:30 a.m.; noon-1 f.m.; 5-8
CFCN 985 Calgary, Alta., MST'.
7:30 a.m.-1:30 p.m.; 5-11 p.m.
CFCO 1210 Chatham, Ont., EST. 9-10 p.m.
CFCT 630 Victoria, B. C., PST.
8 a.m.-12:30 p.m.; 6-8 p.m.
CFCY 580 Charlottetown, P. E. I., AST.
11:30 a.m.-noon; 4:30-8 p.m.
CFJC 1120 Kamloops, B. C., IST
7:30-9:30 a.m.; noon-2 p.m.; 5:30-7 p.m.; mid.-2 a.m.
CFLC 915 Prescott, Ont., EST.
8-10 a.m.; noon-2 p.m.; 5-7:30 p.m. : 8-10 p.m.

CFNB 1210 Fredericton, N. B., AST.
8:30-9:30 a.m.; 12:30-2 p.m.
CFQC 910 Saskatoon, Sask.
CFRB 690 Toronto, Ont., EST.
8 a.m.-mid.
CFRC 930 Kingston, Ont.
CHCH 1200 Montreal, Que.
CHCK 960 Charlottetown, P. E. I., AST.
Noon-2 p.m.; 5-7:30 p.m.
CHGS 1120 Summerside, 1. E. I., AST.
10 a.m.-2 p.m. ; 4-8 p.m.
CHLs 730 Vancouver, B. C., PST. 8:50-10:30 p.m.
CHMA 580 Edmonton, Alta. MST. Silent.
CHML 880 Hamilton, Ont., EST'. 9 a.m.- 2 p.m.
CHNC 840 Toronto, Ont.
CHNS 815 Halifax, N. S., AST.
8 a.m.-2 p.m.; 6 p.m.-mid.
CHRC 645 Quebec, Que., EST .
9 a.m.-2 p.m.; 5 p.m.-mid.
CHWC 960 Regina, Sask., MST.
7-9 a.m.; 10-11 a.m.; noon-1 p. m.; 3:30-6-30 p.m.

CHWK 665 Chilliwack, B. C., PST. Noon-8 p.m.
CHYC 730 Montreal, Que.
CJCA 745 Edmonton, Alta., MST. 7:45-9:15 a.m.; noon-1 p.nı.; 3:30-4:30 p.m.; 5-10 p.m.
CJCB 880 Sydney, N. S., AST. 10 a.m.-2 p.m.; 6-10 p.m.
CJCJ 690 Calgary, Alta., MST. 9-11:30 a.m.; 1:45-3 p.m.; 6-7 p.m.

CJGC 595 London, Ont., EST.
8:45 a.m.-1:15 p.m.; 5:30-10 p.m

CJGX 630 Yorkton, Sask., CST'
8:30-9:15 a.m.; 10:30-10:45 a. m.; 12:40-1:15 p.m.; 7:15-8

CJOC 1120 Lethbridge, Alta., MST. 8:45-10 a.m.; noon-1:15 p.m.; 3-4 p.m.; 6-8 p.m.
CJOR 1210 Yancouver, B. C., PST 7:30 a.m.-1 p.m.; 4-11:30 p.m.
CJRM 665 Moose Jaw, Sask., MST. 8-10:30 a.m.; noon-2:30 p.m.; 7:30-10 p.m.

CJRW
CKAC 730 Montreal, Que., EST.
Noon-1 pm. $4 \cdot 30 \mathrm{~m} .30$, MST 7:30 a.m.-rnid.
CKCD 730 Vancouver, B. C
CKCI 645 Quebec, Que., EST 1-1:30 p.m.
CKCK 960 Regina, Sask., MST.
9-10 a.m.; 11 a.m.-noon; 1-3:30 p.m.; 5:30-riid

CKCL 580 Toronto, Ont., EST. 8:30 a.m.-mid.
CKCO 890 Ottawa, Ont
CKCR 645 Waterloo, Ont., EST. 10 a.m.-1:15 p.m.; 4-10 p.m.
CKCV 880 Quebec, Que. EST'. Noon-2 p.m.; 6:30-11 p.m.
CKFC 730 Vancouver, B. C. Silent.
CKGW 840 Toronto, Ont., EST. 6:45 a.m.-mid
CKIC
Wolfville, N. S., AST. 7:30-8:30 a.m.; 12:15-1:15 p.m.; 6-7 p.in.
CKLC
CKMC
8 a.m. $8: 15 \mathrm{p} . \mathrm{m}$.
EKMC 1210 Cobalt, Ont.
Silent.
CKMO 730 Yancouver, B. C.
CKNC 960 Toronto, Ont., ESTT. 8 a.m.-12:30 n.m.; 2:30-11:15
CKOC 635 Hamilton, Ont., ESTT. 8 a.m.-10:30 p.m.
CKOK 540 Windsor, Ont., EST. 7:30 a.m.-mid.
ekOV

CKPC
Kelowna, B. C., PST. 8-9 a.m.; 11:30 a.m.-2 p.m.; 4:30-7:30 p.m.: $9-11$ p.m. 880 Preston, Ont, EST. 4 p.rn-rnid.
CKPR 890 Ft. William, Ont., EST. 9a.m.-2 p.m.; 5:30-11 p.rn.
CKTB 635 St. Catherines, Ont., ESTT.
1:30-5 p.m.; 6:30-8 p.m.
ckUA
580 Edmonton, Alta., MST Silent.
CKwX 730 Vancouver, B. C., PST.
8-8:30 i.m.; 10:30 a.m.-noon; 4:30-7:30 p.m.
CKX 930 Brandon, Man., CST. 8:30-9:30 a.m.
CKY 780 Winnipeg, Man., CSTT.
8:30 a.m.-2 p.m.; 3:30-6 p.m.; 7-11 p.m.
CMAB 1249 Pinar del Rio, Cuba.
CMAF 680 Havana, Cuba.
CMAY 965 Havana, Cuba.
CABE 965 Havana, Cuba, ESST.
11 a.m. -5 p.m.
cmbd 1270 Havana, Cuba
CMBF 1365 Havana, Cuba.
cmbG 1070 Havana, Cuba.
CMBJ 1140 Havana, Cuha.
GMBK 1485 Havana, Cuba
CMBL 1445 Havana, Cuba, EST. 3-5 p.m.
CMBN 1445 Havana, Cuba, EST. 2-3 p.m.; 9:15-11 p.m.
EMBR 1485 Havana, Cula.
cmbs 780 Havana, Cuba.
COMBW 1140 Havana, Cuba.
cmby 1230 Havana, Cuba.
CMBZ 1010 IIavana, Cuba, EST. 9-10:30 a.m.; noon-2 p.in.; 4-5 p.m.; 6-7 p.m.; 8-11 p.m.

CMC 840 Mlavana, Cuba.
DMCA 1230 Havana, Cuba.

CMCB 1070 Havana, Cuba, EST. 11:30 a.m.-1 p.m.; 5-6 p.m.; 7:30-10 p.m.
CMCD 925 Havana, Cuba, EST.
Noon-3 p.m.; 8 p.m.-mid.
CMCF 890 Havana, Cuba, EST. 5-8 p.m.; 9-11 p.m.
CMCH 1405 Havana, Cuba, EST. 5-9 p.m.
CMCJ 588 Havana, Cuba
CMCM 1405 Havana, Cuba
CMCN 1270 Havana, Cuba
CMCQ 780 Havana, Cuba
CMCR 1325 Havana, Cuba.
CMCU 630 Havana, Cuba
CMACW 1325 Havana, Cuba
CMCX 1010 Havana, Cuba
сmсу 1365 Havana, Cuba, EST. 8:30-10.30 $\mathrm{p} . \mathrm{m}$.
CMDB 1405 Havana, Cula
CMDD 588 Havana, Cuba
CMDE 925 Lavana, Cuba
CMGA 834 Colon, Cuba
CMGB 1205 Matanzas, Cuba
CMGC 820 Matanzas, Cuba
CMGE 1375 Cardenas, Cuba.
CMGF 987 Matanzas, Cuba.
CMGH 1040 Matanzas, Cuba.
CMHC 790 Tuinucu, Cuba.
CMHD 950 Caibarien, Cuba.
CMHI 1030 Santa Clara, Cuba, EST 11 a.m.-1 p.m. 8-10 p.m.
CMHJ 1125 Cienfuegos, Cuba, EST.
11 a.m.-1 p.m.; 7-9 p.m.
CMHK 1225 Cruces, Cuba
CMHL 1290 Cienfuegos, Cuba
CMJC 1382 Camaguey, Cuba.
CMJE 1175 Camaguey, Cuba.
CMJF 930 Camaguey, Cuba.
CMJG 1050 Camaguey, Cuba.
CMJH 1150 Ciego de Avilis, Cuba, EST.

CMJI 1260 Ciego de Avila, Cuba, LST.
10 a.m.-1:30 p.m.; 6-10 p.m.
CMJL 960 Camaguey, Cuba.
CMJO 1110 Ciego de Avila, Cuba.
CMJP 1310 Moron, Cuba.
CMK 730 Havana, Cuba, EST.
10 a.m.-noon; 6 p.m.-mis .
CMKC 1034 Santiago, Cuba.
CPAKJ 1300 Guantanamo, Cuba.
CMQ 630 Havana, Cuba.
CMW 1185 Havana, Cuba, EST 7:30 a.m.-11:30 p.m.
CMX 890 Havana, Cuba, EST.
11 a.m.-2 p.m.; 8-11 p.m.
CNRA 630 Moncton, N. 13., AST. 12:30-2 p.m.; 6:15-7:15 p.m.; 8:30-10 p.m.
CNRH 815 Halifax, N. S. AST Silent.
CNRO 600 Ottawa, Ont., $E S T$
Noon-1 p.m.; 6-11 p.m.
CNRV 1030 Vancouver, B. C., PST.
2-3:30 p.m.; 5:30-8:30 p.m.
CPRY 840 Toronto, Ont., EST. 1-1:30 p.m.; 7:45-8:30; 9:3010 p.in.
HHK 920 Portau Prince, Hainti. 630 Santo Domingo, EST. 8:25-9:40 p.m.
KABC 1420 San Antonio, Ter., CST. 6:45 a.m.-1:30 p.m.; 4-11:30
KALE 1300 l'orthand; Ore. PST. 710:30 a.m.; 2:30-5; 6-7 p.m.
KARK 890 Little Rock, Ark., CST. 7:30 a.m.-4 p.m.

KASA 1210 Elk City, Okla., CST'
$7 \mathrm{a} . \mathrm{m} .9 \mathrm{pm}$.
KBPS 1420 Portland, Ore., I'ST. 11 a.m.-12:30 p.m.; 3-5 p.m.
KBTM 1200 Paragould, Ark., CST. 7:30 a.m.-1:30 p.m.: 3:15-6:15
KCMC 1420 Texarkana, Ark, CST. 6:45 a.m-2 p.m. 4-3p.m.
KCRC 1370 Enid, Okla, CST.
10 a.m.-2 p.m.; 3:45-7:45 p.m.
KCRJ 1310 Jerome, Ariz., MST. 7:30-9:3J a.m.; noon-1 p.m. 3:45-6 p.m.
KD8 1500 Santa Barbara, Calif., PST'.
8 a.m.-mid.
KDFN 1440 Casper, Wyo, MST 9 a.m. $-9 \mathrm{p} . \mathrm{m}$.
KDKA 980 Pittsburgh, Pa., EST'
7 a.m.-19:30 a.m. next day
KDLR 1210 Devils Lake N. D. CST 7 a.m. 3 p.m.; 5:30-9:30 p.m.
KDYL 1290 Salt Lake City, Utah, MST.
6:30 a.m.-1 ta, m. next day.
KECA 1430 Los ingeles, Calif. PST 9 a.m.-11 p.m.
KELW 780 Burbank, Calif., PST.
10 a.m.-1 p.m.; 5-8 p.m.
KERN 1200 Bakersficld, Calif. PST'. 7:30 a.m.-Mil.
KEX 1180 Portland, Ore., $P S T$.
7 a.m.-noon; 1 p.m.-mid.
KFAB 770 Lincoln, Neb., CST'.
6a.m.-10:30 p.m.
KFAC 1300 Los Angeles, Calif., PST 7 a.m.-mid.
KFBB 1280 Great Falls, Mont.,MST. 8 it.m. -3 p.m. ${ }^{5-10 ~ p . m . ~}$
KFBI 1050 Abilene, Kinns., CST 5 a.m. 9 p.m.
KFBK 1310 Sicramento, Calif., IST 7 a.m.-11 p.m.
KFBL 1370 Everett, Wash., $\mathrm{PS}^{\prime}$ r. 8:30 a.m.-rioon; 3-6 p.m.; 3-6 a.m.

KFDM 566 Beaumont. Texis, CST. 7 a.m.-2 p.m.; 4:30-10:30 p.m.
KFDY 550 Brookings, S. D., CST' 12:30-2 p.m.
KFEL 920 Denver, Colo., MST'.
7-8:30 a.m.; 10 a.m.-12:30 p.m.; 3-4:30 p.m.; 6-7:30 p.ru. ; (1nid.
KFEQ 680 St. Joseph, Mo., CS'T. 6 a.m.-7:45 p.m.
KFGQ 1310 Boone, Iowa, CST 6-7:30 a.m.; 1:30-2:30 p.m
KFH 1300 Wichita, Kans., CST 7-8:30 a.m.; $9-11 \mathrm{a} . \mathrm{m}$; 11:30 a.m.-2 p.m.; 3-11 p.m.

KFI 640 Los Angeles, Calif., PST 6:30 a.m.-mid.
KFIO 1120 Şokane, Wash., PST
6 a.m.-sunset.
KFIZ 1420 Fond du Lac, Wis., CST $10 \mathrm{a} . \mathrm{m} .-1 \mathrm{p} . \mathrm{m} . ; 4$-10 p.m.
KFJB 1200 Marshalltown, Iowa, 6-9 a.m.; noon-3 p.m; b-9 p.m.

KFJI 1210 Klarnath Falls, Ore. PST'.
7:30 a.m.-9 p.m.
KFJM 1370 Grand Forks, N. D., 7 a.m.-9 p.m.

KFJR 1300 Portland. Ore., PST'
10:30 a m.-2:30p. m.; 5-b p.m.; 7-mil.
KFJZ 1370 Fort Worth, Texas, CST 7 a.m.-11 p.m.
KFKA 880 Greeley, Colo, MST
0.7:30 a.m.: 9 a.m.-2:30 p.m.; $8-11 \mathrm{p} . \mathrm{m}$.
KFKU 1220 Lawrence, Kans, CST.
2:30-3 p.m.: 6-6:15 p.m.
KFKX 1020 Chicago, Ill.
KFLV 1410 Rockford. Ill., CST. 10 a.m. -12:30 p.m.; 3-6 p.m.; 8.10 p.ra.

KFLX 1370 Galveston, Texis
KFMX 1250 Northfietd, Minn. Silent.
KFNF 890 Shenandoah, In., (STT.
5-8 a.m.; 9-10 a.m.; $12: 15-5$ p.m. : 6-10 p.m.

KFOR 1210 lincoln, Nebr.. CST -a.m.- 10 p.m.
KFOX 1250 Long Beach, Calif., PST 6 armemid
KFPL 1310 Dublin, Tex:ls, CST . $6: 1 \mathrm{~m} .10: 30 \mathrm{p} . \mathrm{m}$.
KFPM 1310 Gireenville. Texas, CST . 7:45-9 ; .m. ; 1-2:45 p.an. ; 6-9 p..m.
KFPW 1210 Fort Smith, Ark., CST'. 6:30 a.m. - 2 p.m.; $5-10: 30$ p.m.
KFPY 1340 Spokane, Wash, PST'. $7 \mathrm{a} . \mathrm{m} .12: 30 \mathrm{a} \mathrm{m}$. nest day.
KFQD 1230 Anchorage, Aliska. 6 p m.m.mil! (Zone 6)
KFRC 610 San Francisco, Calif. PST.
7 a.m.-1 a.m. next day.
KFRU 630 Columbia, Mo, CST 6:30 a.m.-9; 4-8 p.m.
KFSD 600 San Diego, Calif., PST 7:30 a m.-mid.
KFSG 1120 Los Angeles, Calif., PST 1:31)-3 p.m.; 7:30-mid.
KFUL 1290 Galveston, Texas, CST.
8-9:30 a.m.; 11 a.m.-1 p.m.; 2:30-4 p.m.; 5:30-8 p.m.; 10: 15 p.m.mil.
KFUO 550 St. Louis, Mo., CST. 6:30-7 a.m.; 12:15-12:40 p.m. 11 p.m. unlimited.
KFVD 1000 Los Angetes, Calif., $P^{2} S T$. 6:.m.-6:45 p.m.; 10 p.m.-mid.
Kfvs 1210 Cape Girardeau, Mo., ('ST'.
9 a.m.-noon; 4-7:30; 9-mid.
KFWB 950 Los Angeles, Calif., IST'.
7:30 a m.m.mid.
KFWF 1200 St. Louis, Mo., CST
9:45 a.m.-11:15 a.m.
KFWI 930 San Francisco, Calif., PST.
$7-8$ a.m.; 9 a.m.-1 p.m. $6-7: 30$
p.m.; 11 p.m.-1a.m.

KFXD 1200 Nampa, Idaho, MST.
7 a.m. 9 p.m.
KFXF 920 Denver, Colo, MST'
8:30-10 a m. ; 12:30-3; 4:30-6; 7:30-mid.
KFXJ 1310 Grand Jet., Colo., MST 8 a.m.-2 p.m.; fi-9 p.m.
KFXM 1210 San Bernardino, Calif.,
7 a.m.-mid
KFXR 1310 Oklihoma City, Okka., ('S'T'.
7:30 a.m.-2 p.m.; 4-10

KFYO 1310 Lubhock, Texas
KFYR 550 Bismarck, N. D., CST .
6:30 a.m.-12:30 p.m.; 2-11 p.m.
KGA 1470 Spokane, Wash., PST. 6 a.m.-mid
KGAR 1370 Tucson, Ariz, MST.
7 a.m.-1:30 p.m.: 4-11
KGB 1330 San Diego, Calif., PST. 7 a.m.-mild.
KGBU 900 Ketchikan, Alaska.
KGBX 1310 Springfield, Mo., CST 6:30-9:30 a.m.; 11 a.m.-2 p.m.; ${ }^{4-10} \mathrm{p} . \mathrm{m}$.
KgBZ 930 York, Neb., CST .
7:30-9:30 a.m.; 11 a.m.-12:30 p.m. ; 2-3:30 p.m.; ;-6:30 p.m. ; $8: 30$-mid.
KGCA 1270 Decorah, Iowa, CST. 8:30-9:45 a.m.; 10:45-11:30 a m. 12:30-2:30
KGC8 1210 Watertown, S. D. CST' 6:30 a.m.-3 p.m.; 5-9
KgCu 1240 Mandan, N. D., CST Noon-5 p. m.; 6:45-9 p.in.
KGCX 1310 Wolf Point, Mont., MST 7:30-9 a.m.; noon-3 p.m.; (6-7:30
KGDA 1370 Mitchell, S. D., CST 8 a m. $-4: 30 \mathrm{p} . \mathrm{m}$. $5: 30-9$
KGDE 1200 Fergus Falls, Minn. CST. 7 a.m. 9 pm .
KGDM 1100 Stockton, Calif., PST. 6 a m m.-sunset.
KGDY 1200 Huron, S. D., CST. 7 a.m.-2 p.m.; 4-9 p.m.
KGEK 1200 Yuma, Colo., MST. 11 a.m.-1:30; p.m.
KGER 1360 Long Beach, Calif., PST 6 a.m.-mid.
KGEW 1200 F't Morgan, Colo., MST'. 6:30-9:30 p.m.
KGEZ 1310 KalispelI, Mont., MST' 8 a.m. $9 \mathrm{p} . \mathrm{m}$.
KGFF 1420 Shawnee, Okla., CST . 7:30 a.m.-9 p.m.
KGFG 1370 Oklaboma City, Olka, CS'
a.m.; 3-3:45 p.m.; 7:45-:1-10a.m.; 3-3:45 p.m.; 7:45-
10 p.m.
KgFI 1500 Corpus Christi, Texas, CsT.
7 a.m.-3 p.m.; 6-10 p.m.
KGFJ 1200 Los Angeles, Calif 24 hours daily.
KGFK 1500 Moorhead, Minn., CST 8 a.m. -9 p.m.
KgFL 1370 Santa Fe, N. M., MST'. 9-10 a.m.; 11 a.m. -3 p.m.; $4-5: 30$ p.m.; 7:30-9

KGFW 1310 Kearney, Neb., CST.
7:30a.m.-1:30p.m.; 5-10:30p.m.
KGFX 630 Pierre, S. D.
KGGC 1420 San Francisco, Calif, PST.
9 a.m.-9 p.m.
Kgof 1010 Coffeyville, Kans., CST'.
7:30 a.m-2 p.m.; 5-10:30
KGGM 1230 Albuquerque, N . M., MST.
8 a.m.-2 p.m.; 4-10 p.m.
KGHF 1320 Pueblo, Colo., MST.
7 a.m.-1 p.m.; 4-10 p.m.
KGHI 1200 Little Rock, Ark., CST 8:30 a.m.-1:30 p.m.; 5-9, mid.3 a.m.

KGHL
950 Billings, Mont., MST
7:30 t.m. -4 p.m.; 5:30-11
KGIR 1360 Butte, Mont., MS' I 7 a.m.-mid.
KGIW 1420 Trinidad, Colo.
KGIX 1420 Las Vegas, Nev., PST' 6-9 a.m.; noon-3 p.m.; 6-9 p.m.
KGIZ 1500 Grant City, Mo., CST . 7-11 a. m.; noon-5 p. m.;6-9 p.m.
KGKB 1500 Tyler, Texas, CST 7 a.m.-2 p.m.; 4-10 p.m.
KGKL 1370 San Angelo, Texas, CST', 8 a.m.-9:30 p.m
KGKO 570 Wichita Falls, Texiss.
KGKX 1420 Lexiston, Idaho.
KGKY 1500 Scottsbluft, Neb). MST. 6:30 a.m-2 p.m.; 4:30-9
KGMB 1320 Honolulu, Hawaii. 7-9 a.m.; 10:40 a.m.-11 1).m (Zone 5)
KGNF 1430 North Platte, Neb., MST.
7 a.m.-sunset
KGNO 1210 Dodge City, Kans, MST.
7:30 a.m.-3:30 p.m.; 5-9
KGO 790 San Francisco, Calif. P'ST. 7 a.m.-12:30 a.m. next day.
KGRS 1410 Amarillo, Texas, CST 6-8 a.m.; 10 a.m.-12:30 p.m.; 3-4:30 p.m.; (i-7:30 p.m.; 3$10 \mathrm{p} . \mathrm{m}$.
KGU 750 Honolulu, Hawaii (Zone 6:15 a.m.-11:15; noon-1; 4:4511 p.m.
KGVO 1200 Missoula, Mont., MST. 6 a.m.-mid.
KGW 620 Portland, Ore., PST. 6:30 a.m.-mid.
KGY 1210 Olympia, Wash., PST. 6 a.m.-6 $\mathrm{p} . \mathrm{m}$
KHJ 900 Los Angeles, Calif. $P S^{\prime} T$. 7 a.m.-1 a.m. next day.
KHQ 590 Spokane, Wash., PST. 7 a.m.-mid.
KICA 1370 Clovis, N. M.
KICK 1420 Red Oak, Iowa.
KID 1320 Idaho Falls, Idaho, MST. $9 \mathrm{a} . \mathrm{m}$. -mid.
KIDO 1350 Boise, Idaho, MST. 7 a.m.-10 p.m.
KIDW 1420 Lamar, Colo., MST. 6 a.m.-8 a.m.; 2-6 p. m.; 8-10
KIT 1310 Yakima, Wash., PST'. 7 a.m.-11 p.m.
KJBS 1070 San Francisco, Calif., PST.
Mid. to local sunset
KJR 970 Seattle, Wash., PST. 7 a.m.-mid.
KLCN 1290 Blytheville, Ark.
KLO 1400 Salt Lake City, Utah. MST.
8:30 a.m.-10:30 p.m.
KLPM 1240 Minot, N. D., CST
7 a.m.-1 p.m.; 6-7:45 p.m.; 1011:30 p.m.
KLRA 1390 Little Rock, Ark., CST 8-11 a.m. ; 1-5 p.m.; 6:30-11 p.m. 1440 Oakland, Calif., PST 8:30 a.m.-7:30 p.m.

KLX 880 Oakland, Calif., IST
7 a.m.-11 p.m.
KLZ 560 Denver, Colo., MST.
6:30 a.m.-11:30 p.m
KMA 930 Shenandoah, Lowa, CST
6-7:30 a.m.; 9:30-11 a.m.: 12:30-
2 p.m.; 3:30-5 p.m.; 6:30-8:30
KMAC 1370 San Antonio, Tex., (ST 7-8:30 a.m.; 10-11 a.m.: noon1:30 p.m.; 4-6 p.m.; 7-8 p.m. 10 p.m.-mid.
KMBC 950 Kansas City, Mo., CST. 6:15 a.m.-mid.
KMED 1310 Melford, Ore, PST'.
8 a.m. $9: 30$ p.rit.
KMJ 580 Fresno, Calif. PST 7 a.m-mid.
KMLB $\mathbf{1 2 0 0}$ Monroc, La
CST
7 a.m.-10. .m
KMMJ 740 Clay Center, Neb), (ST5:45 a.m.-sunset
KMO 1330 Tacoma, Wash., PST 6:30 a m. $11 \mathrm{p} . \mathrm{m}$
KMOX 1090 St. Iouis, Mo. CST 6:45 a.m.-12:45 a.m. next day
KMPC 710 Beyerly Hills. Calif
KMTR 570 Hollywood, Calif., PSTT. 6:30 a.m.-mid
KNOW 1500 Austin, Texas. (ST) 7:30 a.m.-1 p.m.: $5-11$, p.m
KNX 1050 Hollywood. Calif, I'S7' 6:30 a.m.-1 a.m. next lay
KOA 830 Denver, Colo., MST. 7 a.m.-nid.
KOAC 550 Corvalis, Ore. PST 6:30 a.m. -4 p.m.; (6-8:30 p.m.
KOB 1180 Albuquerque, N. M MST.
7 a.m.-9 p.m.
KOCW 1300 Chickasha, Okla.
KOH 1380 Reno, Nev., PST 8 a.m.-9 p.m
KOIL 1260 Council Bufffs, Ia., CS7 6 a.m.-1 a.m. next day
KOIN 940 Portland, Ore., PST 6 a.m.-1 i2.m. next diay
KOL 1270 Scalte, Wish., PST 6:45 a mo-mid.
KOMA 1480 Okl:hona City, Okla., 7 a.m-11 p.m. CST
KOMO 920 Seattle, Wash., PST 6:55 a.m.-12:30 a.m. next day
KONO 1370 San Antonio. Tex., CST 8:30-10 a.m.: 11 a.m.-non:

1:30-4 p.m.: 6-7 p.m.; 8-10
KOOS 1370 Marshfield, Ore, PST: 9 a.m. -9 p.m
KORE 1420 Eugene, Ore., ISST 7:45 a.m.-8:30 p.m.
Koy 1390 Phoenix, Ariz., MST 7 a.m.-10 p.m.
KPCB 650 Seattle, Wash., PST
5:30 a.m.-8 p.m.; 10 p.m.-4 a.m next day
KPJM 1500 Prescott, Ariz.
KPO 680 San Francisco, Calif. PST.
7:30 a.m.-mid.
KPOF 880 Denver, Colo, MST 7:30-9 a.m.; 2:30-4:30 p.m. 6-8 p.m.
KPPC 1210 Pasadena, Calif Silent.
KPQ 1500 Wenatchee, Washt, PST'. 7 a.m.-10 p.m.

KPRC 920 Houston, Tevas, CST 6:30 a.m.-mid.
KQV 1380 Pittsburgh, Pa, EST 8:30 a.m.-1 p.m.; 2-11 p.m.
KQW 1010 San Jose, Calif., PST
KRE 1370 Berkeley, Catif., $P S 7$ 6:30-9:30 a.m.; noon-3 p.m.; 6-9 p.m.
KREG 1500 Santa Ana, Calif., PST 9 a.m.-11 p.m.
KRGV 1260 Harlingen, Texas, CST 7-9:30 a.m.; 12:30-3:30 p.m.
KRKD 1120 Los Angeles, Calif., $P S T$ 6 a.m.-1:30 p.m.; 3-7:30 p.m.
KRLD 1040 Dallas, Texas, CST 6-7:15 a.m.; 7:4:-9 a.m.; 10-11 а.ाu.; 12:30-1:30 p.m.; 5:30-8 p.m. 9:30-10:30 p.m.

KRMD 1310 Slireveport, Las, CST 7 a.m.-1 p.m.; 5-8 p.m.
KROW 930 Oakland, Calif. IST 8-9 a.m.; 1-6 p.m. ; 7:30-11 p.m.
KRSC 1120 Seattle Wash., PST. Sunrise to local sunset.
KSAC 580 Manhattion, Kans., CST 8-9 a.m.; 10-10:30 a.m.; 12:301:30 p.m. : 4:30-5:30 p.m.
KSCJ 1330 Sioux City, Iowa, CST 6:30 a.m.-11 p.m.
KSD 550 St. Louis, Mo., ('ST. 7 a.m.-12:15n.m.; 12:40-11p.m 890 Focatello, Jdaho, MST. 8 a.m.-11 p.m.
KSL 1130 Salt Lake City, Utah, MST.
7 a.m.-mid.
KSO 1380 Clarima, Iowa
KSOO 1110 Sioux Falls, S. D., CST b $\mathrm{a} . \mathrm{m} .-8 \mathrm{pm}$.
KSTP 1460 St. Paul, Minn., CST 6:30 a.m.-12:30 a.m. next day. 560 San Francisco, Calif. PST.
6:45 a.m.-1 a.m. next day.
KTAR 620 Phomix, Ariz, MST 7 a.m.-11:15 p.m.
KTAT 1240 Ft. Worth, Texas.
7-9 a.m.; Noon-1:30 p.m.; 4-7 p.m.; 9 -mi I.

KTBS 1450 Shreveport, La, CST 6 a.m.-mid.
1240 Twin Falls, Idaho, MST 6:30 a.m.-11 p.m.
KTHS 1040 Hot Springs, Ark., CST 9-10 a.m.; 11 a.m.-12:30 p.m. 4:30-5:30 p.m.; 8-9:30 p.m. 10:30-11:30 p.m
KTM 780 Los Angeles, Calif., PST 6-10 a.m.; $1-5$ p.m.; 8 p.m. 4 a.m. next day.
KTRH 1120 Houston, Texas, CST 6:30-11 a.m.; noon-11:30 p.m.
KTSA 1290 San Antonio, Tex., CST. 6-8 a.m.; 9:30-11.80 a.m.; 3 5 p.m.; 7-10 p.m.
KTSM 1310 El Paso, Texas.
KTW 1220 Seattle, Wash.
KUJ 1370 Walla Walla, Wath. PST.
6 a.m.-sunset.
KUMA 1420 Yuma, Ariz, MST 7-9 a.m.; noon-3 p.m.; 6-9 p.m
KUOA 1390 Favetteville. Ark.. CST 7-8 a.ra.; 11 a.m.-1 p.m.; 5.6:30
KUSD 890 Yermillion, S. D., CST Silent
KV 570 Tacoma, Wash., PST 6:30 a m. m -mid.

KVL 1370 Seattle, Wash
KVOA 1260 Tueson, Ariz.
6-9 a.m.; noon-3 p.m.i ${ }^{\text {f.-9 }}$ p.m.
KVoo 1140 Tulsa, Okla, CST.
7 a.m.-1:45 p.m.; 3-9 p.m.
KVOR 1270 Colorado Springs, Colo., MST.
7 a.m. 10 p.m.
Kvos 1200 Bellingham, Wash.
KWCR 1420 Cedar Rapids, Ia, CST . 6:30 a.m.-mid.
KWEA 1210 Shreveport, La.
KWG 1200 Stockton, Calif., PST. 7 a.m.-mid.
KWJJ 1060 Portland, Ore.
KWK 1350 St. Louis, Mo., CST 6:55 a.m.-12:15 a.m. next day
KWKC 1370 Kansas City, Mo
KWKH 850 Shreveport, 亡a., CST. 8:30 p.m.-mid.
KWLC 1270 Decorah, Towa, CST 6:45-8 a m. m.; 10:30-9:30 p.m. 11:30 n.m. 12:30 p.m.
KwsC 1220 Pullman, Wash., PST 6:45-8 a.m.; 10:30-9:30 p.m.
KWWG 1260 Brownsville, Texas.
KXA 760 Scattle, Wash., PST. 7 a.m.-sundown; 9 p.m.-mid. 1420 Portland, Ore., PST 7 a.m.-mid.
KXO 1500 El Centro, Calif.
KXRO 1310 Aberdeen, Wash., PST. 7:30 a.m.-10 p.m.
KXYZ 1440 Houston, Texas, CST. 7-10 a.m.; 11 a.m.-1:15 p.m.; 3:30-10:30 p.m
KYA 1230 San Francisco, Calif. $P S T$.
7:30 a.m.-mid.
KYW 1020 Chicago, Ill., CST.
7 a.m. 1 a.m. next day.
NAA 690 Arlington, Va.
RUS 664 Salvador.
TGW 570 Guatamala.
TICR 911 San Jose, C. R.
VAS 685 Glace Bay, N. S., AST
1-1:15 p.m.; mid.-12:15 a.m.
VOAS 810 St. Johns, N. F.
11 a.m.-12:30 p.m.; 4-5:30 p.m. (Zone 19)
VOGT 893 Wabana, N. F. Silent.
vONA 950 St. Johns, N. F.
12:30-2 p.m.; 6:30-8 p.m. (Zone 19)
VONF 1115 St. Johns, N. F.
1-2 p.m.; 6:30-8 p.m. (Zone 19)
VOWR 750 St. Johns, N. F.
vox 690 Halifax, N. S.
VPN 610 Nassau, B. l.
WAAB 1410 Boston, Mass., EST. 7:45 a.m.-mid.
WAAF 920 Chicago, Ill., CST. 6 a m.-local sunset.
WAAM 1250 Newark, N. J., EST . 7-9 a.m.; 10 a.m.-noon; 2-4:30 p.m. ; 6-9 p.m.

WAAT 940 Jersey City, N. J., EST. 6 a.m.- 6 p.m.
WAAW 660 Omaha, Neb., CST. 6 a.m. 6 p.m.
WABC 860 New York City, EST.
7:30 a.m.-2 a.m. next day.
WABI 1200 Bangor, Maine, EST. 6-9 a.m. ; noon-3 p.m.; 6-9 p.m.
wabz 1200 New Orieans, La., CST'.
Noon-4 p.m.; 8 p.m.-mid.

WACO 1240 Waco, Texas, CST. 6-7 a.m.; 9-noon; 1:30-4 p.m.; $7^{7-9}$ p.m.
WADC 1320 Akron, Ohio, EST. 8:30 a.m.-mid.
WAGM 1420 Presque Isle, Me., EST . 7 a.m.-1 p.m.; 3-9 p.m.
WAIU 640 Columbus, Ohio, EST. 7 a.m.-sunset.
WALR 1210 Zanesville, Ohio, EST. 9 a.m. 10 p.m.
WAMC 1420 Anniston, Ala., CST . 7-10:30 a.m.; noon-9 p.m.
WAPI 1140 Birmingham, Ala., CST . 6:30 a.m-sunset; 9 p.m--mid.
WASH 1270 Gd Ilapids, Mich., CSTT. 7 alm.-rnid.
WAWZ 1350 Zarephath, N. J., EST. 7:45-8:45 a.m.; noon-1:30 p.m.
WBAA 1400 Lafayette, Ind., CST. Silent.
WBAK 1430 Harrisburg, Par, EST. 10:30-11:30 a.m.; 1:30-2:30 p.m.; 4-4:30 p.m.

WBAL 1060 l3altimore, Md, EST 7 \%m.mid.
WBAP 800 Ft. Worth, Texas, CST. 8:30-10:30 a.m.; 12:30-3 p.m.; 4:30-5:30 p.m. ; 6-9 p.m.
WBAX 1210 Wilkes Barre, Pa, EST. 7:30 a.m.noon; 6-11 p.m.
WBBC 1400 Brooklyn, N. Y., EST. 7-11:30 a.m. ; 6-i:30 p.m.
WBBL 1210 Richmond, Va., EST . Silent.
WbBM 770 Clicago, Ill., CSTT. 6:45 a.m.-10 p.m.; 11:30 p.m.2 a.m.
WBBR 1300 Brooklyn, N. Y., EST . 10 a.m.-noon; f-S p.m.
wbsz 1200 Ponca City, Okla., CST. 6 a.m.-10 p.m.
WBCM 1410 Bay City, Mich., CST. 8 a.m.-mid.
WBEN 900 Buffalo, N. Y., EST. 6:45 a.m.-1 a.m. next day.
WBEO 1310 Marquette, Mich
WBHS 1200 Huntsville, Ala., CST. 8 a.m. 2 p.m. ${ }^{5-9: 30}$ p.m.
wbig 1440 Greensboro, N. C., EST. 8 a.m.-3 p.m.; 5-11 p.m.
wBMS 1450 Hackensack, N. J., EST . Noon-3 p.m.
WBNX 1350 New York City, EST. 1:30-6 p.m.
WBOQ 860 New York City.
WBOW 1310 Terre Haute, Ind., CST. 7 a.mn.-2 p.m.; $4-11$ p.m.
WBRC 930 Birminghan, Ala., CST. 7 a.m.-11 n.m.
WBRE 1310 Wilkes Barre, Pa.
WBSO 920 Babson Park, Mass., EST.
WBT 1080 Charlotte, N. C., EST. 7 a.m.-mid.
WBTM 1370 Danville, Va., EST. 11 a.m.-1 p.m.; 6-6:30 p.m.; 710:30 p.m.
WBZ 990 Boston, Mass. EST. 7 a.m.-mid.
wBza 990 Springfield, Mass., EST. 7 a.m.-mid.
WCAC 600 Storrs, Conn., EST. 12:30-1 p.m.; 7-8 p.m.
WCAD 1220 Canton, N. Y., EST. 12:30-1:20 p.m.
WGAE 1220 Pittsburgh, Pa., EST. 6:45 a.m.-mid.

WCAH 1430 Columbus, Ohio, EST. 7:45 a.m.-mid.
WCAJ 590 Lincoln, Neb., CST. 10-10:45 a.m.; 3:30-4 p.m.; 9-10
WCAL 1250 Northfield, Minn., CST. 9:45-10:15 a.m.
WCAM 1280 Camden, N. J., EST . 2-5 p.m.
WCAO 600 Baltimore, Md., EST. 7 a.m.-mid.
WCAP 1280 Asbury Park, N. J., EST .
9 a.m.-noon; 5 -mid
WCAT 1200 Rapid City, S. D., CST. 12:30 p.m.-1:30 p.m.
wCAU 1170 Philadelphia, Pa., EST. 8 a.m.-1 a.m. next day.
WCAX 1200 Burlington, Vt., EST. Noon-1 p.m.
wCAZ 1070 Carthage, Ill., CST.
9:30 a.m.-3:30 p.m.
WCBA 1440 Allentown, Pa., EST. 7:30 a.m. 1 p.m.
WCBD 1080 Zion, IIl., CST.
6-7 a.m. ; 7:30-10:30 a.m.; 1:30-3
n.m. $4: 30-5: 30 \mathrm{p} . \mathrm{m}$.
wCBM 1370 Baltimore, Md., EST. 7 a.m.-1:30 p.m.; 5-11 p.m.
wCBS 1210 Springfield, Ill., CST. 11:30 a.m.-3 p.m.: 6:45-9 p.m.
wcco 810 Minneapolis, Minn. CST.
6:45 a.m.-mid.
wCDA 1350 New York City, EST. 6-7:30 a.m.; 9-noon; 6-9 p.m.
WCFL 970 Chicago, III., CST. 6 a.m.-mid.
wCGU 1400 Brooklyn, N. Y., EST. 3:45-6 p.m.; 9-10:30 p.m.
WCKY 1490 Covington, Ky., CST Mid.-mid.
wCLo 1200 Janesville, Wis., CST. 7:30 a.m.-3:30 p.m.: 5-9 p.m.
wCLS 1310 Joliet, IIL., CST.
11 a.m.-noon; 3-8 p.m.
WCMA 1400 Culver, Ind., CST . 6-6:30 a.m.; 1:15-4:15 p.m.; 11mid.
WCOA 1340 Pensacola, Fla., CST 9 a.m.-10:30 p.m.
wCOC 880 Meridian, Miss, CST. 7:30 a.m.-2 p.m.; 5-11 p.m.
WCOD 1200 Harrisburg, Pa., EST.
8-11 a.m. ; 3-6 p.m.; 8-11 p.m.
WCRW 1210 Chicago, III., CST. 7-8:30 a.m.; 11:30 a.m.-1:30 p.m.; 6-7 p.m.; 9-10 p.m.
wCSC 1360 Charleston, S. C., EST. 8 a.m.- 3 p.m.; 6-11 p.m.
WCSH 940 Portland, Maine, EST. 7:45 a.m.-1:30 p.m.; 2-11:15
WDAE 1220 Tampa, Fla., EST. 8 a.m.-mid.
wdaF 610 Kansas City, Mo., CSTT. 6:26 a.m.-mid.
WDAG 1410 Amarillo, Texas, CST'. 8-10 a.m.; 12:30-3 p.m.; 4:30-6 p.m.: 7:30-9 p.m.; 10 p.m.mid.
WDAH 1310 El Paso, Texas.
WDAS 1370 Philadelphia, Pa., EST. 9 a.m.-10:30 p.m.
wDAY 940 Fargo, N. D., CST. 6 a.m.-11 p.m.
WDBJ 930 Roanoke, Va., EST. 8 a.m.-mid.
wDBo 580 Orlando, Fla., EST. 7 a.m.-mid.

WDEL 1120 Wilmington, Del., EST 9 a.m.-10 p.m.
WDEV 550 Waterbury, Vt., EST. 9:30-11 a.m.; noon-2 p.m.
WDGY 1180 Minneapolis, Minn. CST.
6:30 a.m-8:15 p.m.
WDOD 1280 Chattanooga, Tenn., CST.
7:30 a.m.-11 p.m.
WDRC 1330 Hartford, Conn., EST. 8 a.m.-mid.
WDSU 1250 New Orleans, La., CST. 7 a.m.-11:45 p.m.
WDZ 1070 Tuscola, Ill., CST. 7 a.m. 4 :30 p.m.
WeAF 660 New York City, EST. 6:45 a.m.-1 a.m. next day.
WEAI 1270 Ithaca, N. Y. Variable.
WEAN 780 Providence, R. I., EST. 7:30 a.m.-1 a.m. next day.
WEAO 570 Columbus, Ohio, EST. 9-11 a.m.; 1-3 p.m.
WEBC 1290 Superior, Wis., CST. 7 a.m.-11 p.m.
WEBQ 1210 Harrisburg, Ill., CST. 6-9 a.m.; noon-4 p.m.; 7:30-9
WEBR 1310 Buffalo, N. Y., EST. 7 a.m.-2 a.m. next day.
WEDC 1210 Chicago, Ill.
WEEI 590 Boston, Mass., EST. 6:45 a.m.-mid.
WEEU 830 Reading, Pa., EST. 8 a.m. -8 p.m.
WEHC 1350 Emory, Va., EST. 6-8 a.m.; 11 a.m.-2 p.m.; 4-7
WEHS 1420 Cicero, Ill., CST. 4-6 p.m.
WELL 1420 Battle Creek, Mich.
WENC 1420 Americus, Ga., EST. 7 a.m.-2 p.m.; 4 p.m.-sunset.
WENR 870 Chicago, Ill., CST. 10:15-11:45 a.m.; 3:30-7 p.m.; 8:30 p.m.-1 a.m. next day.
WERE 1420 Eric, Pa. EST. 8 a.m.-1:30 p.m.; $3: 45-10: 45$
WESG 1370 Glens Falls, N. Y.
WEVD 1300 New York City, EST. 8-9 a.m.; 3-6 p.m.; 8-9 p.m.; 10-11 p.m.
WEW 760 St. Louis, Mo., CST. 8 a.m.-5 p.m.
WEXL 1310 Royal Oak, Mich., EST. 8 a.m.-11 p.m.
WFAA 800 Dallas, Texas, CST. 6:45-8:30 a m.m.; $10: 30$ a.m.-12:30 p.m.; 3-5 p.m.; 5:30-6 p.m.; 9-11:30 p.m.
WFAB 1300 New York City
WFAM 1200 South Bend, Ind., CST. 7:30-10:15 a.m.; noon-3 p.m.; 5:30-8:30 p.m.
WFAN 610 Philadelphia, Pa., EST. 8 a.m.-mid.
WFAS 1210 White Plains, N. Y., EST. 9 a.m.-noon; 9 p.m.-mid.
WFBE 1200 Cincinnati, Ohio, EST. 7 a.m.-11 p.m.
WFBG 1310 Altoona, Pa 10:30 a.m. $-4: 30$ p.m ; 7-10:30
WFBL 1360 Syracuse, N. Y.. EST. 7:30 a.m.-mid.

WFBM 1230 Indianapolis, Ind., CST. 7:30-10:15 a.m.; noon-3 p.m.; 5:30 p.m.-mid.
WFBR 1270 Baltimore, Md., ESTT. 7 a.m.-mid.
WFDF 1310 Flint, Mich., CST.
7 a.m. 11 p.m.
PFDV 1500 Rome, Ga., CST. 6-9 a.m.; noon-3 p.m.; 6-9 p.m
WFEA 1430 Manchester, N. H., EST . 9 a.m. -11 p.m.
WFI 560 Philadelphia, Pa., EST 6:45-9 a.m.; 9:45-11 p.m.; 1-2 p.m.; 3-4:30 p.m.; 6 p.m.-mid.

WFIW 940 Hopkinsville, Ky., CS' 6 a.m. 3 p.m.; 5 p.m.-mid.
wFLA 620 Clearwater, Fla., $E S T$. 7:15 a.m.-mid.
WFOX 1400 Brooklyn, N. Y., EST . 1:30-3:45 p.m.; 10:30-mid.
wGAL 1310 Lancaster, Pa., EST. 10 a.m.-noon; 1:30-6 p.m.
WGAR 1450 Cleveland, Ohio, EST. 6 a.m.-1 a.m. next day.
WGBB 1210 Freeport, N. 亡., EST. $7-9 \mathrm{p} . \mathrm{m}$.
WGBF 630 Evansville, Ind., CST. 6:30 a.m.-3 p.m.; 4-6:45 p.m.; $8-11$ p.m.
WGBI 880 Seranton, Pa., EST. 9:30 a.m.-12:30 p.m.; 1:30-4:30 p.m.; 5:30-8 p.m.

WGCM 1210 Gulfport, Miss, CST 8 a.m.-2 p.m.; 3-9 p.m.
WGCP 1250 Newark, N.J., EST. 2-5 p.m.; 8-10 p.m.
WGES 1360 Chicago, ill., CST 8 a.m.-12:30 p.m.; 6:15-8:30
WGH 1310 Newport News, Va., E'ST.
7 a.m. -2 p.m.; 5-11 p.m.
WGL 1370 Fort Wayne, Ind., CST 6:15 a.m.-9:30 p.m.
720 Chicago, H1., CST. 7:30 a.m.-1:30 a.m. next day.
WGR 550 Buffalo, N. Y., EST. 7:30 a.m.-mid.
WGST 890 Atlanta, Ga., CST. 7 a.m.-11 p.m.
WGY 790 Schenectady, N. Y., EST. 6:45 a.m.-1 a.m. next day.
WHA 940 Madison, Wis., CST. 8 a.m. $-3: 30$ p.m.
WHAD 1120 Milwaukee, Wis., CST. 9:30-10:15 a.m.; 3-4 p.m.; 8:309:30 p.m.
WHAM 1150 Rochester, N. Y., EST . 7:45 a.m.-mid.
WHAS 820 Louisville, Ky., CST. 7 a.m.-mid.
WHAT 1310 Philadelphia, Pa., EST 9 a.m.-noon; 1-2 p.m.; 8:30-mid.
WhaZ 1300 Troy, N. Y., EST. Mid.-1 a.m.
WHB 860 Kansas City, Mo., CST . 6 a.m.-sunset.
WHBC 1200 Canton, Ohio, EST. 6-9 a.m.; noon-3 p.m.; 6-9 p,m.
WHBD 1370 Mt. Orab, Ohio, EST 7-11 a.m.; noon-5 p.m.; 6-9 p.m.
WHBF 1210 Rock Island, IIl., CST. 10 a.m.- ${ }^{3}$ p.m. 5 p. m-mid.
WHBL 1410 Sheboygan, Wis., CST. 7-10 a.m.; 12:30-3 p.m.; (i-8 p.m.; 10 p.m.-mid.
whBQ 1370 Memphis, Tenn., CST. 7:55 a.m.-10:30 p.m.

WHBU 1310 Anderson, Ind., CST
7 a.m.-1 p.m.; 3-9:15 p.m.
WhBY 1200 Green Bay, Wis., CST
7 a.m.-10 p.m.
WHDF 1370 Calumet, Mich., CST.
9-9:45 a.m.; noon-1 p.m.; 4:40-7
WHDH 830 Boston, Mass., EST.
8 a.m.-12:45 p.m.; 2:45-7:15
WHDL 1420 Tupper Lake, N. Y., EST.
7:45 a.m.-1 p.m.; 3-7:45 p.m.
WHEB 740 Portsmouth, N. H., EST.
10 a.m.-sunset.
WHEC 1430 Rochester, N. Y., EST.
8 a.m.-mid.
WHEF 1500 Kosciusko, Miss.
WHET 1210 Troy, Ala., CST.
6-8 a.m.; 11 a.m. -5 p.m.
WHFC 1420 Cicero, Ill., CST.
7 a.m.-1:30 p.m.; 6-9 p.m.; 11 p.m.-1 a.m. next day.

WHIS 1410 Bluefield, W. Va., $E S T$.
8-9 a.m.; noon-2 p.m.; 6-8 p.m.
WHK 1390 Cleveland, Ohio, EST.
7 a.m.-mid.
WHN 1010 New York City, EST. 1:30-5:30 p.m.
who 1000 Des Moines, Iowa.
WHOM 1450 Jersey City, N. J., EST .
8-10 a.m.; 3-9 p.m.
WHP 1430 Harrisburg, Pa., EST.
8:30-10:30 a.m.; 11:30 a.m.-1:30 p.m.; 2:30-4 p.m.; 4:30 p.m.1 a.m.
WIAS 1310 Ottumwa, Iowa, CST 7:30 a.m.-1:30 p.m.; 4-9 p.m.
WIBA 1280 Madison, Wis., CST. 6:30 3.m.-11:30 p.m.
WIBG 930 Glenside, Pa ., EST. Daybreak to sunset.
WIBM 1370 Jackson, Mich., CSTT. 7:30 a.m.-8:15 p.m.; 11 p.m.mid.
WIBO 560 Chicago, Ill., CST. 6:30 a.m.-mid.
WIBU 1210 Poynette, Wis., CST. 9 a.m. -9 p.m.
WIBW 580 Topeka, Kans., CST. 6 a.m.-mid.
WIBX 1200 Utica, N. Y.
WICC 600 Bridgeport, Conn., EST . 7:30 a.m.-mid.
WIL 1200 St. Louis, Mo., CST. 7-9:45 a.m.; 11:15 a.m.-mid.
WILL 890 Urbana, Ill., CST. 10 a.m.-12:15 p.m.; 5-6 p.m.
WILM 1420 Wilmington, Del., EST. 7:30 a.m.-2 p.m.; 4:30-10 p.m.
WINS 1180 New York City, EST. 7 a.m.-10:15 p.m.
WIOD 1300 Miami, Fla., EST. 7 a.m.-1 a.m. next day.
WIP 610 Pbiladelphia, Pa., EST. 9 a.m.-mid.
WIS 1010 Columbia, S C. EST. 7 a.m.-1:30 p.m.; 5:30-11 p.m.
WISN 1120 Milwaukee, Wis., CST. 7-9:30 a.m.; 10:15 a.m.-3 p.m.; 4-8:30 p.m.; 9:30 p.m.-mid.
WJAG 1310 Johnstown, Pa., EST. 8:30-10:30 a.m.; 4:30-7 p.m.
WJAG 1060 Norfolk, Neb., CST. 6 a.m-sunsct.
WJAR 890 Providence, R. l., EST. 8 a.m.-mid.
WJAS 1290 Pittsburgh, Pa., EST . 7:30 a.m.-11:30 p.m.

WJAX 900 Jacksonville, Fla., EST 7 a.m.-11 p.m.
WJAY 610 Cleveland, Ohio, EST 6 a.m. $-6: 45 \mathrm{p} . \mathrm{m}$.
WJBC 1200 LaSalle, Ill., CST. 8-9 a.m.; 10 a.m.-12:30 p.m.; 3:30-6:30 p.m.
WJBI 1210 Red Bank, N. J., EST 5-7 p.m.
WJBK 1370 Detroit, Mich., EST .
7 a.m.-11 p.m.
WJBL 1200 Decatur, Ill., CST 6:30-8 a.m.; 9-10 p.m. ; 12:30-3 p.m.; 6:30 p.m.-mid.

WJBO 1420 New Orleans, La.
WJBU 1210 Lewishurg, Pa., EST. Noon-2 p.m.; 4-6 p.m.
WJBW 1200 New Orleans, Ia., CST 8 a.m.-noon; 4-8 p.m.
WJBY 1210 Gadsden, Ala., CST. 6 a.m.-12:10 next day
WJDX 1270 Jackson, Miss., CST 6:15-10 a.m. $; 11: 30$ a.m. -10 p.m
WJEJ 1210 Hagerstown. Md
WJEQ 1370 Williamsport, Pa.
WJJD 1130 Chicago, Ill., CST. 6 a.m.-8:30 p.m.
WJKS 1360 Gary, Ind., CST 12:30-6-15 p.m. 8:30 p.m.-mid
WJMS 1420 Ironwood, Mich., CST 7 a.m.-2:30 p.m.; 4:30 p.m.-sunset.
WJR 750 Detroit, Mich, EST 6:00 a.m.-1 a.m. next day.
WJSV 1460 Washington, D. C., EST 7:30 a.m.-1 a.m. next day.
WJTL 1370 Atlanta, Ga., CST. 6:45 a.m.-mid.
WJW 1210 Akron, Ohio, EST. 8 a.m. -10 p.m.
WJZ 760 New York City, EST. 7:30 a m.-1 a.m. next day.
WKAQ 1240 San Juan, P. R. AST. 2:3(1-4:30 p.m. 6:30-10p.m.
WKAR 1040 E. Lansing, Mich., CST Noon-12:30 p.m.
WKAV 1310 Laconia, N. H., EST. 9 a.m. 1 p.m. $3-8$ p.m.
WKBB 1310 Joliet, Ill, CST.
8-11 a.m.; noon-3 p.m.; 8 p.m.mid.
WKBC 1310 Birmingham, Ala
WKBF 1400 Indianapolis, Ind., CST 6:30 a.m.-1:15 p.m.; 4:15-11
WKBH 1380 LaCrosse, Wis., CST. 7:30 a.m. 10 p.m.
WKBI 1420 Cicero, Ill. CST. 1:30-4 p.m.; 9-11 p.m.
WKBN 570 Youngstown, Ohio, EST 7-9 a.m.; 11 a.m.-1 p.m.; 3-mid.
WKBS 1310 Galesburg, Ill.
WKBY 1500 Connersville, Ind., CST 10 a.m.-noon; 6-10 p.m.
WKBW 1480 Buffalo, N. Y., EST 9:15 a.m.-1 a.m. next day.
WKBZ 1500 Ludington, Mich., CST. 9 a.m.-9:30 p.m.
WKFI 1210 Greenville, Miss., CST 7 a.m.-2 p.m.; 4-9 p.m.
WKJC 1200 Lancaster, Pa., EST 11 a.m. -3 p.m. $; 6-8 \mathrm{p} . \mathrm{m}$.
WKRC 550 Cincinnati, Ohio, EST. 6:45 a.m.-mid.
WKY 900 Oklahoma City, Okla. CST.
6:30 a.m.-11:30 p.m.
WKZO 590 Kalamazoo, Mich., CST 6:30 a.m. $-8: 15 \mathrm{p} . \mathrm{m}$.
WLAC 1470 Nashville, 'Jenn., CST.

WLAP 1200 Lousville, Ky., CST.
6:30 a.m.-11 p.m.
WLB 1250 Minneapolis, Minn., CST.
8-9 p.m.
WLBC 1310 Muncie, Ind., CST.
7 a.m.-11p.m.
WLBF 1420 Kansas City, Kans., CST.

WLBL 900 Stevens Point, Wis., CST.
8 a.m.-3:30 p.m.
WLBW 1260 Erie, Pa.. EST. 8 a.m.-1 a.m. next day
WLBz 620 Bangor, Maine, EST'. 8:30 a.m.-mid.
WLEY 1370 Lexington, Mass., EST. Noon-3 p.m.; 6-9 p.m.
WLIT 560 Philadelphia, Pa, EST. 9-9:45 a.m.: 11 a.m.-1 p.m.; 2-3 p.m.; 4:30-6 p.m.

Wloe 1500 Boston, Mass. EST . 10 a.m.-1:30 p.m. ; 4:30-10 p.m. 870 Chicago, Ill., CST. 6-10:15 a.na; 11:45 a.m.-3:30 p.m.; 7-8:30 p.m.

WLTH 1400 Brooklyn, N. Y., EST. 11:30 a.m.-1:30 p.m.; 7:30-9
WLVA 1370 Lynchburg, Va., EST 8-11 a.m. ; 1-6 p.m.
WLW 700 Cincinnati, Ohio, EST . 6:30 a.m.-1 a.m. next day.
WLWL 1100 New York City. EST.
6-8 $\mathrm{n} . \mathrm{m}$.
WMAC 570 Syracuse, N. Y.
WMAL 630 Washington, D. C., EST 8 a.m.-mid.
WMAQ 670 Chicago, Ill., CST. 7 a.m.-1 a.m. next day.
WMAS 1420 Springficid, Mass., EST. 7:45 a m.-mid.
WMAZ 1180 Macon, Ga., EST 7 a.m.-9:30 p.m.
WMBC 1420 Detroit, Mich., EST. 7:30 a m.-mid.
WMSD 1440 Peoria, Ill., CST. 6-9:30 a.m.; 1-2:30 p.m.; 8 p.m.mid.
WMBG 1210 Richmond, Va., EST. 7:30 a.m.-1:30 p.m.; 5-11 p.m.
WMBH 1420 Joplin. Mo. CST.
Noon-2 p.m. ; 6-9:30 p.m.
WMEI 1080 Chicago, Ill., CST 7-7:30 a.m.; 10:30-11:30 a.m.; noon-1:30 p.m.; 3-4:30 p.m.; 5:30-8 p.m.
WMBO 1310 Auburn, N. Y., EST. 9 a.m.- 9 p.m.
WMBQ 1500 Brooklyn, N. Y., EST 9-11 a.m.; 8-10 p.m.
WMBR 1370 Tampa, Fla., EST. 6:45 a.m. -10 p.m.
WMC 780 Memphis, Tenn., CST. 7 a.m.-11 p.m
WMCA 570 New York City, EST 8-11 a.m.; noon-6 p.m.; 9:30 p.m.-2 a.m.

WMIL 1500 Brooklyn, N. Y., EST. 2-6 p.m.
WMMN 890 Fairmont, W. Va., EST 7 a.m. -9 p.m.
WMPC 1500 Lapeer, Mich., EST . 10 a.m.-2 p.m.; 3:30-6 p.m.; 7-10:30 p.m.
WMRJ 1210 Jamaica, N. Y, EST.

Noon-5 p.m.
WMSG 1350 New York City, EST. Noon-3 p.m.
WMT 600 Waterloo, Iowa, CST. 7 a.m.-11 p.m.
WNAC 1230 Boston, Mass, EST 8 a.m. -1 a.m. next day.
WNAD 1010 Norman, Okla. 7:15-9:15 p.m.
WNAX 570 Yankton, S. D., CST. 6 a.m.-mid.
WNEF 1500 Binghamton, N. Y., EST . 7 a.m.-10 p.m.
WNBH 1310 New Bedford, Mass., EST.
8:30 a.m.-1:10 p.m. ; 3-11 p.m.
WNEO 1200 Washington, Pa., EST 9 a.m.-noon; 3-6 p.m.; 9 p.m. mid.
WNBR 1430 Memphis, Tenn., CST. 7:30 a.m.-12:30 p.m.; 3-10:15
WNBW 1200 Carbondale, Pa .
WNBX 1260 Springfield, Vt, EST 6 a.m-sunset.
WNEZ 1290 Saranac Lake, N. Y
WNJ 1450 Newark, N. J., EST. 10 a.m.-noon; 9 p.m.-mid.
WNOX 560 Knoxville. Tenn., CST 6:45 a.m.-11 p.m
WNYC 570 New York City, EST. 11 a.m.-noon; 6-9:30 p.m.
WOAI 1190 San Antonio, Tex., CST 6:30-9:45 a.m.; 11:15 a.m.-3 p.m. ; 4:45-10:45 p.m.

WOAX 1280 Trenton, N. J., EST Noon-2 p.m.
WOBU 580 Charleston, W. Va.EST 9 a.m.-noon; 2-4 p.m.; 8:30 p.m.mid.
WOC 1000 Davenport, Iowa, CST 7 a.m.-11 p.m.
WOCL 1210 Jamestown, N. Y., EST . Noon-mid.
WODA 1250 Paterson, N. J.
WODX 1410 Mobile, Ala. CST 9 a.m.-4 p.m.; 5:30-9 p.m
WOI 640 Ames, Iowa, CST 6:30 a.m. $-1: 30$ p.m.
WOKO 1430 Albany, N. Y., EST 9 a.m.-1 a.m. next day.
WOL 1310 Washington, D.C., EST 7 a.m. -1 p.m.; 3-9 p.m.
WOMT 1210 Manitowoc, Wis., CST 7 a.m. 9 p.m.
WOOD 1270 Gid. Rapids, Mich., CST 7 a.m.-mid.
WOPI 1500 Bristol, Tenn., EST
7 a.n -2 p.m.; 4-9 p.m.
W0O 1300 Kansas City, Mo., CST 6-7 a.m.; 8:35-9:05 a.m.; 1111:30 a.m.; 2-3 p.m.; 11-mid
WOR 710 Newark, N. J., EST 6:45 a.m.-mid.
Worc 1200 Worcester, Mass., EST $8 \mathrm{a} . \mathrm{m} .-\mathrm{mid}$.
WORK 1000 Yoŕ, Pr., EST 7:55 a.m.-sunss.
wos 630 Jefferson City, Mo., CST.
wov ${ }_{1130}$ a.m. -4 p.m. York City, EST. 8 a.m.-6 p.m.
WOW 590 Omaha, Neb., CST. 6:15-10 a.m.; 10:45 a.m.-3:30 p.m.; 4-9 p.m.; $10-11: 30$ p.m.
wowo 1160 Fort Wayne, Ind., CST. 7:30 a.m.-7:45 p.m.; 9:15 p.m.mid.

WPAD 1420 Paducuh, Ky., CST.
7-9:30 a.m.; 11 a.m.-2 p.m.; 4-10:30 p.m.
WPAP 1010 New York City, EST. 11 p.m.-1 a.m.
WPAW 1210 Providence, R. I., EST 9 a.m.-1:45 p.m.; 3 p.m.-mid
WPCC 560 Chicago, Ill.
Silent.
WPCH 810 New York City, EST . 8 a.m.-sunset
WPEN 1500 Philadelphia, Pa, EST 7:30 a.m.-10:30 p.m
WPFB 1370 Hattiesburg, Miss., CST 7 a.m. 2 p.m.; 4-9 p.m.
WPG 1100 Atlantic City, N. J., EST 8:15 a.m.-6 p.m.; 8 p.m.-1 a.m. next day.
WPHR 1200 Petersburg, Va., EST, 7-11 a.m.; noon-5 p.m.: 6-9 p.m
WPOR 780 Norfolk, Va.
WPRO 1210 l'rovidence. R. I., EST'. 9 a.m.-1:4.5 p.m.; 3 p.m.-mid.
WPSC 1230 State College, Pa., EST 11:45 a.m.-12:15 p.m.: 4-5:30
WPTF 680 Raleigh. N. C., EST. 6:45 a.m. $-8 \mathrm{p} . \mathrm{m}$
wQAM 560 Miami, Fla., EST 7 a.m.mid.
WQAN 880 Scranton, Pa. EST 12:30-1:30 p.m.; 4:30-5:30 p.m. 8-11 p.in
WQAO 1010 New York City. Silent.
WQBC 1360 Vickshurg, Miss., CST 7:30 a.m.-2:30 p.m.: 5-10 p.m
WQDM 1370 St Albans, Vt. EST 8-9 a.m.; 11 a.m.-2 p.m
WQDX 1210 Thomasville. Ga
WRAK 1370 Williamsport, Pa. EST
8:30 a m.-2:30 p.m.; 4:30-10:30
WRAM 1370 Wilmington, N. C.ESST.
7:30 a.m.-3 p.m.; 6:30-11 p.m
WRAW 1310 Reading, Pa., EST
7-9:30 a.m.; 6 p.m.-mid
WRAX 1020 Philadelphia, I'a., EST 7 a.m.-Bunset.
WRBL 1200 Columbus, Ga-, CST 7 a.m. 9 p.m.
WRBX 1410 Roanoke, Va., ESTT. 9 a.m.-noon; 3-6 p.m.; 8 p.in.-1
WRC 950 Washington, D. C. EST
6:45 a.m.-1 a.m. next day.
WRDO 1370 Augusta, Maine, EST 7-9:30 a.m.; 10:30 a.m.-1:30 p.m.; 3:30-10 p.m.

WRDW 1500 Augusta, Ga., EST
8 a.m.-2 p.m. ; 5-11 p.m.
WREC 600 Memphis, Tenn.
WREN 1220 Lawrence, Kans., CST. 7 a.m.-mid.
WRHM 1250 Minneapolis, Minn., CST.
6:15-9:45 a.m.; 10:35 a.m.-8 p.m.; 9 p.m.-1 a.m

WRJN 1370 Racine, Wis., CST.
8 a.m.-10:30 p.m.
Wrny 1010 New York City.
WROL 1310 Knoxville, Tenn., CST'. 7 a.m.-10 p.m.
WhR 1280 Dallas, Texas, CST.
6:30 a.m. 11 p.m.
WhuF 830 Gainesville, Fla., EST. 8 a.m.-6:45 p.m.

WRVA 1110 Richmond, Va, EST. 7 a.m.-3 p.m.; 4:15 p.m.-mid.
w\$al 1330 Cincinnati, Ohio, E'ST. 8 s.m.-11 p.m.
WSAJ 1310 Grove City, Pa.
Silent.
WSAN 1440 Allentown, Pa., EST . 5 p.m.-mid.
wSAR 1450 Fall River, Mass., EST. 8 a.m.-3:30 p.m.; $5-10$ p.m.
WSAZ 580 Huntington, W. Va., EST.
6-9 a.m.; noon-2 p.m.; 4-8:30
WSB 740 Atlanta, Ga., CST 7 a.m.-mid.
WSBC 1210 Chicago, Ill.
WSBT 1230 South Bend, Ind., CST' 6-7:30 a.m.; 10:15 a.m.-noon; 3-5:30 p.m.
WSEN 1210 Columbus, Obio, EST 8 a.m.-11 p.m.
WSFA 1410 Montgomery, Ala., CST
6:30 a m.-sunset; $9-11$ p.m.
WSIX 1210 Springfield, Tenn., CST. 6 a.m.-3 p.m.; 6-9 p.m.
WSJS 1310 Winston-Salem, N. C. EST.
8 a.m.-mid.
WSM 650 Nashville, Tenn., CST. 6:30 a.m.-mid
WSMB 1320 New Orleans, La., CST 7 a m.-mid.
WSMK 1380 Dayton, Ohio, ESTT.
7 a.m. 8 p.m.; 10 p.m.-mid.
wSOC 1210 Gastonia, N. C., EST 8 a.m.-10 $\mathrm{p} . \mathrm{m}$.
WSPA 1420 Spartanburg, S.C., EST $7: 30 \mathrm{a} . \mathrm{m}-11 \mathrm{pm}$.
WSPD 1340 Toledo, Ohio, EST 7:30 a.m.-nir!
WSUI 880 Iowa City, Iowa, CST
9 a.m.-10; 11-12:30; 2-4; b-10 p.m.; mid. 4 a.m

WSUN 620 St. Petersburg, Fla , EST . 7:1.5 a m.mind.
WSus 1370 Buffalo, N. Y.EST. 8:30 a.m.-10 a.m.; 2-3 p.m.
WSYB 1500 Rutland, Vt., EST 10 a.m. -1 p.m.; $5-9 \mathrm{p} . \mathrm{m}$.
WSYR 570 Syracuse, N. Y. EST 7a.m.-3 f.m.; 4-11 p.m
WTAD 1440 Quincy, III., CST 4:30 a.m. -1 p. $\mathrm{m} . ; 2: 30-8 \mathrm{p} . \mathrm{m}$.
WTAG 580 Worcester, Mass., EST 8 a.m.-11:15 p.m.
WTAM 1070 Cleveland, Ohio. EST. 6:30 a.m.-1 a.m. next day.
wtag 1330 Eau ('laire Wis., CST. $7 \mathrm{a} . \mathrm{m} .-8 \mathrm{p} . \mathrm{m}$.
WTAR 780 Norfolk, Va., EST 7 a.m.-mid.
wTAW 1120 College Station, Texias Silent.
WTAX 1210 Springfield. Ill.
wtro 1420 Cumberland, Md., EST 7 a.m.-1:30 p.m.; 2:30-8 p.m.
WTEL 1310 Phitadelphia, Pa., EST 7 a.m.-9; 11-1 p.m.; 5-8:30 p.m
WTFI 1450 Athens, Ga., EST.
8 a.m.-4 p.m.; 6-10 p.m.
WTIC 1060 Hartford, Conn., EST 7 a.m.-4 p.m.
WTJs 1310 Jackson, Tenn., CST.
$7 \mathrm{a} . \mathrm{m} .-1$ p.m.; 3-9 p.m.
wTMJ 620 Milwauke, Wis., CST . 6:45 a.m.mid.

WTOC 1260 Savannah, Ga., EST .
7 a.m.-mid.
WTRC 1310 Elkhart, Ind., CST
7:30 a.m. -7 pm.
WTSL 1310 Laurel, Miss.
WWAE 1200 Hammond, Ind., CST. 7 a.m.-8:30; 11-1 pm.; 4-9 9-11:30 p.m.
WWJ 920 Detroit, Mich., EST. 7:30 a.m.-mid.
WWL 850 New Orleans, Lal., CST. 8 a.m.-8:30 p.m.
WWNC 570 Asheville, N. C., CST. 7 a.m.-mid.
WWRL 1500 Woodside, N. Y., ESTT. 8-9 a.m.; 11 a.m.-noon; 1-2 p.in. 6-8 p.m.
WWSW 1500 Pittshurgh, Pa., EST .
8 a.m.-1:30 n.m.; 3-11:30 p.m.
WWVA 1160 Whecling, W. Fa, EST 7:30 a.m.-9 p.m.
WXYZ 1240 Detroit. Mich, EST
7:30 a m.-mid
XEA 1155 Guadalajara, Mex.,CST
11 a.m.-1noon; 2-3 p.m.; 5-11
1030 Mexico City, Mex., CST.
8 a.m.-mid.
1000 Toluca, Mex.
965 Reynoss, Mex.
1000 Oxatco, Mex.
735 Villa Acuna, Mex.
24 hours daily.
Xefa 1250 Mexico City, Mex.
XEFB 1315 Monterrey, Mex., CST
11 a.m.-2 p.m.; ${ }^{\text {h-1 }} 10$ p.m.
XEFC 1050 Merida, Mex.
XEFD 1020 Tijuana, Mex.
Xefe 1000 Laredo, Mex.
XEFI 1000 Chihuahua, Mex.
Xefo 940 Mexico City, Mex, CST
2-3 p.rn.: 7-11 p.m.
Xers 1000 Queretaro, Mex., CST
7:30-10-30 p.m.
XEFZ 1370 Coyoacan, Mex., CST
$8-11$ p m.
Xeg 1070 Mexico City, Mex.
XEH 1132 Monterrey, Mex., CST.
9 a.m. $1: 30 \mathrm{p} . \mathrm{m}$.; ( m -mid)
XEI 1310 Morelia. Mex., CST
2-3:30 p.m. ; 8:30-10 p.m.
XEJ 1000 Juarez, Mex., CST.

990 Mexico City, Mex.
XEL 1000 Siltillo, Mex., CST. $11 \mathrm{a} . \mathrm{m} .-1 \mathrm{p} . \mathrm{m} . ; \mathrm{i} 9 \mathrm{~g} . \mathrm{m}$.
XEM 1300 Tampico, Mex.
XEN 711 Mexico City, Mex.,CST 10 a.m-noon; 2-4 p.m.; 7-11
XENT 1115 Neavo Laredo, Mex.
XEP 1400 Laredo, Mex.
XEQ 750 Juaret, Mer., MST. 9 a.m.-2p.m.; 5-11 p.m.
Xer 735 Villa Acuna, Mex.
24 hours daily
XES 1055 Tampico, Mex., CST.
9-10:30 a.11.; noon-2 p.m.; 7:1510 p.m.
XET 690 Monterrey, Mex., CST.
9 a.m.-2 p.m.; 6-10 p.m.
Xeta 1140 Mexico City, Mex.
XETB 1380 Torreon, Mex.
XETC 1000 Jalama, Mex.
Xetr 630 Veracruz, Mex., CST.
7-8 n.m.; noon-2 p.m.; 7 p.m. mid.

| XETG | 1000 | Torreon, Mex. |
| :--- | ---: | :--- |
| XETQ | 1230 | Mexico City, Mex. |
| XETR | 610 | Mexico City, Mex. |
| XEU | 1007 | Veracruz, Mex., CST. |
|  | $7-8$ a.m.; $10-11$ a.m.; noon-3 |  |
|  | pm.; 6 -mid. |  |
| XEV | 1000 | Pueblo, Mex. |
| XEW | 910 | Mexico City, Mex. |
| XEX | 1210 | Mexico City, Mex. |


| XEY | 1000 | Merida, Mex. |
| :--- | ---: | :--- |
| XEZ | 780 | Mexico City, Mex |
| XFC | 810 | Aguascalientes, Mex. |
| XFF | 875 | Chihuahua, Mex. |
| XFG | 683.3 | Mexico City, Mex. |
| XFX | 867 | Mexico City, Mex. |
| 10-AB | 1200 | Moose Jaw, Sask., MST. |
| 10-AK | 6.7 p. | 1200 |
|  | Stratford, Ont., EST. |  |
|  | $6-8$ p.m. |  |

10-AT 1155 Trail, B. C.
10-8i 1200 Prince Albert, Sask., MST.
Noon-1 p.m ; 6-8 p.m.
10-BP 1199 Wingham, Ont., EST. noon-1 p.m.
10-BQ 1200 Brantford, Ont., EST. 6 p.m.-7; 8-10 p.m.
10-BU 1200 Canora, Sask

## SHORT WAVE STATIONS of UNITED STATES

According to Frequencies in Megacycles (thousands of kilocycles) and Wave Lengths in Meters. Time is given in EST. The Foreign Short Wave Stations were given by Countries in the September issuc and by frequencies in October.




| Call | Megs. | Meters |  | Call | Megs. | Meters |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Harrisburg | -PENNS Y | YLVANIA | Beaumont |  |  |  |  |  |
| WAED | 3.100 | 96.72 | T. A. T. | KGPJ | 1.712 | 175.15 | P. S. |  |  |
| WAED | 5.560 | 53.92 | T. A T. | Big Springs |  |  |  |  |  |
| Philadelphia |  |  |  | KGUG | 3.490 | 85.91 | S. A. T. |  |  |
| WPDP | 2.470 | 121.40 |  | KGUG | 5.630 | 53.25 | S. A. T. |  |  |
| W3XZU | 9.585 | 31.28 | Daily, ex. Thurs., Fri. | Dallas |  |  |  |  |  |
| Plttshurgh ${ }^{3}$ p. m. to midnight. |  |  |  | KVP | 1.712 | 175.15 | P. S . |  |  |
|  |  |  |  | KGUF | 3.490 | 85.91 | S. A. T. |  |  |
| WPDU | 1.712 | 175.15 | P. S. | KGUF | 5.630 | 53.25 | 8. A. T. |  |  |
| WAEC | 3.100 | 96.72 | T. A. T. | El Paso |  |  |  |  |  |
| WAEC | 5.560 | 53.92 | T. A. T. |  |  |  |  |  |  |  |
| W8XK | 6.140 | 48.83 | Westinghouse Elte. \& | KGUA | 5.630 |  |  |  |  |
| Mfg. | Co. Relay | KDKA | Tues., Thur., Sat., Sun. | Fort Worth |  | 175.23 P. S. |  |  |  |
| ${ }^{4} \mathrm{p} . \mathrm{m}$ | . to midnig | t. |  | KGPR | 1.712 |  |  | S. A. T, |  |  |
| W8XK | 11.872 | 25.25 | Westinghouse Elec. \& | KGUC | 3.490 | $\begin{aligned} & 85.91 \\ & 53.25 \end{aligned}$ |  |  |  |  |  |
| Mfg . | Co., 3 to 9 p | m. Sat. | night Arctic programs. | KGUC | 5.630 |  | S. A. T. |  |  |
| Televi | ision, Mon. | * Fri. 2:30 | $30 \mathrm{p} . \mathrm{m} ., 60$ lines, 1200 | Houston |  |  |  |  |  |
| r. p. m | m. (11,881 | kc.). |  | KGZB | 1.712 | 175.23 P. S. |  |  |  |
| W8.JK | 14.480 | 20.70 |  | Salt Lake City-UTAH |  |  |  |  |  |
| W8XK | 15.204 | 19.72 | 6:30a.m. to $4 \mathrm{p} . \mathrm{m}$. | kGPW | 2.470 | 121.40 I 's. |  |  |  |
| W8. ${ }^{\text {M }}$ | Co 17.780 | 16.87 | Westinghouse Elec. \& | KQD | 3.170 | 94.5853.54 | B. A. T. |  |  |
| W8Xh | Co. 21.540 | 13.42 | 6:30 it. m. to 11 ar m. | K(P) | 5.600 |  | B. A. T. |  |  |
| W8SI | 31.000 | 9.67 | ar. m. to 11 d. | Arlington-VIRGINIA |  |  |  |  |  |
|  | Manlla-PH | LIPPINE | ISLANDS | NAA ${ }_{10}$ | 4.105 | $73.03$ | Time signals $9: 57$ to |  |  |
| KZRM <br> pines. | $6.140$ | 48.83 | Radio Corp. of Philip- | NAt ${ }^{10}{ }^{1}$ | $\begin{gathered} 11 .: ~ \\ \\ 8.57 \\ 8.872 \end{gathered}$ | noon. 33.60 | Time signals 9:54 to |  |  |
| NPO |  | 33.78 | Time signals 9:55 to | $10 \mathrm{p} . \mathrm{m} . ; 2: 57$ to $3 \mathrm{p} . \mathrm{m}$. |  |  |  |  |  |  |  |  |  |
| 10 p . | m. (Cavite | Manila) |  | NAS 12.045 |  | 24.07 | Time signals 11:45 to |  |  |
| K1XR | 9.560 | 31.36 |  |  |  | 18.05 U. S. Navy time sig- |  |  |  |
| KZRM pines. | 9.570 | 31.33 | Radio Corp. of Philip- | $\begin{aligned} & \text { NAA } \\ & \text { nals } \end{aligned}$ | $\begin{aligned} & 16.060 \\ & 1: 57 \text { to noor } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| K1XR | 11.440 | 26.20 | 11:15 a m. to 12:15 p. | Pasco-washingion |  |  |  |  |  |
| m.; 1 | a. m. to 3 a | m. ; 5 to | 10 at . m | KDD | 3.170 | 94.58 | B. A. T. |  |  |
| KlyR | 11.820 | 25.39 | 11:15 a. m. to 1215 p . | KDD | 5.600 | $53.54 \mathrm{~B}, \mathrm{~A}$. T. |  |  |  |
| m.; 1 | a. m. to 3 a | m.; 5 to | 10 a m. | Seattle |  |  |  |  |  |
| KZRM | 11.840 | 25.33 | Radio Corp. of Philip- | KGPA | 2.414 | 124.2794.30P. S. A. |  |  |  |
| pines. |  |  |  | KZJ | 3.178 |  |  |  |  |  |  |  |  |  |  |  |
| KA1MR | 12.245 | 24.49 |  | KZ.J | 5.657 | 53.0017.33 | U. A. |  |  |
| K1XR | 12.250 | 24.46 | 5 to 9 a. m., ex. Sunday | W78C | 17.300 |  |  |  |  |
|  Memphis-TENNESSEE <br> WPEC $2.470 \quad 121.40$ P.S. |  |  |  | WPDK | Milwaukee-WISCONSIN <br> 2.450 <br> 122.40 <br> P. S. |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ablent - TEXAS |  |  |  | Cheyenne-WYOMING |  |  |  |  |  |
| KGUL | 3.490 | 85.91 | S. A. T. | HeE | 3.170 | 94.58 B. A. T. |  |  |  |
| KGUL | 5.630 | 53.25 | S. A. T | KOL | 5.600 |  |  |  |  |  |  |  |  |  |  |  |
| A marllo |  |  |  | Rock Springs |  |  |  |  |  |
| KSW | 3.100 | 96.72 | T. A. T. | Koc | 3.170 | 94.58 B. A. T. |  |  |  |
| KSW | 5.560 | 53.92 | T. A. r | HQC | 5.600 | 53.51 B. A. 'T' |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

Fill in your dial numbers and you will then know where these foreign stations should be received on your set

| 500 |  |  |  |  | $\begin{gathered} \text { Keys. } \\ .589 \\ .590 \\ .590 \\ .599 \end{gathered}$ | Power <br> 15000 <br> 10000 <br> 8500 | $\begin{aligned} & \text { Call } \\ & \text { LP6 } \\ & \text { JOAK } \\ & \text { IMI } \end{aligned}$ | City <br> Velthem <br> Buenos Aires <br> Tokyo <br> Milan | Country <br> Belgium <br> Argentina <br> Japan <br> Italy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Keys. | Power | Call | City | Country |  |  |  |  |  |
| 551 | 1000 | RW17 | Kazan | Russia |  |  |  |  |  |
| 554 | 4000 | I1PA | Palermo | Italy |  |  |  |  |  |
| - 554 | 10000 | SBD | Sundsvall | Swedent |  |  |  |  |  |
| 560 | 7500 | 2 CO | Corowa | Australia |  |  |  |  |  |
| - 560 | 1200 | RW41 | Velikj Oustug | Russia | 600 | 1750 |  |  |  |
| 563 569 | 1700 3000 |  | Mrunich | Germany | 600 600 | 120 20 | RL2ZK | Hanganui Utyanovsk | New Lealand Russia |
| 569 +571 | 10040 | YLZ | Riuja | Latvia | 604 | 1200 | RW31 | Ivanovo- |  |
| 580 | 600 | VL7ZL | Hobart | Australia |  |  |  | Yosnesensk | Russsia |
| 581 |  |  | Sienna | Austria | 60\% | 500 | XGZ | Nanking | Chiua |
| - 587 | 1009 | RV50 | Armavir | Russia | 608 | 510 | LKT | Troudelag | Norwaty |
| 588 | 750 |  | Bloemfontaine | So. Arica | 608 | 1200 | RW32 | Stavropol | Russia |
| - 589 | 3600 | ON4RB | Brussels | Belgium |  | 1000 | 1K3:R | Melbourne | Australia |


| Keys. | Power | Call | City | Country | Keys. | Power | Call | City | Country |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 616 | 5000 | OKP | Prague | Czechoslovakia | 750 | 10000 | JOBK | Osaka | Japan |
| 621 | 1200 | RW40 | Gomel | Russia | - 750 | 1000 | VQ7LO | Nairobi | Kenya |
| -625 | 1000 | CMAB | Santiago | Chile | 750 | 700 | RA8 | Bogorodsk | Russia |
| 625 | 500 | XOL | Tientsin | Clina | - 750 | 750 | EAJ2 | Madrid | Spain |
| 625 | 500 | JOQK | Nilgat:4 | Japan | 752 | 1000 | G5SC | Glasgow | Scotland |
| -626 | 25000 | G5GB | Daveritry | England | 759 | 500 | LT4 | Mendoza | Argentina |
| 626 | 30000 |  | Hulderstield | Engiand | -759 | 12000 |  | Bucharest | Rumania |
| 630 | 50 | ZL1ZH | Hanilton | New Zealand | -760 | 2500 | VEPQG | Brisbane | Australia |
| 630 | 4000 | RW52 | Simferopol | Russia | 760 | 1000 | JQAK | Dairen, Man- |  |
| 635 | 17000 |  | Langenburg | Germany |  |  | JQR | churia | Japan |
| 635 | 500 | JONK | Nagaro | Japan | 770 | 8000 |  | Toulouse | France |
| 635 | 7500 | 5CK | Crystal Brook | Australia | 770 | 1700 |  | Frankfort | Germany |
| 636 | 1200 | RW23 | Groznyi | Russia | 770 | 200 | VUM | Madras | India |
| 636 | 300 | RW28 | Vladivostok | Russia | - 770 | 10000 | JOHK | Scndai | Japan |
| 638 | 50 | PRAM | Amparo | Brazil | - 770 | 10000 | RW36 | Arkhangelsk | Russia |
| 640 | 1200 | RW5 ${ }^{\text {d }}$ | Penza | Russia | 770 | 600 | SBF | Ostersund | Sweden |
| 644 | 3000 | YN | Lyon | France | - 770 | 500 | CX12 | Montevideo | Uruguay |
| 645 | 1200 | RW48 | Tomsk | Russia | 777 | 500 |  | Rbeims | France |
| 648 | 500 | ZL4YA | Dunedin | New Zcaland | 778 | 500 | JOPK | Shidzuoka | Japan |
| 650 | 1000 | RW33 | Krasnolar | Russia | 779 |  |  | Lwow | Poland |
| -650 | 1000 | CX6 | Montevideo | Uruguay | 779 | 500 |  | Wilna | Poland |
| 653 | 60000 |  | Beromunster | Switzerland | -789 | 500 | LU2 | Bahia Blanea | Argentina |
| 662 | 500 |  | Klagenfurt | Austria | - 790 | 500 | LR1 | Buenos Aires | Argeatina |
| - 662 | 250 | 1'「B | Danzig | Danzig | . 790 | 10000 | JOGK | Kumamoto | Japan |
| 662 | 200 | IBZ | bolzano | Italy | - 790 | 1500 | OAX | Lima | Peru. |
| 662 | 500 | LKD | Bodo | Norway | 793 | 1000 | RW37 | Moscow | Russia |
| 662 | 800 | LKP | Porsgrund | Norway | 793 | 300 | RW39 | Moscow | Russia |
| 662 | 110 | LKM | Tromsoc | Norway | 796 | 1040 | RW27 | Makhatch Kala | Russia |
| 662 | 1000 | EAJ8 | San Sebastian | Spain | - 797 | 1000 | G 22 Y | Manchester | England |
| 662 | 150 | SCT | Upsala | Sweden |  |  |  |  |  |
| 665 667 | 1000 15000 | VK2FC | Sydney | Austrila |  |  |  |  |  |
| 667 668 | 15000 4000 | RW13 | Johannesburg Odessa | So. Africa | 80 | 00 |  |  |  |
| 670 | 5000 | LP4 | Buenos Aires | Argeftina | 800 | 1000 | VK3LO | Melbourne | Australia |
| 670 | 10000 | JFAK | Tokyo | Japan | 804 | 1000 | CMAC | Santiago | Chile |
| 671 | 1000 | FP'TT | Paris | France | 806 | 1700 |  | Hamburg | Germany |
| 671 | 300 | LKA | Aalesund | Nofway | 810 | 1000 | LTI | Concordia | Argentina |
| 671 | 900 | LKN | Notodden | Norway | - 810 | 3000 | VUC | Calcutta | India |
| 671 | 170 | LKR | Rjukan | Norway | 810 | 10000 | JOCR | Nagoya | Japin |
| -674 | 50 | PRAH | Bahia | 1 razil | -810 |  | HS7PJ | Bangkok | Siam |
| 674 | 1000 | COHB | Harbin | China | . 810 | 1000 | ZTC | Cape Town | So. Africa |
| 680 | 75000 | I1RO | Rome | Italy | - 810 | 1000 | CX14 | Montevideo | Uruguay |
| 680 | 500 | JOLK | Fukuoka | Japan | 811 | 1200 | RV26 | Artemovsk | Russia |
| -685 | 1000 | LP8 | Laplata | Argentina | -815 | 1000 | PRAE | Sao Paulo | Brazil |
| -685 | 2000 1200 | HJN | Bogota | Colombia | 815 $8: 0$ | 20 | EAJ5 | Seville Greymouth | ${ }_{\text {Spain }}^{\text {New }}$ Zealand |
| -689 | 1000 | CAB | Canton | China | 820 | 20 | ZL3ZR | Greymouth | New Zealand |
| 689 | 60 | SCN | Malmberget | Swedicn | 820 |  | RV42 | Nokolaev | Russia |
| -689 | 1000 | SBA | Stockholm | Sweden | 824 | 2400 |  | Algiers | Algeria |
| - 690 | 1000 | VK6WF | Perth | Australia | 824 | 1000 | LKB | Bergen | Norway |
| 690 | 1000 | JODK | Keijo, Chosen | Japan | 8.35 | 1500 | F8GC | Paris | France |
| 690 | 1200 | R.44 | Tver | Russia | 830 | 500 | J/R5 | Buenos Aircs | Argentina |
| 696 |  |  | Belgrade | Jugosiavia | 830 | 10000 | JOIK | Sapporo | Japan |
|  |  |  | - | Jugotia | 830 | 25 | 2ZP | Wairoa Stuttgart Fredrikstad | New Zealand Germany |
| 700 |  | 1 |  |  | $\begin{aligned} & 833 \\ & 837 \\ & 838 \\ & 840 \end{aligned}$ | $\begin{array}{r} 60000 \\ 700 \end{array}$ | LKF |  |  |
|  |  | 4000 |  |  | RW57 | Tiraspol | Russia |  |  |
| 700 | 500 |  | JOKK | Okayama |  | Japan | 10000 |  | Helsingfors |  |
| 704 | 4000 | RW20 | Klarkov | Russia |  |  |  |  | Frelriksberg | Finland |
| - 706 | 3000 | PRAP | 1'ernambuco | Brazil | -840 | 12000 | F31CD | Saigon | Fr. Indo-China |
| -706 | 3000 | Prada | Porto Alegre | Brazil | - 840 | 3000 | VUB | Bombay | India |
| - 708 | 1500 | LAJ7 | Madrid | Spain | - 812 | 250 | PRAF | Para | Brazil |
| - 710 | 5000 | LSI | Buenos Aires | Argentina | -842 | 30000 | G2LO | London | England |
| 710 | 300 | JOJK | Kanazawa | Japan | - 845 | 1500 | ZBW | Victoria | Hong Kong |
| 714 | 200 | las32 | Suratov | Russia | - 850 | 10000 | JOFK | Hiroshima | Japan |
| $\begin{array}{r}716 \\ \hline 720\end{array}$ | 1700 5000 |  | Berlin | Germany | -850 |  | CX16 | Montevideo | Uruguay |
| -720 | 5000 2000 | ComK | Wellington Mukden | New Lealand | 851 | 7000 |  | Graz | Austria |
| -724 | 2000 |  | Mabat | Morocco | 8850 | 1000 | VK2BL | ${ }_{\text {S }}$ Sydney | Australia |
| 726 | 1500 | 2 RN | Dublin | Irish Free State | 850 | 2500 | RSP1 | Bangkok | $\stackrel{\text { Russia }}{ }$ |
| -730 | 5000 | LT6 | San Juan | Argentina | - 857 | 200 | PRAJ | Juiz de For: | Brazil |
| - 730 | 1000 | VK5CL | Alelaide | Australia | -857 | 500 | prac | Rio de Janciro | Brazil |
| 730 | 1000 | RW55 | Pokrovsk | Kussia | 860 | 7500 | EAJI | Barcelona | Spain |
| - 730 | 1000 | CX10 | Montevideo | Uruguay | 865 | 1200 | RW24 | Piatigorsk | Russia |
| - 731 | 1000 | ZTD | Durban | South Africa | 867 | 6000 | SPTT | Strasburg | France |
| - 734 | 10000 |  | Katowice | Poland | - 870 | 10000 | LR2 | Buenos Aires | Argentina |
| 735 | 2200 |  | Tartu | Estonia | 870 |  |  | Shanghai | China |
| 741 | 1000 | JOSK | Kokura | Japan | - 870 | 10000 | JOAK | Tokyo | Japan |
| - 743 | 25000 |  | Sottens | Switzerland | - 878 | 36000 | OKB | Brno | Czechoslovakia |
| 748 | 1200 | RW51 | Nalchik | Russia. | 880 | 600 | $\checkmark \mathrm{K} 4 \mathrm{BC}$ | Brisbane | Australia |
| - 750 | 7000 | LR7 | Buenos Aifes | Argentina | 880 | 200 | VK6PR | Perth | Australia |
| - 750 | 1000 | PRAA | Rio de Janeiro BrazilMont-de-Marsan France |  | - 881 | 500 | LV7 | Tucuman | Argentina |
| 750 | 250 |  |  |  | - 882 | 50 | PlaN | Curityba | Brazil |



| Keys. | Power | Call | City | Country | Kсуs. | Power | Call | City | Country |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1160 | 16 | ZLAZP | No. Invereargill | 1 New Zealand | 1300 | 50 | VII3BA | Ballarat | Australia |
| 1166 | 10000 | SBH | Horby | Sweden | 1300 | 30 | CW38 | Salto | Uruguay |
| 1170 | 25 | 1Z13 | Auckiand | New Zealand | 1301 | 150 | SCA | Boras | Sweden |
| 1170 | 200 | VF4TO | Townsville | Australia | 1301 | 200 | SCG | Halsing borg | Sweden |
| 1170 | 20 |  | Campinas | Brazil | 1301 | 60 | SBC | Malmo | Sweden |
| 1170 | 200 | CX 32 | Montevideo | Uruguay | 1301 | 20 | SCS | Umea | Sweden |
| 1175 | 1500 | MRD | Toulouse | France | 1304 |  | HKF | Bogota | Colombia |
| 1180 | 100 | VK3DB | Melbourne | Australia | 1310 | 300 | VE5AD | Adelaide | Australia |
| 1180 | 2.5 | ZL2ZD | Masterton | New Zealand | 1319 | 300 |  | Aix la Chapelle | Germany |
| 1180 | 30 | CW32 | Salso. | Uruguay | 1319 | 1700 |  | Cologne | Germany |
| 1184 | 2300 |  | Iepzzig | Germany | 1319 | 600 |  | Muenster | Germany |
| -1190 | 10000 | LS2 | Buenos Aires | Argentina | 1320 | 50 | VK2AY | Albury | Australia |
| - 1191 | 100 | VK4MK | Mackay | Australia | 1320 | 26 | 2LIZJ | Auckland | New Zealand |
| 1190 | 13 | ZL1ZQ | Auckland | New Zealand | 1330 | 50 | VK2\10 | Bunnedah | Australia |
| 1195 | 200 | E.J18 | Almeria | Spain | 1330 | 15 | ZL2ZI | Hastings | New Zealand |
| 1199 | 5000 |  | Bordeaux | France | 1330 | 20 | 2ZL | Hastings | New Zealand |
| 1200 |  |  |  |  | $\begin{array}{r} 1330 \\ 1333 \\ 1337 \\ 1340 \end{array}$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | CX40 <br> CMAK | Montevideo Santiago | Uruguay <br> Chile <br> Irish Free State |
| 1200 | 200 | VK5に | Adelaide | Austratia |  | 1000 | 6 CK | Cork |  |
| 1200 | 500 | NKKA | Toulon | France |  | 50 | VK2XN | Lismore | Australia |
| 1200 | 500 | TFA | Reykjavik | Iceland | -1340 | 10000 | CW40 | Paysandu Luxemburg | Uruguay Luxemburg |
| 1200 | 250 | ZL3ZC | Christchurch | New Zenlan! | -1349 | 3000 | LS 0 | Buenos Aires | Argentina |
| - 1210 | 1000 | 2 CH | Sydney | Australia | - 1350 | 200 | 1 K 3 KZ | Melbourne | Australia |
| 1210 | 5 | ZL2ZE | Ekatchuana | New Zealand | 1350 | 1000 | CPX | LaP:az | Bolivia |
| 1210 | 10 | ZL1ZM | M:nurewa | New Zealand | - 1360 | 400 | LT2 | Concordia | Argeutima |
| - 1210 | $50)$ | CX34 | Montevideo | Uruguay | 1360 | 50 | 2ZR | Nelson | New Zealand |
| -1211 | 15000 | I1TR | Trieste | Italy | 1360 | 25 | 4ZR | Balclutha | New Zealiand |
| 1219 | 100 | ON4FO | Brussels | Belgium | - 1363 |  | ZP1 | Asuncion | Paraguay |
| 1219 1219 | 400 | ON4RG | Ghent | Belgium | -1364 | 1000 | PRAX | Rio de Janeiro | Brazil |
| 1219 | 200 | ON4RW | Liege | Belgian | 1304 | 1500 |  | Beziers | France |
| 1219 | 100 | EAJ15 | Nice | France | 1364 | 250 |  | St. Etienne | France |
| 1220 | 500 |  | ,arkgena | Spai | 1365 | 50 | YK2XL | Broken Hill | Australia |
|  |  |  | Donau | Austria | 1373 | 500 | CX42 | Montevideo | Uruguay |
| 1220 | 50 | VK2MV | Moss Vale | Australia | 1373 | 250 | SCK | Karlstad | Sweden |
| 1220 | 100 | VK6KG | Kilgoorlie | Australia | 1373 | 200 | SCW | Ornskoeldsvik | Sweden |
| 1220 |  |  | Abo | Finland | 1375 | 100 | ON4GT | Brussels | Belgium |
| 1220 | 1500 |  | Bjorneborg | Finland | 1380 | 600 | VK4BH | Brisbane | Australia |
| 1220 | 750 |  | Jahohstad | Finland | - 1386 | 10000 | LS9 | Buenos Aires | Argentina |
| 1220 | 300 |  | Kassel | Germany | - 1388 | 500 | LV5 | Rosario | Argentina |
| 1220 | 180 | ZL4ZL | Blocmendaal Dinedin | Netheriands New Zealand | 1338 1388 | 200 | ON4CE | Chatelineau | Belgium |
| 1220 | 20 | 4ZW | Dunedin | New Zealand | 1388 | 100 | ON4EX | Ottomont |  |
| 1220 | 200 | SCB | Eskilstuna | Sweden | 1390 | 50 | 2GN | Goulburn | Beggum Australis |
| 1220 | 200 | SCI | Kalmar | Sweden | 1391 | 200 | SCE | Halmstad | Sweden |
| 1220 | 200 | SCL | Kiruna | Sweden |  |  |  |  |  |
| 1220 | 400 | SCP | Saffle | Swolen |  |  |  |  |  |
| - 1220 | 50 | CW34 | Sulto | Uruguay |  | 00 |  |  |  |
| - 1229 | 10000 | LS8 | Buntago Aires | Chile | 1400 | 50 | VK3GL | Geelong | Australia |
| 1230 | 100 | ZL, 2 YB | New Plymouth | New Zealand | 1410 | 20 | CX4 4 | Montevideo | Uruguay |
| 1238 | 1000 | G2BE | Belfast | Irel:und | - 1114 | 100 | LU1 | Mar del Plata | Argentina |
| 1245 | 2000 | Vhenc | Newcastle | Australia | - 1415 | 200 | VK2KO | Newcastle | Australia |
| 1247 | 500 | LKS | Stavanger | Norway | 1420 | 30 | CW44 | Paysandu | Uruguay |
| - 1249 | 500 | LT5 | Parana | Argentina | 1420 | 15 | 1ZS | Auckland | New Ze:land |
| 1249 |  | PRP1 | Oporto | Portugal | 1425 | 300 | 3AW | Meibourne | Australia |
| 1250 | 500 |  | Nimes | France | 1428 | 12 | OA4M | Lima | Peru |
| - 1250 | 250 | CN36 | Montevideo | Uruguay | 1435 | 50 | VK2WL | Wollongong | Australia |
| 1256 | 2300 |  | Nuremburg | Germany | - 1441 | 1000 | LT7 | General Pico | Argentina |
| 1260 | 50 | VK3WR | Wangaratta | dustralia | -1448 | 100 | ON4RC | Brussels | Belgium |
| 1260 | 15 | ZL2ZH | Napier | New Zealand | - 1448 | 3000 |  | Oporto | Portugal |
| -1260 | 30 | ${ }^{\text {CW36 }}$ | Sulto | Uruguay | -1450 | 100 | CX46 | Montevideo | Uruguay |
| 1265 | 200 | SCYY | Orebro | Sweden | 1455 | 50 | ON4ED | Antwerp | Belgium |
| 1270 | 1000 | 2SM | Sydncy | Australia | 1455 | 25 | 0 N 4 FG | Dimpremy | Belgium |
| - 1270 | 1000 | 1S3 | Buenos Aires | Argentina | 1455 | 100 | ON4CE | Verviers | Belgium |
| 1274 | 500 | LKK | Kristianssand | Norway | 1460 | 50 | VK2MV | Mess Vale | Australia |
| 1277 | 50 | RSC | Shanghai | China | - 1460 | 20 | CW46 | Tucuarembo | Uruguay |
| 1280 | $2(10$ | VK43 | Brisbane | Australia | 1470 | 200 | SCE | Gavie | Sweden |
| 1280 | 50 | Vh3TR | Trafalgar | Australia | 1480 | 50 | VK2AY | Albury | Australia |
| 1290 1292 | 100 | CX38 | Montevideo | Uruguay | 1480 1490 | 250 250 |  | Kristinehaman | Sweden |
| 1292 | 300 |  | Kiel | Germany | -1490 | 50 | ${ }_{\text {CX }}$ | Jonkoping | Sweden |
|  | 00 |  |  |  | 1500 | 50 | VK2MO | Gunnedah | Australia |
| 1300 | 8 | 2ZB | Napier | New Zealand | 1500 1500 | 130 | G2LS | Leeds-Bradford Mel ourne | England |

The time on the air for a different day of the week is given in each issue of RADEX. The Sunday time was in the September issue, Monday in October and Wednesday will appear next month. Back issues are available.

The December issue will have a complete list of all the short wave stations in the Dominion of Canada arranged by provinces.

# TELLS lifor the Whole World 

Just set the dial for the hour of the day in your zone and-prestothere is the time for every country in the world. No adding nor subtracting. Shows which times are yesterday, today and tomorrow.

Shows where twilight, darkness and dawn lies.


Tells You When You Must Tune for Distant Programs
On the double page inside is a fine map of the world-the size of six pages of RADEX - with all the principal cities and time zones plainly shown. Adds immensely to pleasure of DXing.

On the back is a list of all countries in the world with the call letters assigned to each and zone key for use on the Converter.

Mailed anywhere in the world for 25 cents. Given free with a year's subscription to RADEX; see subscription blank on page 22 .


Sortetimes $I$ think there ought to be a law to make everyone do a little studying every weck. I didn't think that a year ago because it looked like all the cards were stached against me. But I am certainly rolling in the money now. Maybe my story will show you the way to larger earnings also.

# I Thought Radio Was a Plaything But Now My Eyes Are Opened, and l'm Making Over $\$ 75.00$ a Week! 

$\$ 50$ a week! Man alive, a year ago I thought anyone making that much was just plain lucky.

Twelve months ago I was just barely getting by. It was the same old story-a little job; a salary as small as the job.
If you had told me that twelve months later I would be making $\$ 75$ a week in my own Radio business-I'd thought you were crazy.

But I am getting ahead of my story-let me tell you how it all started. I was hard up a year ago because I had been kidding myself-that's all-not because 1 had to be. I thought a fellow either had to be lucky or have a string of college degrees a half a mile long to make good money.
One day I picked up a magazine and the headline of an ad attracted me because it seemed to fit my case. It said, "I will show you how to start a spare time or full time Radio business of your own WITHOUT CAPITAL.'
"They're trying to kid somebody," I thought; "but I'll find out what it is all about anyway."
I wrote in and within a few days received a 64-page book telling about the opportunities in Radio, how I could prepare right at home in my spare time, and how they would show me how to start making money in my neighborhood selling and repairing Radio sets. It would probably have sounded too good to be true if the promises had not been backed up by 100 letters trom fellows who had taken their course and were very enthusiastic about it.

What has happened since seems almost like a dream to me now. I took their course and in about a month. I was ready to start making money in my neighborhood-as much as $\$ 5$ and $\$ 15$ a week. It wasn't long until I had saved enough money to start a little business of my own.

That business has since grown to the point where I am clearing an average of $\$ 75$ a week. All this took place under the watchful guidance oil my friends at the National Radio Institute. They also offered to train me for other linesin case I wasn't interested in having my own business. Broadcasting stations, Radio Manufacturers, Operating on Board Ship, Servicing Sets, Aircraft Radio, Television and Talking Movies
are other fields their training covers. And to think, until the day I wrote for that book, l'd been wailing, "I have never had a chancewill never have one because I have no pull and have never had the advantage of a good eduacation!"
Friend-you may not be as bad off as I was but think it over-are you satisfied? Are you making as much money as you need? Would you sign a contract to stay where you are or the next ten years at the same salary? Those are the things you have to think about-because no one is going to make it his business to push you ahead-you must make it your own business.

Take my tip-write for their book. It won't cost you anything-only a three-cent stamp. It shows you a lot of things which I don't believe you know now-a lot of facts and figures on the opportunities in this new, fast-growing ficld. Where the jobs are, what they pay, how to get ready for one. Beginners as well as experienzed men are making as much as $\$ 1,000$ to $\$ 2,000$ a year more as a result of N. R. I. training. You place yourself under no obligation because the book is free and is gladly sent to anyone who is ambitious and wants to get ahead. Just address J. E. Smith, President National Radio Institute, Dept. 2MO, Washington. D. C.

\section*{1. E. Smith, President

\section*{\section*{National Radio Institute}

## \section*{National Radio Institute} <br> Dept. 2MO, Washington, D. C.

Dear Mr. Smith: Send me yolir free book, ' $R$ ti•h kewards in Radlo." which points out the opportumities for spare time and full time jobs in Radio aud your pamous $50-50$ methorl of training men to become Radio Experts through home study. I $117-$ derstand this request places me under no obilgatiom.

Name
Address
City
State......................


[^0]:    H. C. LEWIS. President

    Radio Division, Coyne Electrical School
    500 S. Paulina St., Dept. 82-5M, Chicago, Ill.
    Dear Mr. Lewis: Send me your Big, FREE Radio Book, and teil me how I can get the ThAINING that will make me a WINNER.

    NAME
    ADDRESS
    CITY
    STATE

[^1]:    Complete equipment consists of chassls, power unit, auditorium typo speaker, and complete set of laboratory tested tubes. Chassis finished in highly polished nickel over heavy copper plate. Precision laboratory construction is employed throughout; and every receiver is tested on distance before shipment.
    D.C.-S.W.-33 (battery receiver) employs 10 two volt tubes.

    Mall the coupon for full laboratory information and price. New York City territory write V. G. Hush, Division Drive, Dobbs Ferry, N. X.

[^2]:    E-12:30 a.m., C-11:30, M-10:30, P-9:30 B - Lew Diamond's Orchestra
    KOIL KTBS KWCR KYW WBAL WHAM WJR WJZ WKY WJW WRC WREN

[^3]:    E-6:45 p.m., C-5:45, M-4:45, P-3:45 R - Lanny Ross. Tenor
    KFSD KGO KOA KPRC KSD KTBS WBEN WCKY WEAF WJAR WMAQ

[^4]:    E－11：00 p．m．C－10：00 M－9：00 P－8：00 C－Columbia Symp．Orch．，See Monday B－Amos＇n＇Andy，See Monday
    C－Edwin C．Hill，Sce Monday R－Anson Weeks and Orchestra CFCF KSD WEAF WEEI WFBR WFLA WGY WIOD WIS WJAR WLIT WOW WRC WTAG WTAM ww：Wrinc

[^5]:    E－10：30 p．m．，C－9：30，M－8：30，P－7：30 B－Three Keys，See Thursday

[^6]:     C - Poet's Gold-David Ross
    CFRB CKOK KFH KLZ KRLD

[^7]:    E-9:00 p.m., C-8:00, M-7:00, P-6:00 R-Our Government, David Lawrence KPRC KSD KTBS KVOO WAPI

[^8]:    590 kilocycles 508.2 meters

    | CJGC | ae | 5000 | 595GZ |
    | :---: | :---: | :---: | :---: |
    | $6{ }^{6}$ | ak | 1000 | N(2) |
    | WCA | ac | 500 | 1 |
    | WEEET | ak | 1000 | R |
    | Hezo | ae | 1000 | D |
    | Hew | aeh | 1000 | 1R |

    London, Ont. Spokane, Wash. Lincoln, Neb. Boston, Mass. Kalamazoo, Mich Omaha, Neb.

[^9]:    Maple Leaf Radio Co., Ltd.
    Nathansan's Radio Headquarters
    Vandry, Inc.
    Cyrus Dolph
    Mid-Western Radio Corp.
    Tribune Publishing Co.
    Pillar of Fire
    Mississippi Broadcasting Co., Inc.
    Scranton Broadcasters, Inc.
    Scranton Times
    State University of Iowa

[^10]:    C. A. Munro, Ltd.

    Dr. G. M. Geldert
    Dougall Motor Car Co., Ltd.
    Raoul Karman, Casa DelaPorte
    Casa "Lavin" FranciscoA. Lavin, Adm.
    Arkansas Radio \& Equipment Co.
    Henry Field Company
    Radio Service Corporation
    University of South Dakota

[^11]:    Rey-Borges
    Sioux Falls Broadcast Assn., Inc.
    Larus \& Bros. Co., Inc.
    Norman T. Baker

