## THE MARCH 1933



THE ALL.WAVE RADIO MAGAZINE


## $25^{\circ}$

Saturday Time on the Air Spending Sunday with the Short Waves
The Police Broadcasters by Cities, Calls and Channels
When to Tune for the European Broadcasting Stations


No. 67

B. FRANCIS DASIIFIII Tecbuical Editor


FRED CLAYTON BUTLER
Editor and Publisher

## CONTENTS



PAGE TAYLOR Short Ware Editor

NUMBER 67

Frontispiece-Jeannie Lang
Her Story is on page 2
The March DX Calendar of Special Programs. ..... 1
In Front of the Microphone, by "Betty" ..... 2
A IDX Critic Investigates the Two-Tube Record ..... 5
The World on the Short Waves, by Page Taylor ..... 8
Building Radio into the Home of the Future ..... 11
Taking the Trouble out of Radio, by B. Francis Dasbiell ..... 12
Was that Cricket Game from Paris? ..... 17
Writing Letters to Spanish-speaking Stations. ..... 19
"This is What I Think . . ." Letters from our Readers ..... 20
Monthly Meeting of the DX Club ..... 28
This Month's Changes in Station Data ..... 34
"What's on the Air Tonight?" The Month's Chain Programs ..... 35
Classified Index to the Network Features. ..... 44
Index by Frequencies and Dial Numbers. ..... 46
Index by Locations with Key to the Map ..... 60
Index by Call Letters with Saturday Time on the Air ..... 67
The Police Broadcasting Stations, by Cities, Calls and Channels ..... 74
Time on the Air of European Broadcasters. ..... 75
With the Short Waves on Sunday ..... 76
One Hundred Best Short Wave Stations by Frequencies ..... 77
Last Minute DX Notes ..... 79
Published Monthly Excepting July and August See Subscription Blank on Page 24

## THE RADEX PRESS, INC.

$25 c$ per Copy

Publication Office, 404 No. Wesley Ave., Mount Morris, Illinois.
Editorial and Executive Office, 5005 Euclid Ave., Cleveland. Ohio.
Entered as second-class matter November 7, 1932, at the post office at Mount Moria, Ill. under the Act of March 3, 1879. Printed in U. S. A.
ADDRESS ALL CORRESPONDENCE TO CLEVELAND OFFICE

## MARCH DX CALENDAR <br> Special Programs for Distant Listeners

A. M. time is given as the night before. Thus early Monday morning programs are listed under Sunday night. Time is given in Eastern Standard so that programs may be listed in proper sequence.


# In FRONT of the MICROPHONE 

\author{

-     - By "BETTY"
}


## The Girl on the Cover

JEANNIE LANG, petite, vivacious and collegiate, first got a "big bang" out of life when she made her bow to the world in St. Louis December 17, 1911. She was small enough then, but no one suspected she'd go through life abbreviated as "Half Pint," "Peanut" and "Spark Plug."

Although Jeannie's earliest dreams and ambitions were aimed at a theatrical career, she was preceded by three brothers who were always on hand to wallop any fancy ideas out of her, and a father and mother who, like most parents, were dead set against it.

A leading role in the high school musical comedy production cinched her determination, however, and she took matters in her own hands. She called upon the manager of a local theatre, who was a friend of the family. He was quite unaware that Jeannie had come to apply for a job without the full sanction of her parents, so he gave her a small part. The parents eventually threw up their hands in resignation, and Jeannie hammered at all opportunities vigorously.

## Debut in a Faint

Her first real chance came when Brooke Johns, over six feet tall and looking for a small feminine foil, appeared at the theatre. Jeannie persuaded him that she was just the girl he needed. Waiting backstage to go on, however, she suffered such agonies of fright that she fainted. Brooke Johns nonchalantly picked her up and carried her before the footlights with him, and when she "came to" he was singing her song for her. She did not utter a note. That was two and a half years ago.

When the Lang family went visiting in California, friends at the Universal studio conducted them on a
tour. Paul Whiteman was commencing production on the "King of Jazz" and Jeannie was introduced to him. He offered her a screen and microphone test. Both were so successful that without further hesitation she was given several numbers to do in the picture.

Hammerstein later sent for her to come to New York for a part in "Ballyhoo." Upon its conclusion, Jeannie returned to the coast and resumed radio work at KFI and movie shorts with Warner Brothers. Then came a telegram from Jack Denny, offering her a job as soloist with his orchestra, and Jeannie went east.

It was Pontiac who came through with the hoped-for "commercial." She is now heard on that program over the Columbia network, along with Col. Stoopnagle and Budd, gigantic Bill O'Neal, and Andre Kostelanetz. The program originates in the Chamber Music Hall of Carnegie Hall, New York.

Leonard Hayton


Leonard Hayton is the youthful
conductor of the Chesterfield Orchestra who has directed more bands than his life numbers in years. Less than two decades ago, 6-year-old Leonard used to pitch pennies to a ring-tail monkey on Manhattan sidewalks and marvel at the musical machinations of the hurdy-gurdy. He dreamed of the day when he might rouse the neighborhood with similar fanfare.

## A Youthful Maestro

Today, at the age of 24, Leonard directs the gay music heard with Bing Crosby, Ruth Etting and other stars in the Columbia Broadcasting studios high above the haunts of his childhood hurdy-gurdy. Before he was out of his 'teens, he began a career which carried him upward as pianist, arranger and conductor with Paul Whiteman and Bing Crosby on Broadway, stage tours and in Hollywood. His big chance came this year when he assembled a group of novel instrumentalists and won the engagement to support the Chesterfield stars.

Leonard was born in New York City on February 13, 1909, the son of a Manhattan restaurateur. He developed a penchant for the piano when six years old. Neither of his parents was a tutored musician, but both were avid followers of the concert hall. Leonard was taken to every musical event and, before he emerged from knee pants, became thoroughly schooled in the symphonies. The parents forbade "jazz" and it was not until Leonard reached the age of sixteen that he knew the subtle appeal of syncopation. Then he "bootlegged" modern recordings into the household and soon was tantalizing the keys with rhythmic tunes for schoolboy friends. This forbidden forte became his fortune when family reverses set in.

## Joins Paul Whiteman

Leonard left high school to become pianist with the Broadway Hotel Orchestra. While playing at the Park Central, he was heard by Paul Whiteman and immediately engaged

"Cannonball" Stoopnagle and "Mile-a-minute" Budd try out their new Model-1905. Whatisit. On Pontiac program, CBS, Thursdays at 9:30 p. $m$.
by the exponent of jazz symphonies. During his two and a half years with the Whiteman fold, he alternately served as featured pianist, arranger and assisting conductor on the stage, in radio, recording and movie studios. With Whiteman at the same time was a young singer named Bing Crosby, one of the oniginal Rhythm Boys. Leonard and Bing struck up a professional and personal friendship which remained intact when Bing leaped to radio fame. Leonard joined the Crosby radio ensemble as one of the piano duo of Hayton and Arthur Schutt, and as Crosby's arranger. He accompanied Bing to the coast for the filming of "The Big Broadcast." Enroute they played eight weeks of theatre engagements, Hayton organizing and directing a new band in each city. When Chesterfield contracted for their triumphant return to the air, Leonard Hayton not only emerged in his own right as arranger and conductor for the popular baritone, but was appointed musical director for the entire series.

Known as "Lennie" to his friends, he is slender, of medium height, has
dark hair and trim mustache . . . likes a real game of ping-pong . . . hasn't missed an important football battle . . . isn't superstitious and believes everything happens for the best . . . hopes some day to write a serious symphony ... lives in a bachelor apartment . . . divides his spare time between sports, symphonic concerts and the movies, especially the news reels.

## NEWSY NOTES

Carson Robison, whose Buckaroos are heard twice weekly over the N.B.C. Blue network, had a musical romance. When he was recording, he walked into the office of Nat Shilkret then a recording maestro. He looked into a pair of brown eyes and Mr. Shilkret lost a secretary. The Robisons have a girl, Patsy, three and a half, and a boy almost a year old, named Robert Arnold.

Jack Pearl, the teller of strange tales on those Thursday night Magic Carpet broadcasts, doesn't mind if Cliff Hall, the straight man in his weekly frolic before the microphone, gets a part of the credit for the success of the Baron Munchausen idea. "That's right!" says Pearl, "I couldn't do very much without Cliff. He's the greatest straight man in the business today, and I mean just that. We've worked so long together that I'm afraid I'd be a flop without him." Incidentally, Jack denies he has signed to be featured on the "True Story" hour.

Those Tuesday night Magic Carpet programs dealing with the secret agents take twelve solid hours of rehearsal, in addition to the twelve hours of research work six men do on the cases, making a 24 -hour job out of them . . . and it takes less than an hour to broadcast them.

Never a day passes but that Raymond Knight, who plays "Billy Bachelor" on his five-night-a-week dramatic show about Wheatenaville is asked if the twins, Peter and Pan, are his own children. Knight is the father of two children--John, who is in high school, and Betty Lou, but they do not take part in the programs. Knight also "doubles" the comedy role of Wellington Watts. Alice Davenport, who plays the love interest, has had eleven proposals of marriage since she took the part.

Those Boswell Sisters don't like to work out their arrangements on paper, but prefer to sit down at a piano and experiment until they find a harmony scheme that suits them. Although Martha always plays the piano accompaniment during their broadcasts, any of the three is likely to be found at the keyboard when the girls are rehearsing.

Although they had previously vowed they would never do it, "Easy Aces" have signed a vaudeville contract. Goodman Ace, author and lead of the three-a-week CBS skit, tried to frighten off vaudeville bookers by naming a high figure ( $\$ 2,000$ a week) but they surprised him and met his price.

The Great Gracie Allen Missing Brother Search, after sweeping the radio world, invaded Broadway the other day. In the popular musical play, "The Dubarry," featuring Grace Moore, star of stage and opera, a group of court ladies await the entrance of the King's favorite. At last La Dubarry, played by Miss Moore, appears in a gorgeous gown. "Ah, Madame, where have you been?" she is asked. To which Miss Moore replied in tragic tones: "I have just been out hunting for Gracie Allen's brother." And it stopped the show for two solid minutes. We hope by the time this is in print they've found the rascal.

# A DX CRITIC INVESTIGATES Sceks a Sbowdown 

WE KNOW we ought to "let sleeping dogs lie," but we just can't help writing this article. Our readers will remember the storm we brought down upon our heads when we published last April, the story, "Girdling the Globe on Two Tubes." It was an account of the reception of George Lilley on a twotube set of his own construction. His claim of the reception of New Zealand and Australian stations brought us a score of letters of protest, most of them bitter, against our publishing such wild claims.

One of our most vehement critics, whom we will call Mr. X, wrote us several letters of great length. We are making very brief excerpts from his letters. "Preposterous claims." "I wonder if there is anyone who is ignorant enough to believe it." "These fellows are crooks and their verifications fraudulent." "Never has one of these fakers brought one of these miracle stations in in the presence of other DXers." "Why not appoint several subscribers in their vicinity to call upon them any day and any time? I'm sure you'll find they have their first foreigner to get."
"I judge you never DXed in your life hence you know little or nothing about radio. Had you ever been a DXer you could tell at once these claims are impossible." "Those claims for a two-tube set are out of the question."

After several months, we received another letter from Mr. X. "Disgusted .. . your stand . . . fakers." "Why don't you send committee to investigate?" "If you had the faintest knowledge of DX you wouldn't print the things you do." "You have a wonderful magazine but you are ruining it completely with stories like you are printing." "I would like to see you actually challenge them."

But that's enough. It was neces-
sary to print the above comments in order to explain the next chapter.
"Time marches on". . .
Mr. X himself arranged with George Lilley to witness a demonstration of that two-tuber. When we learned of this we wrote Mr. X and asked him to tell us the results of the test. To his credit be it said, Mr. X wrote us frankly and fairly and from his letter we are making the following quotations.
"I am very glad to find you are after both sides of the demonstration, which looks as though you are really concerned with the truth of the claims you publish in your fine magazine. I arrived at Mr. Lilley's home at 12:15 on the morning of October 30th. We talked for some time and started to DX about 1:30 a. m. when all the big stations were on. I found the big stations spread considerably and that


Borgney Hammer, young Norwegian actress. of the "March of Time" program CBS. Fridays at 8:30 p. m, EST.

WCAU could be heard very plainly in the background. . . . We calculated where the Australians would come in. At 2:00 a. m. many of the big stations were off and we were getting better catches. For one, we got KOH which came in very well. Then around 3:00 a. m. we had KERN, a 100-watter in Bakersfield, Calif., which I thought and still think was a very good catch. It came in quite clear but Lilley had a hard time to hold it.

## Picks Up Australia

"After that we got all sorts of stations none of which were anything exceptional. Some of them were: KGER, KWSC, KFI, KNX, WKY, WSIX, KGB and a few more I can't remember. There really seemed to be very little on the air. However at 5:50 a. m. Lilley did get what I truly believe were three Australian stations in $4 \mathrm{BH}, 4 \mathrm{QG}$ and 2BL. They came in very weak, of course, 2BL being the worst and indeed very poor. However I must say he was unable to hold any of the three for a period of one minute. He did pick up 4 BH twice but couldn't hold them at all. In the case of 4 BH and 4 QG , I must say they came in so clear for their very brief time that, had I known the selections at all, I could have written for verification as proof of reception. However when he did pick them up, he should have been able to hold them a little longer but daylight was coming on. I am of the firm opinion that Mr. Lilley does receive Australian stations but how long is it possible for him to hold them? I feel well satisfied with the demonstration and I believe that George treated me perfectly honestly and I am being honest with him and giving him all the credit he deserves."

## Summarizes Test

Mr. X still doubt's Lilley's ability to bring in the Europeans as their channels are congested with American stations. He also thought George too hasty in deciding the identity of a station before hearing the an-
nouncement. He summarizes the test thus: "While I was skeptical about his claims, I made the demonstration for my own satisfaction. I did not go with the idea of tearing down any credit that Mr. Lilley deserves. I found he has a very sensitive set and a wonderful location indeed."

## Verifies 4BH

And now comes the third chapter.
On October 9 th, three weeks before the test above described, Mr. Lilley wrote to us of the reception of 4 BH and sent us a copy of his report of reception. We asked him to be sure to send us the verification from 4 BH when it was received. This came to us on January 9th. As this was one of the stations which Mr. X heard, this verification is of interest.

Following is the report of reception which is so complete as to admit of little doubt:

Date of reception: Sunday morning, Oct. 9th in West Chester, Pa., Sunday evening in Brisbane. Station received on my two-tube receiver. Please note that the envelope contain-


Mildred Rose gave up trusted post with big insurance company to try to get into radio, Now on CBS Cathedral Hour. Light Opera Gems and other features.
ing this report is postmarked by the U. S. Postoffice within a few hours of my reception.

Reception was between 5:52 a. m. and 6:11 a. m. EST. Translated to Brisbane time, this was $8: 52$ to $9: 11$ p. m., same day, Eastern Australia Standard Time.

8:52 to 8:56 p. m. A classical selection by the Grand Symphony orchestra.

8:56 to 8:59 p. m. Announcement by a man advertising a cold remedy to be used on handkerchiefs. Then a phone call was acknowledged from a Mr. Quinn of New South Wales. Then it was announced that the next program was sponsored by the O. K. Rubber Company.
$8: 59$ to $9: 03 \mathrm{p} . \mathrm{m}$. One of the old favorite selections whose title I could not think of. Chorus was sung by a man.

9:03 to 9:04 p. m. Announcer told about the merits of the O . K. Rubber Co.

9:04 to $9: 07 \mathrm{p} . \mathrm{m}$. The popular tune entitled "Cabin in the Cotton."

9:07 to $9: 10 \mathrm{p}$. m. Following a short announcement of the title, the selection "Kiss by Kiss" was played.

9:10 to $9: 11 \mathrm{p} . \mathrm{m}$. Announcement the details of which I missed due to a fade.
$9: 11$ to $9: 14 \mathrm{p} . \mathrm{m}$. The popular English dance tune "Day by Day,"

Reception of your station, 4 BH , was unusual in that the program was heard well after the break of day. The program was as clear and loud as many stations of only 1000 miles distance. The morning was clear here with average temperature.

## The Verification

Following is the verification from 4 BH , a personal, typewritten letter: George Lilley, Esq.,
227 West Bernard St.,
West Chester, Penna, U. S. A.
Dear Sir:
We have to acknowledge receipt of your letter of the 9 th October, reporting on your reception of Station 4 BH . We have checked this over with our $\log$, and find the de-


The Mills Brothers went from obscurity to fame in less than a month. Left to right. Herbert. Donald, Harvey and Johr. Monday and Thursday. CBS at 9:15 p.m. EST.
tails mentioned by you are correct. We have pleasure in inclosing yerification card.

Thanking you for your interest. Yours truly,
BROADCASTERS (AUST.) PTY. LTD.

> (Signed) W. R. Pyna, Manager.

The New Zealand Radio Call Book shows the power of 4 BH to be 200 watts aerial and to be able to make so complete a report of receptiontwo tubes or ten-is a noteworthy feat. It supports our belief that in radio anything is possible and backs up our position-"If it's DX news it belongs in Radex."

In the April issue, Mr. Dasiniell will tell us how to conquer those terrible power-line noises and give us a diagram for building our own filters.

# The WORLD of SHORT WAVES 

\author{

-     - By PAGE TAYLOR
}

Editor's Note: We are glad to announce the appointment of Page Taylor of Detroit, as Short Wave Editor. Mr. Taylor is a short-wave enthusiast, listening to the higher frequency signals exclusively. Of his qualifications, W. H. Reeks, Corresponding Secreary of the Chicago Short Wave Club, writes: "Page Taylor is our most valuable correspondent. He is an exceptionally competent and enthusiastic short wave tuner and has a remarkable ability in identifying stations, being more or less familiar with several languages. He carries on an extensive correspondence with other listeners in many lands. I have repeatedly observed that all his information is absolutely authentic."

I$T$ seems that many newcomers to the short wave game, especially those who have just commenced tuning on the higher frequencies within the past few months, are somewhat discouraged because they don't seem to be able to hear some of those elusive overseas broadcasters. Perhaps we can offer them some consolation in the fact that this winter in particular has been one of the worst $D X$ seasons on these bands for many years, and with the coming of spring and summer will come much better reception. Reception conditions make a complete cycle from good to bad and back to good in approximately 11.1 years, and engineers tell us we are now experiencing the worse part of this cycle. However, despite the fact we are hearing far less stations than we would like to hear, there are still many good ones to be gotten, but it takes a little patience and careful tuning.

The introduction of telephone service to various South and Central American countries is one of the most important of recent short wave developments. The American Telephone and Telegraph Company eventually will offer service to the Canal Zone, Costa Rica, Guatemala, Honduras and Nicaragua, while circuits are already in operation between Florida and Venezuela, Colombia, Panama and the Bahamas. The Florida link is station WMB, 19.92 meters ( 15051 kcs .) and situated at Hialeah, near Miami.

YVQ, Maracay, Venezuela, works on the new wavelength of 22.58 meters ( 13279 kcs .) while Bogota, Colombia, is heard on 20.00 meters ( 14991 kcs .) through station HJB. The others are RXC, Panama City, Panama, 20.69 meters ( 14485 kes.) and VPN, Nassua, Bahamas, on about 65 meters. TIR, Cartago, Costa Rica, has been heard testing again on 7685 kcs . (39.01 m .) after a silence of over a year, and we believe that this station will furnish the Costa Rican link in this chain. We suggest also that you look for TIR on 20.7 meters or 14484 kes.

## Visiting the Ships

Those of you who are interested in listening to the ships have no doubt noticed the increased activity on these channels. Hardly a moment of the day passes but what some ship may be heard, be it Italian, German, British or American vessel. The frequencies used are given in our lists and the call letters of the various ships follow:

DDNY, Albert Ballin; DDDT, Deutschland; DDDX, Hamburg; DDAC, Europa; DDCP, Cap Polonio; DDAS, Bremen; DDFF, Reliance; DDBR, Berlin; DDEA, Cap Ancona; DDCB, Columbus; DDED, New York; DDCG, Resolute; and DDFT, the Oceana. These German ships work with WOO and DAN.

The Italian ships work with WOO and IAC. They are as follows: ICEJ,

Rex; IBEJ, Conte Rosso and IDLI, the Conte de Savoia.

The British and American ships work on the same frequencies and are listed under the general title "British Ships." They use the following calls: GDLJ, Homeric; GFWV, Majestic; GLSQ, Olympic; GMBJ, Empress of Britain; WSBN, Leviathan and WIEX, the Manhattan. VPSX, the Monarch of Bermuda, works with ZFA, ZFB and WOO.

## Advice to Beginners

We have an interesting letter from Charles A. Perdicaro, 75 Berry St., Brooklyn, N. Y. He writes, "I was very happy to read of your intention to start a Short Wave Dept. Short Waves are becoming very popular since the new converters went on the market. Please caution the new listeners into the realm of short waves to have patience and not expect to hear the world at the first sitting. Takes time to learn whea to tune in and how to look for stations. I am sending you a list of a few stations that can be depended on as they come thru pretty regular. I have tuned in and heard all of the stations I have mentioned." Mr. Perdicaro submits a very fine list of s. w. broadcast stations with their schedules and his information has been incorporated in our lists.

## How to Identify Them

"Just a tip to some of our new short wave listeners," from C. R. Anderson, 1026 First St., N. E., Mason City, Iowa. "The new Caracas, Venezuela, short wave station YV1BC can be identified by its beautiful quarterhour chimes. This is now on about 49.6 meters. England's station GSA is also on this channel, not helping its tone quality one bit. YVQ on 16.39 meters can be told by a station hum very loud at times and a crackling sound. This is a commercial station. Commercial stations do not care to have listeners write them about their transmissions, so I, for one, do not bother them with correspondence. Your short wave section is fine-keep it up. VK3ME came in yesterday
morning (January 4th) like a local, starting the New Year right." Since Mr. Anderson wrote, YV1BC has moved down to 6119 kcs . or 49 meters.
R. Schmidt, 56 Willow, Hartford, Conn., uses a Stewart-Warner converter with a Silver-Marshall Model $J$ and would like to hear from other Silver-Marshall owners. He writes, "So far have received I2RO, Rome, Italy, and EAQ, Madrid, Spain, with plenty of power. Those are my only two across the water. In the south I have received YV1BC, Caracas, Venezuela, and HKD, Barranquilla, Colombia. For the last two nights YV1BC has come in here at $6: 30$ and you have to turn the volume down."
"The real reason for this letter is a change in wavelength which I have just stumbled upon. YVQ in Maracay, Venezuela, is now using 22.28 meters, according to their announcement," advises Doyle E. Carpenter, Emmetsburg, Iowa. "Their schedule seems to be irregular. I have heard them talking with Miami, Florida, the last two afternoons at intervals all afternoon. They come in better than


Jane Froman, NBC blucs singer, former University of Missouri co-ed, started to be a news-paper-woman. Jane sings each Sunday at 4 p. m. EST over WEAF chain.
locals and their announcer has fair English considering he is a South American. I have just purchased a new Midwest 16 -tube all-wave and would like to hear from readers who use this set."
"Your January Radex was swell, especially the s. w. log," comments John E. Strong of 1436 Meridian Place, N. W., Washington, D. C. His list of foreign stations includes these good catches: CT3AQ, EAJ7, EAR58, F3ICD, OPM, ORG, SUZ and many others.

## Figuring Frequencies

H. W. McCracken, 1 Tyndall Ave., Phillipsburg, N. J., writes, "I received a verification from EAQ, Madrid, Spain, (on a borrowed converter) and they told me they operated on 9868 kes., with 20 watts power. I noticed you list EAQ on 9862 kcs . Does this make a difference?" (EAQ uses 20 kilowatts. In figuring their frequency they divided the wavelength, 30.4 meters, into 300,000 , while we use the figure 299,820 , which accounts for the difference in the frequencies.)
"The following are my results on the short waves with a National A. C. SW5, which I have had a little more than a year." Gilbert VanVranken, Jr., 2230 N. El Molino Ave., Pasadena, Calif., continues, "Have heard voice stations in the following places: Spain, England, France, Italy, Germany, Argentina, Colombia, Brazil, New Zealand, Australia, Japan, Java, French Indo-China, Siam, Philippines, Siberia, Honduras, Hawaii, Cuba, Canada and Mexico. Verifications include: EAQ, Pontoise, GBS, G5SW, LSL, LSN, HKN, VK2ME, VK3ME, PLV, J1AA, 6 Canada, Hawaii, etc. Any short wave fan who wants a thrill should listen on 15.93 meters, 2 to $6 \mathrm{p} . \mathrm{m}$., PST, for PLE, Java, which has been testing lately with San Francisco. Sometimes they are like a local b. c. station. They should be, with 60,000 watts. EAQ, Spain, 30.4 meters, is the loudest and most consistent European I can get. Also get Pontoise real well occasionally. My list of unidentified foreign speaking sta-
tions is larger than my identified list. I imagine that this is the case with a lot of s. w. fans. Have heard 20 meter phone amateurs in England and Australia and lots of east coast hams."

## The Pontoise Station

We notice that many readers use the call letters FYA in referring to the French station, but we have been advised by Mr . Scholty, the Director of this station, that they use no call, but designate their station by the name "Radio Coloniale." It is popularly called "Pontoise," which is a suburb of Paris and the location of the transmitter. Our lists are being corrected accordingly.

Stuart Walmsley, 1641 W. 60th St., Los Angeles, Calif., sends some highly interesting information. "Pontoise, France, comes on the air every morning at 8 a. m., PST, on 25.2 meters, and they are fairly consistent here in Los Angeles. I have heard LSX on 28.98 meters several times this month, testing with KEZ, Bolinas, around 5 p. m., PST, so evidently they have not gone off the air permanently as many of us thought. PLE, Bandoeng, Java, has been coming in nearly every afternoon for me about 3:30 p. m., PST. They test with W6XN, San Francisco. YV11BMO is one loud station here and at times they pack more wallop than W8XK. Incidentally, I use one of the new Philco All-Wave Model 43B, receivers and I also find your index of short wave stations a helpful addition to Radex"

## A Good List

Richard M. Carter, 1315 Washtenaw Ave., Ann Arbor, Mich., writes that he has received "the usual run of short wave stations." His list includes the following: HKO, HKD, CMCI, YV1BC, HKA, HKN, KKH, GBC, GBK, XDA, VK3ME, EAQ, VRTZFB, LSX, XAM, VE9JR, VIY, I2RO, Pontoise, GBS, GBW, DJB, YVQ, GBB, GTSD, GFWV and ICGZ. This is more than a "usual" list, especially because it contains VIY, ICGZ and HKA, as they have now left the air, (Continued on page 80)

# BUILDING RADIO into the HOME 

## ... What to Plan for

IN THE home of the future the fullest use and enjoyment of radio will receive as much attention from architects and builders as the other necessities of heating and lighting and refrigeration. No longer will it be necessary to place the radio set where one may conveniently reach the dials. It may even be placed in the basement never to be visited except when a tube or something else goes goes wrong. All this is indicated in the "Telektor," a device now being manufactured by the Stromberg-CarlsonTelephone Manufacturing Company of Rochester, New York, and already installed in hundreds of homes.

The home will not only be completely wired for radio but hidden speakers will be built in the walls of every room. When the resonant tones of a great pipe organ come over the air, a toach of a button will transfer them to a speaker located in the hall or in the stairway where they may be given a volume that will not destroy their naturalness. At present we have to tune the majestic organ down to the volume of a harmonica because its natural volume would be too great for enjoyment.

A phonograph with rec-ord-changing equipment will be in constant readiness to supply good music to any room in the house upon the touch of a button. Microphones will be in the circuit so that mistress may speak to maid in any room of the house.

All of th:s will be possible-is now poss ble, in fact-through the use of "Telektors" one of which is illustrated. It contains a meter for silent

tuning so that from any room in the house the radio set may be tuned to razor-edge selectivity. Meter and push-buttons are illuminated by the small pilot light. Several buttons are assigned to control the various speakers. Another governs the automatic phonograph. In the illustration eight buttons are assigned to stations so that a mere touch brings in any one of them. Another button sends the dial exploring among the lower channels. The opposite buttons reverses the movement. The volume is controlled by two others and the set is turned on and off by the tenth pair.

A number of "Telektors" may be used, each acting independently of the others. The DXer may take over the control of the dial at any time and the fact that the receiver is being manually operated is indicated by the pilot lights on all the remote controls.

The "Telektor" is now being built into StrombergCarlson receivers as a unit so that one may change receivers and transfer the tuning device to the new set.

The units are being incorporated not only in beautiful console models but also in a plain steel cabinet which may be placed in basement, attic or closet.
The pick-up and record-shifter is a Stromberg-Carlson product. It plays and shifts standard 10 -inch and 12 -inch (or mixed sizes) records. A program of nearly three hours may be played without going near the record-shifter.

Thus is radio being adapted to the needs of the home and the comfort and convenience of the family.

# TAKING The TROUBLE OUT OF RADIO 

By the TECHNICAL EDITOR

IHAVE a General Electric model H- 31 radio set that has the old type -80 rectifier tube. Would it be possible for me to use the new 82 in place of it?

The mercury vapor tube, type 82 , was designed for sets using class B audio amplification. It gives a larger supply of current than the older -80 type. But, since the -80 furnishes sufficient current to operate your set there is nothing to be gained in substituting the 82 for an -80 . Also, older sets have certain power unit characteristics suitable for the -80 and not for the 82 .

## Speaker Is Too Bass

The loud speaker in my RCA Victor model $R-10$ set seems to give too bass a sound; the high frequencies appear to cut off; and it also lacks brilliance of tone. What can be causing it to sound this way, and how shall I remedy the trouble?

It is probable that some resistor in a grid or plate lead is defective, and therefore causes a partial short circuiting of the higher audio frequencies. A defective detector output condenser will have a similar effect because of a direct shortening of the second detector tube output. Other tone defects may be brought about by the cone resonance in the speaker favoring the lower frequencies in the audio range of vibrations. Correction of the trouble calls for a readjustment of the cone and speaker on the higher frequencies instead of the lows which are more prevalent during the time when adjustment is made at the factory.

## Automatic Control Fades

Why does my radio set continue to fade at times with a mushy sound
although it has an automatic volume control which, I have been led to believe, prevents fading of signals?

The trouble with your set is one that is met with in most all cases. Automatic volume control does not offer a guarantee against fading. This arrangement can only be useful between two definite sensitivity limits which are determined by its original design. When natural fading reduces the incoming signal strength below the level of control then actual fading will take place as usual, Mushy sounds are usually caused by the over-powering of the fading signals by other louder and interfering signals on nearby frequencies. If your volume control is set to a certain strength at the time a signal has reached the lowest peak of its fading period then fading will not go


Cesare Sodero, noted orchestral conductor, whose orchestra is heard over NBC-WJZ at 11:30 p. m. Wednesdays and Thursdays
below this intensity, and the volume control will prevent the signal, when it rises, from becoming annoyingly loud.

## Attaching Additional Speaker

How can $I$ connect an additional magnetic loud speaker to my RCA Victor receiver without changing or tearing the wiring to pieces?

Procure a thin, wafer adapter and place beneath one of the power tubes in your set. Attach an insulated wire to the plate soldering lug of the adapter and then connect to a . 25 microfarad blocking condenser. The other side of the condenser goes to one cord tip of the loud speaker and the other tip should be grounded to the chassis frame. A switch may be placed in one lead of the voice coil of the dynamic speaker so as to cut out the speaker when the additional magnetic cone is operated, if desired.

## Using Headphone Adapters

I have a new Majestic 291 receiver and wish to use the IC.A headphone adapters at times. Can this be done in $m y$ set without damaging the tubes or wiring?
I.C.A. headphone adapter plugs are furnished in both four and five prong types. But when an adapter is plugged in a tube socket it means that a tube has been removed from the circuit and some unbalancing of resistors and power supply has taken place. This is not dangerous, but most manufacturers condemn the practice. The adapter may be inserted in the second detector, first audio, or power tube socket. The phones are connected across the grid of the tube socket and the filament and do not draw much current. See the article on this subject in the February issue.

## Auto "B" Eliminator

$I$ use a windmill to run a dynamo which is used to charge a storage battery for my radio. I have wondered whether $I$ can use one of the new auto type " $B$ " battery eliminators in connection with my outfit. Please tell me about these devices and how to use them.


Irene Wicker and Margee Evans in "Jane and Judy" from 3:00 to $3: 15$ p. m. EST on an $N B C$ split network, daily except Saturday and Sunday.

The new $B$ eliminators made for automobile radio use operate from a 6 -volt storage battery and produce from 135 to 180 volts of B potential. But, the higher the $B$ voltage, the lower the output current will be in amperage. When 180 volts are provided the current is about 35 thousandths of an ampere as against about 46 thousandths ( 35 and 46 milliamperes, respectively) when only 135 volts are taken from the eliminator. You will require, therefore, a 6 -volt storage battery capable of standing an output drain of not less than 2.5 amperes per hour. The efficiency of these devices is low, and also there is the rectifier tube to be heated and a magnetic device to be operated. This means that an $80-$ hour standard storage battery will operate the eliminator approximately 30 continuous hours. Can your charging outfit keep the battery going at this rate?

These eliminators take the 6 -volt
battery supply and convert it from the direct flow to a broken, intermittent flow of rapid pulsations by means of a vibrator buzzing at 60 breaks a second to produce 60 cycle current. Such a current, when passed through the primary of a "step-up" transformer, will induce an alternating current in the secondary of much higher voltage. This output must then be rectified with a tube, type -80, and smoothed out to a high potential "B" power supply. The Elkon, Premier and Utah devices are standard, and the makers claim that the vibrator will cause no interference in the radio set.

## Using New Tubes in Victor

$I$ am anxious to use, in my RCA Victor radio that now takes three type -27s, three $-35 s$, one -24 , two -47 s and one -80 , some of the new tubes Please advise me what to use in each socket.

While it is possible to replace all except the -47 s and -80 by new tubes it is not entirely advisable, because older sets designed for the


Bruno Walter, one of the vorld's mutstanding conductors, directs New York PhilharmonicSumphony Orchestra on the CBS Sundays from s to 5 p. m. EST.
characteristics of older tubes are seldom helped by the use of new tubes as far as audible results are concerned. The most obvious benefit is the reduced current drain on the power unit. You might change the present -27 s over to 56 s to some advantage without wiring changes. Of course, you can change over to 57 s and 58 s , but since adapters are needed, the total height of the tubes is increased and the grid caps may not fit beneath the present metal shielding of the set. The oscillator and automatic volume control tubes should not be changed. In no case do we recommend a wholesale discarding of old tubes to make way for new ones, but rather an experimental change of one at a time. Every receiver has its own peculiarities and we can only give general instructions and not individual tube to tube advice.

## Rebuilding for Short Waves

Would it be entirely practicable for me to rebuild my Magnavox model $J$ receiver so that it will respond to the short waves? If so, will you please advise me how to go about making the change and tell me what must be altered.

Some Magnavox sets used the variometer method of tuning; others have standard inductance coils consisting of primary and secondary. If your set is the latter it will be possible to make some changes. A tuned-radio-frequency receiver can be altered but a superheterodyne cannot so well. You will not be very successful at this, for such alterations never give good results over the entire short wave band. This holds good for all sets having a t.r.f. circuit.

The most simple method is to remove a few turns of wire from the grid ends of the secondaries of the radio frequency coils-exactly the same number of turns from each coil. This will lower the wave lengths to which the coils will respond. Two or three rotor plates should be taken from the shaft of the variable condensers which will aid tuning and
spread the stations over the dial.
This alteration should enable you to get some amateur and police calls on the lower end of the dial while the regular broadcast stations that were heard on the lower part of the dial will move up to the upper end. Removing still more turns of wire will push the broadcast stations off the upper end of the dial and bring in more short wave stations at the lower end. The lack of proper balance and resonance between all parts of the circuit, however, prevents the set from being efficient on the low waves below 100 meters.

## 57s Versus -24s

I am thinking of using 57 s in place of the -24s in my RCA Radiola model 82. Is the change practicable?

While 57 s could be used in place of the -24 s , we do not recommend the change, for the gain would not be noticeable. Adapters are needed, and it may be that the shielding over the tubes may not provide sufficient headroom to allow clearance over the tops of the grid caps when adapters are used beneath the new tubes. The only benefit is a saving in current for the 57 s draw only 1 ampere as against the 1.75 amperes consumed by the -24 s .

## PZH Tubes

$I$ saw in a recent issue of RADEX mention of a new adapter made to take the new PZH tube. My local dealer does not know who makes the PZH or what type of tube it is. Can you help me?

The PZH is made by the makers of the PZ tube - the Arcturus Radio Tube Company, Newark, N. J. The PZ is similar to the -47 power pentode. The PZH is likewise similar to the 41 or 42 pentode power tube using 6.3 volts and utilized mostly by automobile radio sets. The adapter takes the 6 prongs of the PZH and inserts them into the 5 -hole socket of the standard base. A suitable resistor is connected to the cathode of the top socket for grounding to the chassis.


Renee Rodier of Marscilles of the "Fu Manchu" program, Columbia, Mondays at 8:30 p. m. EST.

## 46 Tube in Crosley

I have a Crosley model 705 receiver and I should like to use the now 46 tube in place of the present -71A. Do you advise the change?

The 705 model Crosley is a d.c. receiver and as such is adapted only to the use of a -71 A power tube. Because of the voltage characteristics of the set you cannot substitute a 46 type for the -71A.

## Short Wave Adapter Use

I own a Nathaniel Baldwin receiver and a short wave adapter, but I cannot use the adapter for I do not know what tube in the set is the detector, which must be removed to take the adapter plug. Can you tell me what. is the detector from the sketch herewith?

The tube line-up and number seems to indicate a superheterodyne circuit. We have been unable to get more definite information about this receiver. If our belief is the case, the adapter of your short-wave apparatus may be plugged directly into the second detector circuit. No results will be obtained if the plug is inserted in
the first detector. If the circuit is a tuned radio-frequency arrangement there will be but one detector, of course.

While there is no way we can identify the second detector without seeing the set, we believe you should be able to locate it by tracing the circuit. No tuned circuits (tuned by variable condensers) will follow the second detector, and the grid of that tube will be fed from the secondary coil of the last intermediate-frequency stage transformer coil. The plate of the tube will, most likely, feed into the primary of the first audio transformer.

## Resistance Value

I have a 1932 Grebe H.S. superheterodyne receiver and would like to ask what are the values of the volume control and the tone control resistances.

The volume control is a variable resistance of $5,000 \mathrm{ohms}$, and the tone or color control resistance is also made variable with 100,000 ohms.

## 25 Cycle Eliminators

Lighting current of 25 cycles only is available to me and I am wondering whether battery eliminators will operate on this low frequency. Where can $I$ obtain 25 cycle apparatus?

Any transformer will work on an alternating current regardless of its frequency or number of cycles. But the design of the apparatus is different for different frequencies, for the resistances of the coils increase in proportion to the number of alternations per second. Therefore, in order to get the proper voltages and reduction of hum you must have eliminators built for 25 cycles. Nearly all large radio supply houses carry such apparatus. Try the following: Radolek Co., 601 W. Randolph St., Chicago; Insuline Corp., 25 Park Place, New York City; Allied Radio, 833 W. Jackson Blvd., Chicago; Wholesale Radio, 100 6th Ave., New York City.

New Tubes in Leutz Set
My Leutz radio receiver was rebuilt at the factory last year to take the -51 type of tubes in place of the original -24s. Now $I$ wish to substitute the new 58 s for the -51 s . Can this be done?

The only change we recommend is the use of a 56 in place of the one -27 now in your receiver. The -51s in use are similar to the -35s which are more widely used. We are reluctant to advise the change of -51 s to 58 s in your case, although there are adapters available to convert the 5-prong bases of the -51 s to the 6 -prong base of the newer 58. But since you state that the manufacturer rebuilt this set once to use the -51 tube in place of the original -24 s , we do not know just what wiring changes have been made or the characteristics of the set at the present time. We believe, however, you are getting about all you can out of the receiver with its -51 type tubes.


Nino Martini, phenomenal young Italian tenor whose voice range covers more than two and one-half octaves is the only living singer capable of reaching " $F$ " above high " $C$ "' in full voice. With Howard Barlow and Columbia Symphony Orchestra Wednesdays and Fridays at 11:00 p. m. EST.

## Was The CRICKET GAME from PARIS?

IT BEGINS to look as if that famous cricket game came to our listeners direct from Paris. It was difficult to believe that the French station would be picked up by so many readers at such widely scattered points particularly at an hour when it was already daylight in Europe. We are communicating with the Paris station, Poste Parisien, and if a reply is received in time, we will add a postscript to this article.

An actual report of announcement comes from Stanley A. Schmuch, 94 Otis St., East Cambridge, Mass., who heard "'Ello, ello, ello, ici Poste Parisien." Stanley reports picking up these broadcasts every morning from January 13th to 18th inclusive -a remarkable feat.

Our readers will recall that a number of listeners have reported interference on 915 kcs . which they could not locate. If Poste Parisien was really heard by so many people, then it may be the cause of this reported interference. The world is getting smaller when Paris interferes with Detroit!

## Reporting the Game

The game was in Australia where teams representing that country and England were competing. The broadcast evidently was from a description by cable although the rapidity of the action led many of our readers to believe they were hearing a "ring-side" report.

The fullest report of the broadcast comes to us from Theo. S. Peirce, Pinecrest, Clinton, Mass., who says: "The game was played in Australia; minute by minute reports were sent by cable to the Poste Parisien studios where the announcer, Mr. Alan Fairfax, very cleverly described the game from the cablegrams, adding realistic touches and enthusiasm, which made it seem like an actual play-by-play
broadcast at the scene. The broadcast was sponsored by Mr. Arthur E. Whitelaw, Australia House, Strand, London. The game ended about 3:40 a. m. EST. A synopsis and forecast of results of future games in the series was then given, followed by recordings. Finally at about 4:00 a. m. a general sign-off; the announcer said that 'this report has, of course, come from the studios of Poste Parisien; the next game in the series will be broadcast tomorrow morning at 6:00 a. m.' This was repeated in French."

As this is the first European station to be so widely received (if it was Paris), we are giving the names of those reporting it to show the "spread" of the reception.

## Some of the Listeners

Bill Vornkahl, Westport, Conn. Warren Snyder, 2125 First St., N. W., Washington, D. C. Chas. L. Morgan, 800 East 179th St., New York City. L. E. Wallace, 110 N. Duval St., Tallahassee, Fla. Mrs. Jessie Alberta Weaver, 370 Central Park West, New York City. Derek Wharton, 22 Elmwood Ave., Rye, N. Y. Daniel C. Looby, 1414 E. Cheltenham Ave., Philadelphia, Pa. Robert Hough, 25 Ellenton Ave., New Rochelle, N. Y. R. R. Rawstron, Claremont, N. H. Edward F. Gross, 666 Park Place, Brooklyn, N. Y. J. Louis Dawson, West Cape May, N. J. Richard M. Carter, 1315 Washtenaw Ave., Ann Arbor, Mich. Douglas Wauchope, 501 S. Candler St., Decatur, Ga.

## The First Confirmation

P. S. First confirmation comes from Earl R. Roberts, 105 Gomber Ave., Cambridge, Ohio. On January 12th he received a letter from Poste Parisien, Paris, France. It was translated from the French as follows:
"Monsieur: We have the honor to
notify you of the reception of your letter of December 6th for which we thank you very much. These are are our broadcasts which you have heard. The game to which you make allusion is the cricket matches played in Australia. Kindly accept, Monsieur, the expression of our sincere sentiments. (Signed) Poste Parisien."

The station is owned by Compagnie Generale D'Energie Radio-Electrique. The address is Siege Social: 4, Rue du General-Foy, Paris (8 e).

Here is the first chance, Radexers, where we have been able to recommend an opportunity of tuning in Europe on the broadcast band. Try for Poste Parisien on 914 kcs . between 1:00 a. m. and 4:00 a. m. EST.

Those who have heard what they thought was a Cuban station on 915 kcs. should tune carefully and perhaps they will bring in Poste Parisien.

## Our Second Postscript

P. S. There seems to be no further doubt that those who heard the reports of this cricket game were listening to Poste Parisien on 914 kcs . It did not seem probable that so many readers in so many different sections would pick up this European station but it is the only one we have been able to find which broadcast these games and its frequency is that reported by all listeners. R. R. Rawstron, Claremont, N. H., and Stanley Nevin, South Hadley Center, Mass., both send us letters from Fleming \& Whitelaw, Australia House, London, England, which say: "The station to which you were listening was not 4RK in Rockhampton, Australia, but Poste Parisien, Paris. Cables were despatched every minute by a commentator in Australia and these in turn were read by Mr. Alan Fairfax from the Poste Parisien Studio. The broadcast was sponsored by Mr. A. E. Whitelaw, the well-known Australian importer of Preservene Soap into Great Britain."

So like the defeated candidates on election day, we "concede" the reception of Poste Parisien.

## That 1430 Channel . .

WITH regard to the attempted synchronization of the Columbia stations on 1430 kcs. C. M. Falconer makes this comment:
"I am informed by the Supervisor of Radio that there never was any synchronization such as that employed by WBZ-WBZA, WJZ-WBAL and WEAF-WTIC. In these three cases the emission was truly synchronized, a special frequency being employed for the purpose. It was thus impossible for either of the two stations involved to receive anything but identical stuff. The unsatisfactory results were traced to causes beyond control in the present state of knowledge, as they consisted in erratic behavior of waves reflected from the Heaviside Layer, and the question of the location of the receiver also entered into the situation. With the stations on 1430 it was simultaneous broadcasting. The theory was that if they all took the same program from the Columbia Chain, and were all strictly on their assigned frequency, there would be no interference. But such, unfortunately, did not prove to be the case. I do not know whether anything was done to compensate for differences of resistance in the communication wires, caused by varying distances; but I have been informed that results might have been better had all the transmitters been identical in construction."

We are changing our symbols to show division of time on this channel rather than synchronization. This undoubtedly reflects the actual situation more accurately.

The debate on the $D X$ rules will appear in the April issue. An effort is being made to form a committee from the clubs to study the question.

## LETTER WRITING for SPANISH STATIONS

WHEN a person tries to write a letter in a language with which he is unfamiliar, the result is apt to be as amusing as Wallace Irwin's "Letters from a Japanese Schoolboy." On the other hand there is little use in writing letters in a language which the recipient

Ingeniero en Jefe, Estacion Radiodifusora (Call)
(City and Country)
Muy Estimado Sr.:
Acabo de tener el gran placer de oir su estacion radiodifusora (Call) en___kes. y a continacion me permito darle la lista de unas de las muchas selecciones que me ha sido grato sintonizar. Le quedaria altamente agradacido si Vd. pudiese hacerme el favor de comprobar mi audicion con sus radiodifusiones y mandarme confirmacion de mi recepcion.

```
Seleccion de orquesta
    ", de piano
    ", de violin
    " de organa
    ", de marimba
    " de acordeon
Solo vocal (Senor)
                        (Dama)
Coro
Musica clasica
    popular
    " nacional
    de baile
Fox trot
Marcha
Vals
Habla
Anuncios de la Estacion
Volumen-debil
        " -mediano
        " -fuerte
Calidad de tono-mala
    de tono-buena
Condiciones atmosfericas-buenas
                -malas
Musica Americana
Musica Espanol
Guitarr
29. Duo La Vez
                            Trio
```

Anticipandole mis mas efusivas gracias, abrigo la esperanza de enviarle otro reporte dentro de poco tiempo y me ofrezco de Vd.

Afmo. atto. y. s. s.
cannot read. Earl R. Roberts, 105 Gomber Ave., Cambridge, Ohio, sends us the following form letter taken from a bulletin of the Atlantic Radio Club. It was published for the use of their members in reporting reception to Spanish-speaking stations.

## (English translation)

## Chief Engineer,

 Radio Station (Call)My dear Sir:
I have just had the great pleasure of hearing your station (Call) on _-kes. and on the log below I am giving you some of the selections I listened to. Will you be so kind as to check this with your station log and send me a verification of my reception?
Orchestral selection
Piano "
Violin
Organ
Marimba "
Accordion (
Vocal solo (man)
(woman)
chorus
Classical music
Popular "
Native "
13. Dance music
4. Fox trot
. March
Waltz
. Talking
Station announcement
19. Faint volume
20. Good volume
21. Great volume
22. Tone quality poor
23. " " good
24. Atmospheric conditions good
25. Atmospheric conditions bad
26. American music
27. Spanish music
28. Guitar
29. Duet Trio
30. The time

Thanking you in advance for your verification and hoping to send you another report in the near future, I am

Yours very truly,

# "THIS IS WHAT I THINK..." 

-• • Suggestions and Criticisms

WE ARE planning two innovations in coming issues which we believe our readers will welcome heartily. We will drop the regular Index by Frequencies in the May and June issues and in its place we will have in the May number a complete list of stations by frequencies with their mail addresses, the slogans they use on the air, the hotels or other buildings in which their studios are located and which are mentioned in their announcements. We feel that this feature will be of very great help in identifying those tantalizing stations whose call letters cannot be quite distinguished. This list will not appear again and our readers should be sure to save the May edition for their future DXing.

In June the Index by Frequencies will be a composite list of all the broadcasting stations of the world. That is, on the 1500 channel, for instance, there will be found not only the stations of North America but also those of Europe, Asia, South America, Africa and Oceania which use that channel. This number, too, should be carefully preserved. We think this is the first time such a list of stations has ever appeared in print and it may be the last.

Make a note now not to miss the May and June issues for these two numbers will be an invaluable addition to any listener's library.

## Using the New Tubes

The articles regarding the substitution of the new type tubes in place of the old, aroused much interest. It must be understood that the new tubes will give their maximum value only in sets especially designed for them. In many older sets, a considerable increase in efficiency over the old tubes may be secured by using the newer types with suitable adapt-
ers. In such cases the work is more or less experimental but a number of readers are reporting greatly increased efficiency. "I replaced all the tubes -45 and -24 in my old set," writes Jesse Lausman, 717 S. Shelby Street, Louisville, Ky. "The new type Majestic tubes, 2-46, 4-57 and $1-80$ increased the efficiency of my Majestic No. 131 super-screen-grid set tremendously. All stations up to 2000 miles now come in without using the distance switch and I added two great catches to my stock of verifica-tions-CJCA, Edmonton, Alberta, and KGU, Honolulu, Hawaii."

## That Distance Formula

In our January issues, R. C. Myretetus of Collingswood, N. J., suggested a mathematical formula for measuring the value of reception. This was an interesting device and several readers have submitted the ratings of their best catches; A. L. Hynes, Clarenville, Newfoundland, has CFRC 50 w .1100 miles rating 22.00; Harry M. Gordon, Erie, Pa., CKFC 50 w .2316 miles rating 46.03; Albert Sandham, St. Catharines, Ont., CMGE 30 w. 1500 miles rating 50.00; Frank E. Switalski, Cincinnati, 10AB 25 w .1280 miles rating 51.2 and Eugene G. Shook, Terre Haute, WNBW 10 w .635 miles rating 63.5 .

Some readers object to the formula pointing out that a 5000 -watt station 5000 miles away would have a factor of only 1, while Mr. Shook's 10watter gives 63.5 . Some suggest that the distance should be squared before dividing by the power but this would place too much emphasis on the distance. It is probably true that there are too many other factors in radio reception besides distance and power to permit any kind of a mathematical formula. Using that suggested by Mr. Myretetus, all of the
following catches have the factor of 50 ; do our readers think they all have the same value as catches? A 200 watt station 10,000 miles distant, a 100 -watter 5000 miles; a 50 -watter 2500 miles and a ten-watter 500 miles?
"The department in Radex showing time on the air is a wonderful help," concedes A. L. Long, 523 N. Dewey, Oklahoma City, "but it would be a great deal more of a help if the times were shown in the Index by Frequencies instead of the Index by Call Letters. Then when I am tuning (which is done by frequencies and not by call letters) I can see at a glance what stations on any frequency are on the air at the time I am tuning. I know that such a change would help me to get many stations that I have not received and I believe such a change would be appreciated by a great many radio fans all over the country." Mr. Long makes an excellent point and we will certainly consider it at the beginning of the next radio season. We have felt that listing the owners in the Index by Frequencies was a help in identifying station announcements but we are not sure the time on the air would not be more valuable than the names of owners and the latter might be relegated to the Index by Call Letters.

## Does KZRM Verify?

"You mention that KZRM does not verify," writes L. F. Stetson, 3420 Janssen Ave., Chicago, Ill. "I have a verification from KZRM and it is a card well worth having in one's collection. The card or 'QSL' is blue in color and the letters 'KZRM' are in heavy red type in the center. It is signed by B. H. Silen, Manager. Here is some dope on the station: When signing off they always bid you 'Mabuhay' (pronounced mah-boohigh). I had written them four times, having heard their program that many times, each time giving in detail what was heard, and I believe they will not verify unless they are heard three successive times, and the log must be correct."


Little Dink and Uncle Sims of Roark Bradford's "John Henry" stories, on CBS at 8:00 and $8: 45 \mathrm{p} . \mathrm{m}$. EST.
"I have been a steady reader of RADEX several years and have never found cause for question until now," comments P. O. Seiser, 196 Harborview Ave., Bridgeport, Conn. "In the December issue you said Station KZRM, Manila, P. I., does not verify. They do, if you get them, by a special card with KZRM in large red letters. I would like to hear of others who actually received KZRM on 618.5 with loud speaker. My verification is dated March 31st, 1932." On our questionnaire which KZRM filled out and returned to us, one question was "Do you verify reception for your listeners upon receipt of accurate report and return postage?" and the answer written in is "No." Information regarding verifications in our index is that given us by the station itself. We have been careful to avoid changing our data upon receipt of information from listeners because we want to show the rule and not some exceptions.
"I enjoy Radex very much but I
have a criticism to make," observes Joe W. Swadley, Jr., Box 103, Primrose, Nebraska. "I am a DXer and have a $\log$ of more than 200 stations in 37 states and three provinces but I think you pay too much attention to your DX column and not enough to programs. You could devote twice the space you use to the program list. You should give every program carried by the chains including the Orange, Gold and Dixie networks. Programs and entertainment are what the majority of radio listeners, yes, a good majority of your readers, are interested in." The same mail brings a letter from another reader who suggests that we drop the programs entirely and give that space to DX! To give all the programs of all the chains, would require every page of Radex. We are trying to strike a balance that will be satisfactory to the greatest number.

## Measuring Distances

Every now and then some reader asks us to publish a table of distances. Older readers will remember that we formerly published such a table. In a book of our size only forty or fifty cities can be shown and hence only a small fraction of our readers can be served. We abandoned the table for the Map of North America which contains a mileage measure so that the distance between any two cities can be measured. We find this very much more satisfactory than any table that can be devised. This replies to Wm. M. Smith, 201 Stone St., Johnstown, Pa., who says he is a 69 year old Radexer and has copies back to February, 1931, which he prizes as much as he does his fishing tackle and that is the joy of his life.

## Building Sets

"I am especially interested in the letters you publish from makers of small sets," comments Wm. Dyke, 1200 Western Ave., Effingham, Ill. "I have built lots of them, none over four tubes. I think you should enlarge the space devoted to experiments with small sets. Though I have
made lots of small sets, I have never sold one nor tried to; have four in the house now." Mr. Dyke is more than 80 years old and greatly enjoys his radio work.
"Your letter saved me at least $\$ 3.00$," writes H. J. Jandron, 77 Marion Road, Watertown, Mass., to the Technical Editor. "This is a good example of the service RADEX is giving to its readers."

Harry M. Gordon, 1002 Parade Street, Erie, Pa., suggests a new championship. "Who has the most back issues of RadEx in his radio library? I have twenty-two."

## Annoying Interference

Several Radexers complain of interference with WTAM on 1070 kcs . and a few of them are sure it is a Spanish-speaking station. It hardly seems that the two low-powered Cubans known to be on this wave could be making the mischief. Neither does it come from the stations on 1060 , 1080 or KMOX on 1090 although these have a serious heterodyne in some locations. The 770 channel is also very badly muddied up. For some reason the Radio Commission permits KFAB Lincoln and WBBM Chicago to use this wave together during the daytime. These stations are altogether too powerful and too close together geographically to use the same channel at the same time and the result is, like the Kilkenny cats, the two stations destroy each other during daylight hours in a large portion of the Middle West. As if two powerful stations on one wave were not enough, a number complain there is still another interfering signal on this channel.
"What powerful station," inquires Daniel C. Looby, Secy., Atlantic Radio Club, 1414 E. Cheltenham Ave., Philadelphia, Pa., "was interfering badly with WBBM on 770 keys. at about 1:19 A. M. EST, Friday, December 30th? This station was playing dance music and signed off about 2:00 A. M. EST. WBBM was on till $3: 00$, so I was unable to get the call letters. Another S.O.S.!

Do you know anything about a station on 810 kcys. talking about wires, etc., Tuesday morning, December 6th, at 2:00 A.M. EST, using the call EQ7? A number of members have also reported this station which gave no location. About every five minutes they would say 'EQ7 signing off till the next period. So long.' Then they would come back on the air about two minutes later and broadcast for about five minutes and sign off again."

In a later letter Mr. Looby answers his own question by saying that he has decided it is CMCQ off his 780 frequency which is interfering with WBBM.
E. G. Shook, Terre Haute, Ind., says: "On the morning of December 28th, I was listening to WBBM at 12:45 to 1:00 A.M. CSTr. I thought I heard another station crowding in but it was very faint. I moved the dial back and forth but the station came in almost directly on WBBM. At 12:56 the unknown station almost crowded WBBM out but the strength of WBBM finally won and the other station slowly faded away."

## Uses Ocean for Aerial

"I have been experimenting with a new system of aerials out here on the west coast," writes Richard D. Caddell, 1115 Pender St. West, Van-
couver, B. C., "and I have just discovered that an aerial I have been using lately cuts out fading and static better than any other type of aerial that I have ever used. I live right alongside the ocean, and the other day I took 150 feet of aerial wire and strung it between two floats in the ocean, so that no part of the aerial is above the water. The aerial is submerged about 15 feet below the surface of the ocean, including the lead-in, and I can truthfully say it beats anything that I have ever tried in the line of aerials yet, and believe me, I've tried plenty. This ocean or under-water aerial that I am now using is certainly a big improvement over the overhead or underground aerial, because there is practically no static or interference below the water level, like there is on dry land, and not nearly as much fading. The signal strength has also been increased about $25 \%$ with this aerial, especially on distant stations."

## Wants Help with "Mercury"

"I would be greatly obliged if you could give me some information about the 1932 model Mercury Diplomat, a receiver made by the H. M. Kipp Co., Ltd., of Toronto," writes C. G. Briggs, 296 Vernon Road, St. James, Winnipeg, Manitoba. "This superheterodyne model employs 5-27, 2-24, 3-35,

Though a comedian. Jimmy Lyons is reputedly an intensive worrier and being "Editor of the Sunday Gazette" is a serious proposition. Jimmy propounds his own sly views on the news evcry week during the Sunday Matinee of the Air-CBS 2:30-s:00 p. m. EST.


1-80 and one 12-10 Amperite. I would like to have a wiring diagram of the set and also complete instructions on how to shield the wiring and what material would be necessary. I have had considerable trouble with this receiver lately. One channel interferes with the adjoining one. This model has adjustable i. f. transformers at the back of the chassis and two servicemen that have had it for adjustment lately, do not seem to understand it. Can I improve this circuit by using $-56,-57$ and -58 tubes to replace types -27, -24 and -35 ?" Can any of our Canadian readers who have similar sets advise Mr. Briggs who states that the manufacturers are no longer in business.

## Makes DX Records

'I have an RCA Victor RE 20, with, of course, an attachment for making transcriptions either from the air or through the microphone," advises Mrs. Jessie A. Weaver, 370 Central Park West, New York, N. Y. "I have made records and sent them to WKAQ, San Juan; WJAX, Jacksonville; CMCR and CMCW, Havana.

Have not had time to hear from Havana, but Mr. Agusty, of WKAQ, was interested, as was KSL, Salt Lake City. The latter printed a small article in the KSL News, of October 30th, in part: 'These records, clear reproductions of the test program, reached KSL well in advance of the dedicatory program of October 22nd.' It surely is an interesting record of a program to keep. I made one from WKAQ at slow speed that runs for $71 / 2$ minutes. There is music, announcements and a short description of the havoc the hurricane wrought."

## Another Feminine Fan

"Just another young lady who is a real radio nut," admits Marian Canniff, 2112 S. Cedar St., Lansing, Mich. "Although I have been interested in radio ever since 1924, when I had a Radiodyne and crystal sets galore, I have never been a real dyed-in-thewool DXer. Didn't stay up late enough. I regret now that I didn't, taking advantage of having a Radiodyne, a 6 -tube set, which was capable of bringing in good distances. Your article about the old days of radio

surely brought back memories to me, too. Wish I had one or two copies, at least, of your Radex of 1924 or 1925."
"About LR4," writes Robert Rosenberger, 17 Janssen Flace, Kansas City, Mo., "I think it should be included in your log, just like YV1BC is. Their verification states their power is 20 kilowatts. Their time on the air is 'Transmite diarimente de 11 a 24 (hora Argentina).' They are at Callaco 1526, in Buenos Aires. I have this montl received also the station in Limoges, France, and I'm pretty sure about ZP1, for they kept saying 'City of Tomississ' and also HJN. These make for me every country of South America, except Peru, so when can I catch OAX?"

## Heard on Two Channels

"C. H. P.," Blenheim, Ontario, is puzzled by the receipt of CFCO, Chatham, Ont., with exceptional volume and clarity on 870 kes. where WLS somes in on the dial. CFCO was tormerly on 1210 but has recently noved to 1010 but we cannot say why their program should be picked up on 870 . Since their move to 1010 , they are being heard in Cleveland, at least, regularly and with good volume. "C. H. P." states that the phenomenon of CFCO being heard on 870 was mentioned by the announcer of WLS. Can some one figure a harmonic out of this?"
"I heard a station on 750 say 'This is EQ7 Lansing, calling EW7 Jackson.' About a week later I heard him again saying, 'EQ7 signing off until next period K.' What kind of a station is this and what is it doing with a call beginning with E?" asks Richard M. Carter, 1315 Washtenaw Ave., Ann Arbor, Mich. This is the same call reported by Mr. Looby. We have had other inquiries in regard to this "EQ7". Who knows him and what is he doing in the broadcast band?
"Several mornings I had tuned in 1220 keys. and heard a police report. Early this morning I heard call letters announced and they sounded like

WPEF. Does anyone know of this station?" asks Mrs. Jessie A. Weaver, 370 Central Park West, New York, N. Y. "I believe I would feel better about hearing, 'There are burglars in Apartment 1C,' as I did this morning, if I knew where the station is."

## Who Can Answer These?

"I had an RCA 82 and last year, just before I broke up housekeeping, I sold the set," comments H. W. McCracken 1 Tyndall Ave., Phillipsburg, N. J. "Now I am in the market for a combination short and long-wave. Can you give me a tip on what I should buy. I want one that will pull in everything possible."
"Has any other reader an RCAVictor R-74 with which they have used a short wave converter?" inquires Rene Fraenkel, 69 Congress Street, Newark, N. J. "Can you tell me the types of tubes used with the Atwater Kent, S. W. Converter, Model 93?" Respectfully referred to our readers.
"I wonder if anyone heard the same thing I did at about 6:00 A.M. CST, January 1st," inquires R. V. Heinzelmann, 880 Grosvenor Ave., Winnipeg, Man. "It was on about 1350 kcys., and the program, as far as I could hear, was as follows: 6:08, large chorus, and then a talk in which the speaker talked about changing prices to end the depression, then asked if they expected him to end it; $6: 15$, music (banjo) and man singing; then the chorus again, and again at $6: 20$. The station faded as if it were a foreigner."

## Mystery on 725

"This morning, Tuesday, January 17 th , I had a station on about 725 kcys., one that completely mystified me inasmuch as heavy static prevented me from identifying it," reports Edward F. Goss, 666 Park Place, Brooklyn, N. Y. "I came upon it at 2:20 A.M. and tried unsuccessfully till 3 A.M. to get its call. There were an orchestra and vocal selections, and at 3 A.M. I lost the program in the, by now, intense static. Radex has no stations on 725 keys.
and I am in doubt whether it was one of the Vancouver 100 -watters or possibly a trans-Atlantic station. It could hardly have been any of the more powerful stations around 730 kcys., as KMPC, a 500 -watter from Beverly Hills, Cal., was coming in like a load of bricks on 710 kcys., much louder than my unknown station. Did any of the gang hear it?"

## Modernizing RCA 60

"There is cheering news for our friends that are still using an RCA 60, model 1928," announces Rudolph Kure, 3633 Vine Street, Clifton, Cincinnati. "Don't throw away the 'old heap', rejuvenate it instead. The result will be astonishing. Changing the wiring of this old-fashioned set, which is a simple matter, and replacing the $171-\mathrm{A}$ with a 245 will improve the set immensely. By employing an adapter the 247 Pentode tube also can be used. The tone quality produced by the 247 is not as good as that of the 245 . Either the 247 with more volume and slightly inferior tone quality or the 245 with less volume and a clearer signal. Take your choice. The 247 requires sharper tuning, in fact a station that transmits a sharply tuned signal may be easily leaped when employing the 247."

## Some New JO's

New stations in Japan which will be on the air soon if they are not there already are as follows: JOBK No. 2, Osaka, and JOCK No. 2, Nagoya, both with ten kilowatts but frequencies unknown; JOAG, Nagasaki, 930 kcs ., 500 watts; JOBG, Maebashi, 970 kes., 500 watts; JOCG, Asahigawa, 655 kes., 300 watts; JODG, Hamamatsu, 635 kes., 300 watts; JOFG, Fukui, 990 kes., 500 watts; JOXK, Tokushima, 980 kes., 500 watts; JFKB, Tainan, Formosa, 720 kes., 1000 watts; JQAK, Dairen, 760 kes., 500 watts; JFBK, Tainan, Formosa, 720 kes., 1000 watts; and ZILY, Hoten, Mukden, Manchuria, 900 kes., 1500 watts.

From the tip sheet of the New England Radio Club: "The informa-
tion comes from the City of Fort Morgan, Colo., that KGEW is no longer broadcasting." Will some of our western readers please verify this? We surely do like to cross them off on these crowded channels. The trouble is most of them go into court. The following stations are now in court trying to make the FRC keep their hands off them: KFH, Wichita; KGEF, Los Angeles; KGMP, Elk City; WBAK, Harrisburg; WHP, Harrisburg; WIBO, Chicago; WJKS, Gary; WLOE, Boston; WMCA, New York; WNJ, Newark; WNYC, New York; WOQ, Kansas City; WPCH, New York; WERE, Erie.

## On the Longer Waves

"Tell Mr. Sutfin of Hornell, N. Y, that I receive the long-wave European stations," says Eddie Grant, North Sydney, Nova Scotia. "I have a Victor, Model R-32, ten tubes. I receive G2LO, G2ZY, G6BM, G2BD, G5SC, 2RN, Athlone, OKR, OKP, CT1AA, SCF, SBB, F8GC, Poste Parisien, Beziers, Heilsburg and Stuttgart, Germany, and Beromuenster in Switzerland. Mr. Sutfin may write me if he wants more information on the European stations, especially the British Broadcasting Company stations."
"I note you have in the January issue a little on the longer waves," says Robert R. Rawstron, 296 Main St., Claremont, N. H. "TFU on 250 keys. with 17 KW of power broadcast daily from 3 to 6 A.M. EST, and Saturday and Sundays till 8 A.M., according to word from them. The address is, TFU, Box 547, Reykjavik, Iceland."

## Are They Outlaws

"Concerning the broadcasting station in the Southern Hotel, Denton, Texas," advises Burney McClurkan, 804 N. Locust St., Denton, Texas, "the call letters are DNTX. Their frequency is 960 kcys. The owner of this station is R. E. Turner. DNTX does not have a Federal Radio Commission license. It has a 50 -watt transmitter, but is allowed to use a power of only 5 watts. They are not
supposed to be heard outside the State of Texas. Their hours of broadcast are weekdays 10 A.M. to 2 P.M. CST; Sundays, 8:30 A.M. to 11 A.M., and $1: 30$ P.M. to 5 P.M. CST."

Another outlaw station, evidently the old WAIR of New Philadelphia, Ohio, is reported by Miss Lilian M. Bethel, 323 First St., N. E., Massilion, Ohio. "WJM, Massillon, Ohio, is located in Lincoln Hotel and operating at this time on 860 kcs . using, I believe, ten watts power. They have used 850,840 and 830 and now 860. They are using a lot of records but are having daily auditions for talent. They are also doing some local advertising. Ray Wilson is manager of the station."

## Some Station Notes

"Upon listening to CMJK, Camaguey, Cuba," says Ansel Gridley, Box 1294, Sarasota, Fla., "I received the following information: CMJK was directly in the path of the cyclone that swept through Cuba, and they have just recently reconstructed their transmitter, and this was a test program. CMJK is located in the editorial room of the local newspaper, El Camagueyano, or The Camagueyano. The mail address of the station is P. O. Box 320, Camaguey, Cuba."
"What is CNRO doing on 635 kes.?" asks Douglas Wauchope, 501 S. Candler St., Decatur, Ga. "The report that we are operating on 635 kes. is in error," replies CNRO. "We are still operating on a frequency of 600 kcs .500 meters."

Station CKPR, Fort William, Ontario, tells us that the reports that they are broadcasting on 650 kcs . are incorrect; that they are still on 890 and adhering to that frequency as closely as modern methods will permit.
"We anticipate a change of frequency from our present 880 kcs . to 930," writes CKPC, Preston, Ont. This station will present a DX program on the morning of Saturday, March 11th from 2:00 to 5:00 A.M. EST, but we are not certain whether
they will be found on 880 or 930 channel.

WXYZ, Detroit, is to be key station of a new Michigan network. Other stations are WOOD-WASH, Grand Rapids; WIBM, Jackson; WELL, Battle Creek; WKZO, Kalamazoo; and WFDF, Flint.

Station CMGE writes the Atlantic Radio Club that they are still on 1340 kes. but expect to move to 1375 very soon.

Station CNRA, Moncton, N. B., asks for information as to what station on 630 kcs . is interfering with their signals.

KGER, Long Beach, Calif., broadcasts DX tips on 1360 kes., beginning at midnight, PST.

WFIW may move from Hopkinsville, Kentucky, to Louisville, the Chief Examiner of the FRC having approved the application. WLAP will probably object as it has asked for WFIW's present channel and increased power.
"In a late paper I saw that WSAJ, Grove City, claims that station is six months older than KDKA. How so?" asks Fred Stone, Kintnersville, Pa. We'll have to refer that question to the historians. "Is there a station at Easton, Pa.? I heard him announce as WEAS." No record of any b. c. station in Easton and the last book of $s$. w. stations makes no mention of Easton.

## Just Idiosyncrasies

"The fact that low-power stations are often louder than much larger stations in the same city is sure noticeable," says Gilbert Van Vranken, Jr., 2230 E. El Molino Ave., Pasadena, Calif. "KGMB is often extremely loud when KGU's carrier is barely audible and KGU has ten times the output. WBBC, New York, is far louder than WEAF or WJZ, yet WEAF has one hundred times as much power. Also get KFLV louder than WENR, and WFIW louder than WHAS."
"I have found that putting a rheo(Continued on page 79)

# MONTHLY MEETING of DX Club - - Tbrills and Disappointments 

WITH the widely reported reception of Poste Parisien as described in the article on the now famous cricket matches, it is evident that more and more of our readers may be a little more hopeful of tuning in some of the Europeans. Trans-Atlantic stations however for most of us still remain one of those 100 -to-1 shots. "Why can't I get foreign stations?" is the plaintive demand we frequently hear. "Others with no better locations than mine and some using the same set I have, are reporting them; why can't I?" Even Solomon with all his wisdom couldn't answer this one. We doubt not that many of those reporting reception of across-the-pond stations have neighbors with the same make of receiver who don't get them. It's just one of those things in radio.

## Foreign Data Helpful

"I could see no reason," writes Robert Hough, 26 Ellenton Ave., New Rochelle, N. Y., "for including the European stations in your lists until I accidentally stumbled on two German stations Wednesday morning, January 4th, and one German station Thursday morning, January 5th. Wednesday I had Dresden on 932 kcys. and Frankfurt-am-Main on 1157 kcys., both with enough volume to be heard all over the ground floor. Stutgart on 832 on Thursday was just as loud. What I want to know is how to address them when they have no call letters? Have you by any chance their addresses? Frankfurt announced in English as well as German, but the other two signed off in German and it was only through my smattering knowledge of German as picked up via short wave, that I was able to make out the cities. There was no guess work, as I received them so unexpectedly and just as they were
signing off, so had no time to look them up. I had no idea of their location; in fact, I thought they must be U. S. stations announcing in German and waited for the English announcement."

We receive radio publications from England, Switzerland, and several other countries but not one of them gives the mail addresses for the European stations. Perhaps some of our other readers can tell Robert how to address his stations.
"Last Saturday morning," writes Earl R. Roberts, 105 Gomber Ave., Cambridge, Ohio, "I was delighted to pick up the program of Heilsberg, Germany, from $1: 20$ to $2: 25$ A.M. EST, on 1157 kcys., with really fair volume. I have plenty for verifica-tion-organ, concert orchestra, opera singers, talks in German, etc. The fading was very rapid, exactly as Paris did after 2 A.M., but for only a short time were the signals inaudible. After $2: 00$ the signals were noticeably weaker and more apt to fade for longer intervals. A DXer in Rye, N. Y., has veris from several German stations which he gets daily from 1:00 to $2: 30$ A.M. I am taking his word that it was Heilsberg, and not Frankfurt, I received, since he has them verified. On the other side of the world I succeeded in adding 2BL, 2YA and 5CK, of which the latter was far the best, on December 27th from 5:00 to 5:50 A.M., with a church program. I deducted one more from the total of U. S. unheard, bringing that list to only 30 by logging KIDW. CMJK came in fine on a DX Sunday."

## From South Dakota

"May I tell you about my DXing?" asks Mrs. Myron Pierce, Philip, S. Dak. "Don't remember seeing any letters in your magazine from South Dakota. Our closest station is about

100 miles distant. Our radio is a Majestic Model 20 superhet., 8 tubes. In the twenty-one months we have had it have received nearly 300 stations. Haven't done so much late night or early morning DXing as my husband doesn't seem to appreciate noises all times of the night. I am just a mere woman. Would sure like to get Alaska. Have tried several times, but have never heard them announce. I believe our Majestic to be one of the most selective radios $I$ have ever seen. The other night just before dark, I separated XER, WSB and WJR. Don't you think that is rather good when XER is so loud here and WSB so far away? We live west of the river between Rapid City and Pierre, S. Dak."

## Rules of the NNRC

"Perhaps your readers might be interested in learning that the Newark News Radio Club accepts members from any country or hemisphere," suggests Alfred W. Oppel, Executive Secretary, 215 Market Street, Newark, N. J. "To date we have a membership of more than 1800. The dues are $\$ 2.00$ the first year and $\$ 1.00$ thereafter, annually. New members receive a gold membership button and card. Our distant members receive a copy weekly of the Wednesday issue of the Newark News, wherein are printed the DX tips and programs for seven days in advance. Air mail service is provided for those members desiring same, if they remit the cost. We have five classifications of DX certificates: Junior, Master, Past-Master, Ace and Super-Ace. Ratings and qualifications for these certificates are based on geographical locations of our members. Therefore, no NNRC member may fail to acquire one of these ratings, if he is eligible. NNRC club stickers and stationery can be purchased by the member at a small cost. Eighteen radio stations from coast to coast and twelve newspapers dispense NNRC DX tips for the convenience of DXers in general."


Boake Carter is Philco's news editorialist, being on the air five times weekly or CBS Monday to Friday inclusive at $7: 45$ p. m. EST.
"Raymond M. Bell says to try for English stations at 7:00 P.M. EST," writes A. L. Hynes, Clarenville, Newfoundland. "Might say all these mentioned close down every night at midnight GMT ( 7 P.M. EST). These stations, including French, German and Italian, with many other European, always come in regularly with us any time after sunset, some of them as early as $2: 30$ P.M. I have received verifications from several $500-$ watters in California this month. I never try to get a verification unless I'm absolutely sure of the station, and don't get any verifications from any station in U. S. A. or Canada using over 1000 watts power. I've been getting KTM, Los Angeles (3350 miles) regularly every morning at 7:30. VONF are now on 1195 kcys. every evening 6:30 to 8:00 P.M. (5:00 to $6: 30 \mathrm{EST}$ ). VOGY are still on 910 keys. I'm using a Philco 7tube battery-operated superhet., model 35."

## Three Receive 2KO

T. Colegrove, Frankfort, Mich., writes: "I just received a verification from 2 KO who has this to say: 'It is rather interesting that we should have received three reports from the $U$. S. A. in the same mail, two from California and yours-the dates being October 13th, 17 th and 19 th and that these are the only reports we have received from the U. S. during the last six months although, once prior to that date, we received two reports within a few days of each other when the station was operating on a power of only nine watts in the aerial.'
"Evidently the power of the Australians who give their aerial power should be multiplied by two in order to compare it with stations which give their output power as 2 KO says his aerial power is now 100 watts."

## Too Many Japs

The old proverb has it that one man's meat is another man's poison. Here's a reader who receives so many JO's that they annoy him!
"I notice there is quite a discussion on the Japs," comments H. N. Delmonico, 1475 Trimble St., Vancouver, B. C. "Regarding them, all I can say is that they are a darn nuisance to me. My record is fourteen Japs in one night on a Scott AllWave. In fact, I can get them nearly any night, but at times the static is too heavy, and they are not worth listening to. Other nights they just pound in, but the average person will give it up as a bad job, for most of their stations are on a chain, and they are very shy on announcing in English. After months of listening I managed to get one, JOHK, whose program is part English, with enough to send for verification. This arrived this week."
"This morning I received my first real thrill when I tuned in WKAQ, San Juan, P. R., on its special broadcast for the Newark DX Club," remarks Jerome W. Landenberger, 7305 West Chester Pike, Upper Darby, Pa. "I would appreciate hearing from any
of your readers who have tuned in KGU, Honolulu. I have tried patiently for this station and would like to know if anybody in this section of the country has been successful in receiving them. I will answer all letters received. I also would like to hear from owners of the new 11-tube Majestic superheterodyne similar to my own, and as to what results they are having."

## Texas Wants New England

"I would like to know if there are ever any DXers around my neck of the woods who are ever able to tune in Delaware, New Hampshire, Vermont, Rhode Island and Maine," inquires O. D. Duncan, 811 W. Woodard St., Denison, Texas. "I have tried dialing as early as 3 P. M., but just don't seem to be able to pick up any distance then, and when it does get where stations can come through, the Central Standard stations are going full blast. I would like to know just how to break through to get those states, for Boston is as far up that way as I have received."
"Last night at 10:08 P.M. EST, I noticed CMAF in Radex on 680 kcys.," writes Charles L. Morgan, 800 East 179th St., New York, N. Y. "I don't know how I missed that before. Well I turned in just for fun and there it was. I listened until 11 P.M. It was loud and clear. Could hear VAS on 690 at the same time. Well another dime to CMAF. The funny thing about this (and that is radio) is WPTF on 680 kcys. could not be heard, while CMAF was on. Maybe they were not on."

## Verifying Australia

"Concerning the Australians," writes Mrs. L. R. Ledbetter, 1109 Grammar St., Vicksburg, Miss., "I have verification from $5 \mathrm{CK}, 2 \mathrm{YR}$ and 2 CO , the latter having sent back my coupon due to the fact that it is a government station. So, save the 9 cents for another one, you DXers. I have logged every frequency. Interference is terrific in this locality and does not cease in the early morning
so it is often useless to try for anything distant."
"Something ought to be done about WJJD operating so late," complains Murray D. Bryce, Rt. 1, Royal Oak, V. I., B. C., Canada. "Last Saturday they signed off at 6:30 P.M. PST. They were quite loud through KSL. KSL, with their new transmitter, is one of the finest stations in America, and should be accorded better treatment. The interference some nights from WJJD is terrible."

## A Get-Together

Hartford, Conn., readers take notice: "Saturday evening finds four ardent DX fans gathered together for an evening of DX discussion and good-natured razzing on the ones we caught and the ones we missed during the week," preambles Sidney R. Kaufman, 60 Bretton Road, West Hartford, Conn. "We look forward to these meetings and would like to have a few more DXers added to the bunch."
"I am side-tracked, living in the 'Haven Home for Aged Men' here," writes Chas S. Humphrey, 109 Lowell Street, Peabody, Mass. "I have an old-timer three-tube battery set but I wouldn't swap it for that electric set downstairs. I can put it out of sight. I have to have a radio to play with to keep from getting old. I am only seventy-four."
"I see several of the DX fans are wondering about their verifications from YV1BC, Caracas," says Harry M. Gordon, 1002 Parade St., Erie, Pa. "I sent my verification in on October 23 rd and today, December 30th, I received a verification from them."

A Dominion club, the Canadian DX Relay, Box 339, Goderich, Ontario, sends us a number of DX tips which unfortunately reached us too late to appear in the February issue. Canadian readers may secure a copy of "The Relay" by addressing the club as above.
"Our Club would like to pass along to you the following list of foreign stations, all of whic have been heard quite well," writes Henry P. Allen,

Vice President of the Atlantic Radio Club, 513 City Line, Oak Lane, Philadelphia.

OKP, Prague, Czechoslovakia, 616 kes., 2 A.M. on Tuesdays.

Langenburg, Germany, 635 kcs., 1:30 A.M.

Stuttgart, Germany, 831 kes., 1:00 A.M.

EAJ1, Barcelona, Spain, 860 kcs., 3:00 A.M. on Wednesdays.

Hamburg, Germany, 923 kes., 1:00 A.M.

Gleiwitz, Germany, 1085 kcs., $2: 00$ A.M.

Heilsburg, Germany, 1157 kcs., 1:00 A.M.

SBH, Horby, Sweden, 1166 kcs., 1:00 A.M.

Leipsig, Germany, 1184 kcs., 1:00 A.M.

I1TR, Trieste, Italy, $1210 \mathrm{kcs} ., 2: 30$ A.M., on Mondays and Tuesdays only.

Nuremburg, Germany, 1256 kcs., 1:00 to 1:30 A.M.

All time is given in Eastern Standard.

## Miscellaneous Tips

"I have some DX tips here," suggests Harry M. Gordon, 1002 Parade St., Erie, Pa., "that might interest some of the fans. These were sent with my verifications from different stations. KPCB, Seattle, Wash., write that they are on the air every night until 3:30 A.M PST, on Saturday nights clear through till the next day. KTFI, Twin Falls, Idaho, daily to 11 P.M. MST, on Saturdays till midnight."

In a letter to H. N. Delmonico, 1475 Trimble St., West Point Grey, Vancouver, B. C., Station JOHK, Sendai, Japan, 770 kcs., gives his time on the air as follows: Weekdays, 7:00-11:40 A.M., $12: 05-5: 35$ P.M., 6:00-9:30 P.M. Sundays, $9: 00-9: 30$ A.M., 3:40-3:50 and 6:00-10:15 P.M. Japan is in Time Zone 44 on the Time Converter.
"Please insert the following notice in your March issue," requests C. C. Norton, 127 B Street, Vallejo, Calif. "Thursday night of March 16th will
be 'Pacific Coast on the Air' for the Transcontinental Radio DX Club and 41 stations have been invited. The hours are 11 P.M. to 7:30 A.M. EST. Everybody is invited to tune in."

Regarding the special DX program arranged for Radexers by WNBX for Saturday morning, March 18th, 4:00 to 5:00 EST, R. R. Rawstrong writes: "They want a report from every state and province. You might add that a 'Muter' inside aerial will be a distance prize and doubtless there will be others."
"I am trying to arrange for a special DX program for the Atlantic Radio Club, Glenside, Pa., over RUS on March 19th from 3:00 to $4: 00$ A.M. EST," informs Earl R. Roberts, 105 Gomber Ave., Cambridge, Ohio. "It is impossible, however, to tell yet whether they will be on or not."

## Japs Do Use English

"I have a Sparton set," advises Austin L. Johnson, 8 Elmhurst Apt., Ogden, Utah, "and have logged 260 stations to date, among them five stations in Japan. Have a letter of verification from JOIK, but the others have not responded to date. It has been my experience that if you listen closely you will notice they announce the station in English at intervals. I get home from work at 1:00 A.M. and get very good reception after that time. The west coast stations are signing off about $2: 00 \mathrm{~A} . \mathrm{M}$., and after that time get the Japan stations almost any night. Have one station in Cuba and many in Canada and Mexico. Have eight New York City stations and many in Chicago and other eastern cities."

## From New Zealand

"I have one of your latest issues supplied to me by my American radio pal, R. M. Ballard of Visalia, Calif.," writes S. M. Cartwright, Hakari, Mokau River, New Zealand, "and I can tell you it is a great help to me to pick up the U. S. A. stations. I have only logged 66 U. S. stations just now, but I hope to be able to collect a few more during this Christmas and

New Year. I use a Stewart-Warner 5-tube Model 32S receiver, battery operated, with 120 ft . aerial and pierce ground. I have been DXing eighteen months and have logged 242 stations, with 140 verified, including Europe, U. S. A., India, Japan, Siam, Australia and New Zealand, Mexico and Canada."

## Good Work in Chicago

L. F. Stetson, 3420 Janssen Ave., Chicago, Ill., reports verifications recently received from VK7UV, Ulverstane, Tasmania, on 1460 , ZL1ZQ, Auckland, N. Z., on 1190, 10BI, Prince Albert, Sask., on 1195, 2RN, Dublin, Ireland, on 726, HJN, Bogota, Colombia, on 685, YV1BC, Caracas, Venz., on 960 , JOLK, Fukuoka, Japan, on 680, XEFS, Queretaro, Mex., on 1000, CMJP, Moron, Cuba, on 1360, XEFC, Merida, Yucatan, on 1050, XEFO, Mexico City, on 940 XETB, Torreon, Mex., on 3180 , CMCA, Havana, on 1235, WTDV, St. Thomas, Virgin Island on 69 meters, WIEP, a fishing trawler, on 115 meters and KDVR, the SS Pres. Madison, on 36 meters-a most excellent list from the heart of Chicago. Mr. Stetson is in the radio business.

## The Infant Department

"Here is another set for the baby department," remarks Romaine Ruhf, 307 S. Broad St., Nazareth, Pa. "I have a homemade two-tube set, using a stage of $t$. r. f. ahead of a regenerative detector, which does not create any disturbance in other receivers. The tubes are a 27 and 56 respectively. With this set I have received 390 stations from 540 keys. to VE9RM at 2004 keys., without changing anything but the condenser setting. I have 10 Californians, 9 Mexicans and 9 Cubans, and my best catch is CKPR, Fort William, which was then 50 watts."

Another Nova Scotian who receives the Europeans is Robert Osborne of Stellarton. "I have received radio stations in Great Britain on 625, 843, 797, 1040 and 1147 kcs . On 914 kcs. I have received a radio station in

France. Also Rome or 680, Algiers on 825 , Germany on 832 , Spain on 860 , and Italy on 905 . Some of these I have had as early as $4: 30$ P.M. AST, it still being daylight here. I have received European stations many times this winter. I have often heard Porto Rico and Florida when reception of New York and Boston stations was impossible."
"I bought a SW set this fall, but the b. c. l. band still holds my interest almost all the time," writes Stanley Savage, R. 4, Spokane, Wash. "TransPacific DX has been pretty good this year. During the past month the Japanese have been coming in especially well. I've heard about 36 from across the ocean. On short wave I've only heard two. $4 \mathrm{BH}_{4}$ Brisbane, is well received all over the U. S., and is much easier to understand than some of the higher powered VK's."

## Who Relayed Honolulu?

"Reception so far has been very good," comments W. H. Lewis, 1328 Delaware St., Leavenworth, Kansas. "No forcign stations so far, but I have logged and verified $10-A B$, Moose Jaw, and 10-BQ, Brantford, Ont., the latter only 15 watts. Could someone inform me what short-wave station relayed the New Year's program from Honolulu to the United States? I would appreciate the information very much."
"I have become quite a DX fan this winter," says Robert H. Glass, Florida Preparatory School, Daytona Beach, Fla., "and your magazine has helped me tremendously. With my paltry 210 stations I feel like a beginner, but I hope to increase my list. I have a Clarion Model 220, on which I intend to use earphones in an endeavor to bring in more new stations. To date $I$ have 21 on the Pacific Coast, my pride and joy being KRSC, a 100 -watter from Seattle, Wash."
"I received verification for my best catch on Saturday, namely, KGU, Honolulu," writes Roy Knight, 1521 Bannatyne Ave., Winnipeg, Man. "I don't know of anyone in this city getting that. Some of my best catches
are CHML, Hamilton; WCAZ, Carthage; CFJC, Kamloops; 10-AB, Moose Jaw; 10-BI, Prince Albert; WEXL, Royal Oak; WLBC, Muncie. WNAD said I was their farthest reach on a regular broadcast. I got them at 7:50 P.M. Besides these I have had 49 100-watters."

## A Newcomer

"I started DXing in September, 1931," advises Kent Scott, Station A, Box 42, Barberton, Ohio, "and up to now I have logged 551 stations in U. S. A., Canada, Cuba, Mexico, Porto Rico, and South America. I have logged every state, except Nevada, and I hope to log it soon. I use a 9 -tube Bremer-Tully highboy on B.C.B. and a Stewart-Warner converter. My veries total over 300 . I will answer all letters."
"The most important new stations I have had are KUMA, Yuma, Ariz.; KGFJ, Los Angeles; KFXM, San Bernardino, and KWG, Stockton, Calif.," reports Milford Voss, 1108 Wealthy St., Grand Rapids, Mich. "The nights of December 29 th and 30th I tuned in KGU, Honolulu. They were coming in good for them."
"Since having Radex, I have picked up 680 different stations and some very fine programs," reports W. H. Bradford, Box 64, Newfields, N. H., "but to me my best pick-up was a test program last fall from Station VK2ME, Sydney, Australia. My set is a Stewart-Warner combination with 10 tubes."

## Verifies Italy

"I got a verification from Trieste, Italy, on 1311 kcys., on a program of November 27, 1932," postcards Bill Vornkahl, Westport, Conn.
"After reading the DX pages of your magazine for the last two years (I haven't missed an issue since January, 1931) I have decided to tell you of my luck," advises D. C. Hamilton, 5814 Murrayhill Ave., Pittsburgh, Pa. "I have an 8 -tube Majestic superhet., which certainly brings them in. I have logged 666 stations in 47 states, my one failure being

Nevada. I have 29 channels and 21 states complete. Among my foreigns are 11 Japs, 23 Mexican, 18 Cuban, HHK, RW36, WKAQ, TICR, HIX, YV1BC, VK4QG, VK2NC, VK4RK, ZL2YA, ZL4YA, ZL1YA, and my prize station COMK, Mukden, China, which I received at $5: 30 \mathrm{~A}$. M. EST."

## Logs Every Channel

"I have had 338 stations with at least one station on every one of the regular channels," says Robert Hough, 26 Ellenton Ave., New Rochelle, N. Y. "I have had all but three states. I still have to get Nevada, Wyoming and Arizona. I've had all but two provinces of Canada, the missing provinces being British CoIumbia and Saskatchewan; also seven Mexican stations, two in Cuba and one in Porto Rico. As yet I have not had Central America, or any stations beyond the West Coast. I would like to hear what other owners of Crosley sets are doing."
"This is my first DX year, which began October 1st," writes Lloyd Harrison, 130 So. Hague Ave., Columbus, Ohio. "Using a 9 -tube McMillan, I have logged 214 stations from October 1st to November 30th. Best in my log are WKAQ, CMBY, CMCJ, XEW, XEPN, XER, CHML, WHBC, KEX, KMPC, KTM and KFSD, besides ten others in California and six in Canada. I have also received the following shortwave stations on this set: W1XAU, W2XAB, W2XAR, W3XK, WMP, WRDS, W1XAL. I would be pleased to hear from any DXer using this make set."

## A Daytime Record

"Here's some daytime distance that I believe will establish some kind of a record," say A. K. Mallard of Dallas, Texas., "but after reading about some of the boys getting 10 -watters in Australia, I doubt if my record is any good after all. Here 'tis, all received between the hours of $11: 30$ and 12:30 CST: CKOK, WLW, WENR, WOWO, WCAU, WGN, and a rumpus on the 780 band caused by WBBM and KFAB. Many other near-
er stations were received but these were outstanding."
"I have been more or less interested in Dxing for several years, but it is only recently I have been logging stations," writes Erwin B. Nebel, 161 Grenville St., Woodbridge, N. J. "I have a Colonial 8-tube superhet and I am very well satisfied with its performance. My only aerial is a single wire running the length of the attic, and the ground is attached to a hot-water radiator. I began logging stations about the middle of October and my total to date is 171 stations."

## This Month's Changes

| O WNERS |  |  |
| :---: | :---: | :---: |
| 560 | WNOX | Innoxville. Tenn., to WNOX, Inc. <br> Toneka. Kans., to Topeka Broadeasting Assn. Inc. |
| 580 | WIBW |  |
| 640 | WAIU | Columbus, Ohio, to Associated Padiocasting Corp. |
| 1010 | WPAP- WQAO- |  |
|  |  | New York City to Marcus Loew Booking Agency |
| 1120 | CFJC | Kamloops, B. C., to Licview Publishing Co., Itd. |
| 1170 | WCAU | Philadelphia, Pa, to WCAU Broadcasting Co . |
| 1200 | WJW | Akron, Ohio, to W.JV, Inc. |
| 1210 | WSBC | Chicago, M1., to WSBC, Ine. |
| 1370 | WJEC- | Williamsport, Pa, to WRAK, Inc. |
| $1+20$ | WMAS | Springfield, Mass, to WMAS, Inc. |
| 1420 | WTBO | Cumberland, Md., to Associated Broadcasting Corp. |
| POWER |  |  |
| 550 | KFD | Brookings, S. Dak. 500 to 1000 |
| 570 | VEAO | Columbus, Ohio, 750 to 1000 |
| 1200 | WFBC | Greenville, S. C., 50 to 100 |
| 1370 | WJBK | Detroit, Mich., 50 to 100 |
| DELETED |  |  |
| 570 | TGW | Guatamala City |
| 1310 | WKBS | Galesturg, IIl. |
| 1400 | WCMA | Culver, Ind. |
| REINSTATED |  |  |
| 14:0 | WERF | Eric, l’a. <br> Newark, N. J. |
| 1450 | WN.J |  |
| CHAINS |  |  |
| 570 | WSYR | Syracuse, N. Y., R to B Washington, D. C., New B |
| (63) | WMAL |  |
| FREQUENCIES |  |  |
| 585 | XEPN | Piedras Ncgras, Mex from 88.5 St. John's, Newfoundizud, from 1115 |
| 1195 | VONF |  |
| CALLS |  |  |
| 1310 | WAML | Laurel, Miss. from WTSI, |
|  |  | NEW |
| 1500 | WKEU | La Grange, Ga. |

## WHAT＇S ON THE AIR TONIGHT？

Fill in calls and dial numbers fo：those stations through which you best receive the three chains．You can then turn quickly to the one that has the feature you want．
COLUMBIA（C）．．．．．．．．．．．．．．．．．．WABC NATIONAL，Red（R）．．．．．．．．WEAF NATIONAL，Blue（B）．．．．．．．．．．WJZ

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


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


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

TIME－E Eastern Standard；C Central Standard；M Mountain Standard；P Pacific Standard．
RADEX is the only publication listing stations in alphabetical order for your convenience．
Editor＇s Note：These programs are correct at the timc of going to press but are subject to change thereafter．

## MONDAY

E－5：45 p．m．，C－4：45，M－3：45，P－2：45 B－Little Orphan Annia
CKGW KDKA HBAL WBZA WCKY WGAR WHAM WIS WJAX WJR WJZ WRVA WWNC

## E－6：00 p．m．，C－5：00，N－4：00，P－3：00 C Elizabeth Barthell

CFRB CKOK KFAB KFH KI $Z$ KMOX KSCJ KNJ KTRH KJOR WAAB WABC WADC WBCM WBIG WBRC WBT HDAE HDBJ HDOD WDRC：WDSU WFAN WFBL WFEA WG］WGST WHEC WIP WISN WTAS WKBH WKBN WLRW WIBRZ WNAX WNOX WODX WOKO WORC WOAM WREC WSBT WSFA WSJS WSID WTAQ WTOC
R－Waldorf－Astoria Orchestra
CKGW゙ KFYR KGO KOA KPRC ISD KTBS WBEN WCAE WCKY WCSH WDAF WFAF WRNR WTBR WFI WHO WIBA WIOD WJAT WKY WMC WOAI WOC WRC WSB HSMB WTAG WWAC

## E－6：15 p．m．，C－5：15，M－4－15，P－3：15

 C Reis and Dunn（FRB CKOK KFAB KFH KI．7 KMBC KSCJ KSL KTRH KVOR WIAB WADC WBCM WBIG WBRC WBT WCAO WDAF WDBO WDOL WiDSU WHAN WFAN UGR HHEC WIP WISN WJAS WJSV WIBH WIBW WLBZ WNAX WOKO WORC WOAM WSBT WSFA WSJS WSPD WTAQ WTAR WTOC

## B－Del Lampe and Orchestra

KOIL KSO KWCR KWK WBAI， WJZ WMAQ WREN WSYR

## E－6：30 p．m．，C－5：30，M－4：30，P－3：30 C－Vaughn De Leath

CFRB CFOK KTRII WAAB WIARC WADC WBCM WBIG WBRC WB＇ WDBO WDOD WVDSU WEAN WFEA WGR WJSV WIBEN Wl．BW WLBZ WOKO WORC WQAM WSFA WSJS WGPD WTAR WTOC
R－Al Bernard，Minsirel Man
KFSD KGO KOA WHFN HDAF WBAF WFBR WIOD WIS WMAQ WMC WRC WSB WSMB

[^0]
## B－Lowell Thomas

CKGW KDKA WBAL WBZ VBZA WGAR WHAM W．IR WJZ WL，W B－Little Orphan Annie
KlYR KOLL KPRC HSO KSTP KTBS KWCR KWK WBAP WDAY WEPC WFNR WEY WOAI WREN

> E-7:00 p.m., C-6:00, M-5:00, P-4:00 C - Myrt and Marge
> CKOL KRLD WABC WADC WCAO WCAU WDRC WFEN WFBL WGR WHE WJAS WJENV WKIRC WNAC WOKO WSBT WSPD WWVA
> B - Amos 'n' Andy
> CKGW KDKA HBAI, WB\% WBZA WCKY WVLA WGAR WHAM WIOD WJAX WJR WJ\% WLW WPTF WRC WRVA WWNC
> R - Gruen and Hall, Piano Duo
> KDY1, KTI KPSD KFYR KGO KOA KSTP KTBS KVOO KYV WCSII WDAF WLAT WEBC WFBR WGY WHO WIBA WKY WOC WOH WSAl WSM WTAM

E－7：15 p．m．，C－6：15，M－5：15，P－4：15 C－Buck Rogers Year 2433
CKOK K\OX WABC WBBM WCAU WCCO WGR WIIAS WHK R－Wheatenaville Ray Knight
WDAF WEAT WEEI WGY WHO WJAR WLIT WMAQ WOC WOW WRC WTAM WVVJ
B Tastyeast Jesters
KDKA WB．\L WBZ WBZA WCKY WHAM WJZ

E－7：30 p．m．，C－6：30，M－5：30，P－4：30 B－Five Star Theatre
KDKA KTBS UBAL WBZ WBZ1 WHAM WIS WJK WMAL WMC WएTF WRYA WSAZ HSMB WWNC R－Van and Don，Comedy Team WCOHE WDAF WEAF WENR WFBR WGY WJAR WOW WSAI WTAG
C－Dolph Martin＇s Orchestra
W \＆BC WCAO WCAU WDRC WEAN WFBL，WFEA WGR HIIEC WHI WJAS WISV WIB\％WNAC WOKO Wore

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

CKOK KMBC KMOX WABC WBBM HBT WCAO HCAU WCCO WGR WHAS WHK WJSY WNAC

## R－The Goldbergs

KFYR KIRC WBEN WCAE WCSH Whis wred WFAd WrBer WGY WJNK WKY WIIT HOAI VRC WTAG WTAM WVJ

## E－8：00 p．m．，C－7：00，M－6：00，P－5：00

 C－Whispering Jack SmithCKOK KMBC KMOX WABC WADC WCAO WCAV WDRC WEAN WVBI， WFBM VGN WGR WHAS WHK WJAS WJSV WKRC WNAC WOKO WSl＇D

## R－Soconyland Sketches

WBEX WCSH WEAF WEEI WGY WJAR WTAG WTIC

## B－Clicquot Club Eskimos

KDKA KOIL K゙sO KWOR KWK WBAT，WBZ WBZA WCFY WGAR WHAM WJZ WISS WREN

E－8：15 p．m．，C－7：15，M－6：15，P－5：15 C－Singin＇Sam
CKOK KMBC KMOX WABC，WADC WCAU WCCO WDRC WEAN WFBL WFHM WGN WGR WHK HJAS WJSV WKRC WNAC WOKO WS巳D

E－8：30 p．m．，C－7：30，M－6：30，P－5：30 C－Fu Manchu Mystery
CFIRB CKOK KMBC KMOX KRLD WABC WADC WBT WCAO WCAU WDRC WEAN WFBM WGA WGR WHAS WHK WJAS WJSY WKRC WNAC WOKO WOWO WSPD R－Voice of Firestone CTCF CKC：W KPIRC KSD KTBS KVOO WBLN WCAE WCSH WEAT WEFI WFAA on $8: 4$ ，WFBR WILA WGG WHO WIOD HIS WJAR WJDA WKY WLI＇WIW WMAQ WMC WOAI WOC WOW WRC WRVA WSB WSM WSMH WTAG WTAM WTIC WWJ WWNC

## B－Don Carney Dog Chats

KDKA KHK WBAI，UBZ WBZA． WGAR WJR WJZ WLS WRLN

E－8：45 p．m．，C－7：45，M－6：45，P－5：45
B－Phillips Lord in Country Doctor ふDKA KOIL KHCR KWK WBAL WB7，WBKA WGAR WJJR WIZ WL＇ WIREA

[^1]
## MONDAY-(Continued)

R-A. \& P. Gypsies
KSD WBEN WCAE WCSH WDAF WEAF WEEI WGY WHO WJAR WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ B-Sinclair Minstrels
KDKA KFYR KOIL KPRC KSO KSTP KTBS KTHS KVOO KWCR KWK WAII WBAL WBZ WBZA WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WIS WJAX W.IDX WJR WJZ WIY WLH WMC WOAI WREN WRYA WSB WSM WSMB WTMJ WWNC

## E-9:15 p.m., C-8:15, M-7:15, P-6:15 C - The Mills Brothers <br> CKOK KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WGN WHAS WHK WJAS WJSV WKBW WKRC WNAC WOKO WSPD

 CKOK KMBC KMOX WABC WADC
WBT WCAO WCAU WEAN WFBL WGN WHK WJAS WJSV WKBW WKRC WNAC WOKO WOWO WSPD R-Paul Whiteman and Orchestra KDYL KFI KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTAR KTHS WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEL WFAA WFBR WFLA WGY WHO WIBA WIOD WJAR WJAX WJDX WKY WLIT WMAQ WAIC WOAI WOC WRC WRVA WSAI WSB WSM WSMB W'IAG WTAM WTMJ WWJ WWNC B - Jack Frost's Melody Moments KDKA WBAL WENR WGAR WHAM WJR WJZ WLW

E-10:00 p.m., C-9:00, M-8:00, P-7:00 R-Contented Program
CFCF CKGW KPYR KPRC KSD KSTP WBEN WCAE WDAF WEAF WEBC WENR WFAA WFLA WGY WHO WIOD WJAX WKY WMC WOAI WOC WRVA WSAI WSB WSM WTAM WTMJ WW.

## C-Columbia Revue

CFRB CKOK KLRA KLZ KMBC KSCJ KSL KTRH KTSA KVOR WAAB WABC WADC WBBM WBCM WBIG WBRC WBT WCAH WCAO WCAU WCCO WDAE WIBBJ WDOD WDIRC WDSU WFBL WFBM WFEA WGST WHAS WHEC WIIK WHP WJAS WJSV WKBH WKBN WhBW WLBW WLBZ WMBD WMT WNAX WNOX WODX WOKO WORC WPG WQAM WREC WSJS WSPD WTOC B-The Sizzlers, Harmony Trio
KDFA KDYL KFSD KGllL KGIR KOA KOLL KsO KWCR KWF WBAL WCKY WGAR WJR WJZ WMAQ WREN WSYR

E-10:15 p.m., C-9:15, M-8:15, P-7:15 B - Vic and Sade
KDYL KFSD KGO KOA KWCR KWK KYW WBAL WCKY WJZ WREN WSYR

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C - Edwin C. Hill
CFRB CKOK KIRA KIZ KMBC KMOX KSC. KTRH KTSA KVOR WAAB WABC WADC WBCM WBIG WBRC WB' WCAH WCAO WCCO WDAE WDBJ WDOD WDRC WDSU

WFAN WFBL WFBM WFFA WGST WHAS WHEC WHP WIP WISN WJAS WJSy WKBH WKBN WKBW WLBW WLBZ WMBD WNAX WNOX WODX WOKO WORC WQAM WREC WSJS WSPD WTOC

## B - Alice Joy and Oid Stager

CFCF KOIL KSO IiWCR KWK WBAL WCKY WGAR WHAM WJR WJZ WREN WSYR
R-National Radio Forum
KECA KGA KPO KSD KTAR KTBS WBEN WCSH WDAF WEAF WEEI WLNR WFBR WFLA WIBA WIOD WIS WJAR WJDX WKY WOAI WRC WRYA WSAI WTAG WTAM WWJ WWNC

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

 C-Myrt and MargeKDB KERN KFBK KFPY KFRC KGB KHJJ KJ.Z KMBC KMJ KMOX KOIN KOL KSL KYI KWG WBBM WCCO WDSU WFBM WHAS WLAC

## E-11:00 p.m., C-10:00, M-9:00, P-8:00

 C - Howard Barlow's SymphonyCFRB CKOK KPAB KFI KLZ KMBC KSCJ KSL KTRH KVOR WAAB WABC WdDC WBCM WBRC WBT WCAO WDOD WDRC WDSU WPAN WrAN WTBM WHK WIBW WICC WIP WISN WJAS WJSD WKBN WKBW WIBWV WIBZ WMBD WNAX WODX WOKO WORC WQAM WSBT WSIS WSPD WTAR WTOC R-Ted Weems and Orchestra
KFYR KGO KOA KSD WBEN WCAE WCKY WDAF WFAF WEBC WFBR WGY WHO WIBA WJAR WOC WRC WTAG WTAM WWJ

## B - Amos ' $n$ ' Andy

KDYL KFI KFSD KGO KGW KHQ KOA KOLL KOMO KPlRC KSTP KTHS KWK IBBAP WDAF WENR WJDX WKY WMAQ WMC WOAI WREN WSB WSM WTM.
E-11:30 p.m., C-10:30, M-9:30, P-8:30 C-Guy Lombardo and Orchestra
CFRB CKOK KFAB KFH KLZ KMBC KMOX KSCJ KSL KTRH KVOR WAAB W aBC WADC WBCM WBRC WBT WCAO WCAU WCCO WDOD WDRC WDSU WEAN WFBM WHK WIBW WICC WISN WJSV WKBN WKBW WLBW WLBZ WMED WNAC WODX WOKO WORC WPG WQAM WSBT WSUS WSPD WTAR WTOC
R-Jack Denny and Orchestra
WEAF WFBR WJAR WRC WTAG WTIC
R-Voice of Firestone
KDYL KFI KFSD KFYR KGHL KGIR KGO KGU KGW KHQ KOA KOMO KSTP ITTAR WDAY WEBC WIBA WTMJ
E-12:00 p.m., C-11:00, M-10:00, P-9:00 C Abe Lyman and Orchestra
CKOK KHAB KLZ KMBC KMOX KRLD KSCJ KSL KTRH KYOR WABC WBRC WBT WCAU WCCO WDOD WDSU WIBW WHCe WISN WJSV WKBW WLBW WMBD WNAC WNAX WOKO WPG WSBT WSPD WTOC

## B - Freddie Martin and Orchestra

KDKA KOLL KWCR KWK KYW WBZ WBZA WGAR WJZ WRC WRE
$\mathbf{R}$ - The Goldbergs
KDYL KECA KEX KGA KJR KOA Kl'O

## TUESDAY

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


#### Abstract

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C - H. V. Kaltenhorn CKOK KFI KSC.J KSL KTRH KVOR WAAB WABC WADC WBBM WBCM WBIG WBRC WBT WCAO WDAE WDBO WDOD WDRC WDSU WEAN WFEA WHRC WICC WISN WJAS WISV WKBH WKBN WKBW WLBW WLBZ WNAX WODX WOKO WORC WQAM WSB'T WSFA VSJS WSPD WTAQ WTTAR WTOC R - Waldori-Astoria, Sec Monday


E-6:15 p.m., C-5:15, M-4:15, P-3:15
C- Reis and Dunn, See Monday
E-6:30 p.m., C-5:30, M-4:30, P-3:30 R - Mid-Week Hymn Sing KFYR KGO KOA KOMO KTBS KTHS KVOO WBEN WDAF WEAF WFASR WFI WIS WMAQ WMC HOAI WPTE WSB WSMB WTAG HWNC

## E-6:45 P.m., C-5:45, M-4:45, P-3:45 R - Back of the News <br> WBEN WEAF WFBR WFI WIS WJAR WPTF WRC WSM WTAG WWJ <br> B - Lowell Thomas, See Monday <br> B - Orphan Annie, See Monday <br> C - Just Plain Bill, See Monday

E-7:00 p.m., C-6:00, M-5:00, P-4:00 R-James Melton, Tenor
KDYI KFSD KFYR KGO KHQ KOA KOMO KTBS WBEN WCSH WDAF WDAY WEAF WEBC WFBR WFI WIBA WJAR WMAQ WRC WSAI WTAG WWJ
C Myrt and Marge, See Monday
B - Amos ' $n$ ' Andy, Sce Monday

## E-7:15 p.m., C-6:15, M-5:15, P-4:15 C - Buck Rogers, See Monday <br> R - Wheatenaville, Sce Monday

KDK: KDYL KECA KEX KFSD KFYR KGA KGIR K.JR KOA KOIL KPO KTBS KVOO KWCR WBZ WB/A WENR WILA WIBA WIS WJDX WJZ WMC WOAI WPTF WHEN WSB WSM WSMB WWNC
E-7:30 p.m., C-6:30, M-5:30, P-4:30 c-Keller, Sargent and Ross
CHOK KMBC KMOX WABC WCAO WCAU WDRC WGN WGR WHAS WHK WJAS WJSV WKRC WNAC
E-7:45 p.m., C-6:45, M-5:45, P-4:45 B - Octavus Roy Cohen Mystery
KDKA KOIL KSO KWCR KWK KYW WBZ WBZA WGAR WJZ WREN WSYR
C-Boake Carter, See Monday
R - The Goldbergs, See Monday

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

 $\mathbf{C}-$ Easy AcesCKOK KMBC KMOX WABC WADC WCAO WCAE WCCO WEAN WFBL WFBM WGN WGR WHAS WHK WJAS WJSV WKRC WNAC WOKO WSPD

## R-Blackstone, Sanderson-Crumit

KSD KSTP KYVV WBEN WCAE WCSII WDAF WTAF WEBC WEEI WHI WGY WHO WJAR WOC WOW

TUESDAY－（Continued）
WRC WSAI WTAG HTAM WWJ B－Eno Crime Club
KDKA KOIL KSO KWCR KWK WBAL，WBZ WBZA WGAR WHAM WJZ WLW WMAQ WREN

## E－8：15 p．m．，C－7：15，M－6：15，P－5：15 c Magic Voice

CKOK NMBC KMOX WABC WADC HC． 0 HCAU WDRC WRAN WFBL WFBM HGN WGR WHAS WHK WHAS WJSY WKRC WNAC WOKO WSPD

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

CKOK KMBC KMOX WABC WADC WBCM WCAH WCAO WCAU WCCO WHB1，WFBM WGN WGR WHAS WHEC WHK WISN WJAS WJSY WKBH WKRC WOKO WOWO WSPD R－Wayne King and Orchestra
hSD kSTP WBEN WC：LE WCKY WCSH WEAF HTBC UREI WFBR WFI WGY WHO WIBA WJAR WMAQ WOC WOW WRC WSAI HTAG WTAM WTMJ WWJ

## B－Horlick－Health Talks

KDKA KOIL KWCR KWK WBAL WBZ WBZA WGAR WHAM WJZ WIS WLW WREN

## E－8：45 p．m．，C－7：45，M－6：45，P－5：45 C－Abe Lyman and Orchestra

CKOK KMHC KMOX WABC WADC WCAO WCAG WDRC WTAN WFBI IVFBM WGN WGH WILAS WHK WIAS WISV WhRC WNAC WOLO WOWO WSPD
B－Phillips Lord，See Monday

## E－9：00 p．m．，C－8：00，M－7：00，P－6：00 c－Chesterlield，See Monday

R－Ben Bernie and Orchestra
KFYR KOA KPRE KSTP WBAP WBEN WCAE WCKY WCNII WDAF WDAY WEAF WEEI WPBR IVPI WGY WHO WJAR WKY WIS WMC WOAI WOC WOW WRG WRVA WSAI WSB WSM WSMB WTAG HTAM WWJ

## B－Household Musical Memories

KDKA KSO KWK WBAL WB／ WBZA WHAM HJR WJZ WMAQ WREN

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

ChOK KDB KERN KFBK KFII KFPY KFRC KGB KHL KLRA KLZ KMBC KMJ LMOX KOIN KOMA KRLD kSL kTREI KTS．kVI KWG WABC WADC WBlRO WB＇WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WEAS WPBL WFBM WGN WGST WIIAS WILEC WHK WJAS WJSV WKBW WKRC WLAC WVAC WOKO WOHO WQAM MREC WSPD WTAR WTOC

## E－9：30 p．m．，C－8：30，M－7：30，P－6：30

 R－Ed Wynn－Don VoorheesCFCF KDYL KFI KIED KFYR
 KOMO KIPC KSD KSTD KTAR KTBS KTHA KVOO MBAP HBEN WGAE WCSH WDAF WDAY WEAF WEBC WEEI WRBR WFI WFLA WGY WHO WIBA WIOD WIS WAAR WJAX WJDY WKY WLW WMAQ WMAC HOAI HOO WOW WRC WhVA WSB WSU WSMB WTAG WTAM WTMJ WWJ WWNC

C－California Melodies
CFRB CKOK KFH KL／KMBC KMOX KSCJ KSL KTRH KTSA WABC WBCM WBIG WBRC WBT WCAO WCAU WCCO WDAE WDOD WDRC WEAN WFBM WFEA WHEC WHK WIBW WJAS WKBH WKBN WLBW WLBZ WMBD WNAC WNAX WODX WOKO WQAM WSJS WTAR W＇OC
B－Willard Robinson and Orchestra
KDKA KSO KWK WBAL WBZ WBZA WC＇KY WENR WJR WJZ WREN WSY＇R

E－10：00 p．m．，C－9：00，M－8：00，P－7：00 C－Five Star Theatre
KIRA WABC WBIG WBT WCAO WCAU WIDRJ WDOD WDRC WDSU WE．IN WFBL WFEA WHP WICC WJAS WJSV WKBW WL：IC WMBG WNAC WNOX WOBUT WOKO WORC WliEC WSJS WTA！

## R－Lucky Strike Hour

KDYL KFL IEPSD KFYR KGO İGU KGW KHEQ KOA KOMO KPRC KSD KSTP KTAR KTBS KTHS W゙API WBAP WBEN WCAE MCSH WDAF WDAY WHAF HEBC WUL WHNR WFBR WFI WHLA WGY WHO JIBA WIOD WIS WJAR WJAK WJDN WKY WIW WNCC WOAI WOC WRC WRVA WSB WSNY WSMB WTAC WTAM WTAJ WWJ WMNC $\mathrm{B}-$ Sigmund Spaeth，Tune Detective CFCF KDKA KOLL KSO KWCR ぶWK WPAI，WCKY WGAR WHAM WJR WJZ WMAQ WREN WSYR

E－10：15 p．m．，C－9：15，M－8：15，P－7：15
B－Vic and Sade，See Monday
E－10：30 p．m．，C－9：30，M－8：30，P－7：30 C Edwin C．Hill，See Monday B－Ilomay Bailey，Soprano kSO KWCR KWK WBAL WCKY WGAl WHAM W．JR WJZ WMAQ WRFN

E－10：45 p．m．，C－9：45，M－8：45，P－7：45 C－Charles Carlile，Tenor
ClRB CKOK KPAB WAAB WABC WADC WBCM WDRC WFAN WFBL WFEA WIYEC WHK WIP WVIAS W．ISV NEBN WKBW WLBZ WOKO WORC WIG WSB＇T WSID

## B－Professor Jack McLallen

CKGW KDKA KOIL KSO KWCR KWK WBAI，WCKY WGAR WHAM WJR WJZ WMAQ WIREN WSYR
C－Myrt and Marge，See Monday
E－11：00 p．m．，C－10：00，M－9：00，P－8：00
C－Howard＇Barlow，Sec Monday
B－Amos＇n＇Andy，See Monday
B－Jack Fulton，Tenor
CHGM WBAL $W F I A$ WGAR WHAM WIS WJZ WSYR WHNC

## E－11：15 p．m．，C－10：15，M－9：15，P－8：15 B－Heart Songs，Women＇s Octet

 CFCF CHGW KMYR KGIK KPRC KSTP KTBS KWK WBAL WCKY WESR WFIA WGAR WHAM WIBA Wls W．jR WJ／h WMC WRC WREN WSM WSYI WWNC
## B－Octavus Roy Cohen Mystery

KDVY，KECA KEX KFYR KGA K．IR KOA KPO KPRC KSTH KTBS WDAY WEBC WFAA VIBA WJDX WKY WMC WO．H WSB WS．vB WTMJ

E－11：00 p．m．，C－10：30，M－9：30，P－8：30 C－Isham Jones and Orchestra
CFRB CKOK KFAB KFH KIZ KMBC ISSCJ KSL IITRH WAAB WABC WADC WBCM WBRC WBT WC：10 WC．A WCCO WDAE WDBO WDOD WDRC WDSU WEAN WFBM WHEC WHK WIBW WICC WISN WJSV WKBN WKBW WLBW WLBZ WMBD WNAX WODX WOKO WORC WPG HOAM WSIS WSPD WTAR WTOC WWVA

## E－12：00 p．m．，C－11：00，M－10：00，P－9：00 R－The Goldbergs，See Monday

 B－Cab Calloway and OrchestraKDKA KOIL KPRC KSO KTBS K以OR KWK WAPI WBZ WBZA WFLA WGAR WIOD WJR WJ\％WKY WMC WREN WSB WSM WSMB WWNC
C－Joe Haymes and Orchestra
（以OK KFAB KL／KMBC KSCJ KSL KTRH KVOR WABC WBRC WBT IV CAH WCAU WDAE WDOD WDSU WFBL WGST WHAs WHK WHI WISN WJAS WJSV WKBW WLBW WMBD WMT WNAX WNOX WOKO WI＇G WREC WSBT WSPD WTOC

## E－12：30 a．m．，C－11：30，M－10：30，P－9：30 R－Sam Robbins and Orchestra

WAP！WCAE WEAF WFBR WFI WFLA WIOD WJAR WMAQ WMC WRC WSB WSM WSMB WTAM WWNC
R Ben Bernie and Orchestra
KNI KESD KGO KHQ KOMO KSD KTAR

## WEDNESDAY

E－5：45 p．m．，C－4：45，M－3：45，P－2：45 B－Orphan Annie，Sce Nond：ly
E－6：00 p．m．，C－5：00，M－4：00，P－3：00
C－Vaughn DeLeath
CFRB CKOK KYH KMOX KSC． ISS，KTRH KYOR WAAB WABC WADC WBBM WBCM WBIG WBT WCAO WD．A WDBO WDOD WDRC WDSU WFAN WFEA WHEC WII WISN WJAS WJSY WKBH WKBN WKBW WLBW WL，BZ WNAX WODX WOKO WORC WQAA WSBT WSFA WSJS WSPD WTAQ WTOC
R－Waldorf－Astoria，See Monday
E－6：15 p．m．，C－5：15，M－4：15，P－3：15 C－Dick．Mansfield and Orchestra CPRB CKOK KFAB KFH KL／KSCJ KSL KTRH KYOR WAAB WADC WBCA WBIG WBRC WBT WCAO WDAL WDBJ WDOD WDRC WDSU WGR WGST WHAS WHEC WHP WLP WLSN WJJAS WJSV WKBH WLBW WLBZ WMT WNAX WNOX WODX WOKO WORC WOAS WREO WSB＇WSFI WSJS WSPD W＇TAQ WTOC

E－6：30 p．m．，C－5：30，M－4：30，P－3：30 R - Harding Sisters，Piano Duo SECA KEX KGA KJR KOA KPO KSD KTBS KTHS WBEN WCKY WDIF WEAF WFBK WIBA WIS WMAQ WMC WOAI WSB WTAG WWNC．

## E－6：45 p．m．，C－5：45，M－4：45，P－3：45

 R－Andy SannellaKECA LES IFSD KGA KJR KPO KSD HBEN WCAE WCSH WEAF WFBK WFI WHO WIS WJ．AR WMAQ

WEDNESDAY-(Con'd)
WMC WOC WOW WRC WSAI WSM WTaG WTAM
C - Just Plain Bill, See Monday
B - Lowell Thomas, See Monday
B - Orphan Annic, See Monday
E-7:00 p.m., C-6:00, M-5:00, P-4:00
C - Myrt and Marge, See Nonday
B - Amos 'n' Andy, Sue Monday
R-Mischa Weisbord, Violist
KDYL KFYR KGO KHQ KOA KOMO KST1 KTBS KYW WDAF WDAY WEAF VEBC WFBR WGY WHO WIBA WJAR WMC WOC WOW WRC WSAI WSB WSM WTAG WT:M

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C- Buck Rogers, Sce Monday
A - Wheatenaville, See Monday
B - Carson Robison, Barbasol
KDKA KOIL KllK WBAL VBZ WBZA WENR WJZ

E-7:30 p. m., C-6:30, M-5:30, P-4:30
B - Five Star Theatre, See Mondily
C - Dolph Martin, Sec Monday
E-7:45 p.m., C-6:45, M-5:45, P-4:45
C- Boake Carter, Sce Monday
R -- The Goldbergs, See Monday
E-8:00 p.m., C-7:00, M-6:00, P-5:00 C Whispering Jack Smith, See Mon. R - Royal Vagabonds, Ken Murray KSD HBEN WCAE HCSH WDAF WEAF WEET WFBR WGY WIAR WLIT WIS WOW W RC WSAI WTAG WTAM WTAC WWJ
B - Eno Crime Club, See Tuesday
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 - Kate Smith, See Tueshlay
R - The Shadow, Mystery Drama
WBEN WCSH WEAF IIEEI WFBR WGY WJAR WLIT WRC WTAG WTIC

## B - Harriet Lee and Leaders

KDKA KWCR KWK WBAL WPLA WIS WJAX WIZ WREN WWNC

E-8:45 p-m., C-7:45, M-6:45, P-5:45 C - Abe Lyman, Sce Tuesday
B - Phillips Lord, See Monday
E-9:00 p.m., C-8:00, M-7:00, P-6:00 C - Chesterlield, See Monday
R-Symphony Concert
KDYL KFL KFSD KFYR KGO KHQ KOA KOMO KSD KTAR KTBS KYOO WBEN HCAE WCSH WDAF WEAF WTBR WFLA WHO WIBA WIOD WIS WJAR WKY WIIT WMC WOAI WOC WOW WRC WSB WSM WTAG WTAM WWJ WWNC B - Sherlock Holmes
CFCE ChCH LIDKA KOIL KWCR KHK WBAL WBZ WBZA WGAR WHAM WJR WJZ WLS WLW WREN

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

CHOK KDB KERS KFBK KFH KFPY KFR( KCB KHJ KLRA KLZ KMBC KAJ KMON KOIN KOL にOMA KRLD KSCJ KSL KTRH

KTS. KVT KWG WABC WACO WADC WBIG WBRC WBT WCAO WCAU WCCO WDBJ WDOD WDRC WDSU WEAN WFBL WFBM WG. WGST WHAS WHK WIBW WISN WJAS WJSV WKBII WKBW WKRC WLAC WLBZ WMBG WMT WNAC WNAX WNOX WODX WOKO WOWO WREC WSPD WTAR

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C-Guy Lombardo-Burns and Allen CEOK LMBC KMOX KOMA KRLD KTRH KTSA WARC WADC WCAO WCAD WCCO WDRC WEAN WFBL WFBM WGN WHK WMAS WJSV WKBW WKRC WNAC WOKO WOWO WSPD
B - Morton Downey and Donald Novis KDKA KDYI, KFI KGHL KGIR KGO hGW KHQ KOA KOLL KOMO KPRC KTAR KTBS KTHS KVOO KWCR KWK WBAL WBZ WBZA WENR WFAA WGAR WHAM WIDX WJR WJZ WKY WLW WOAI WREN WSB WSM WSMB

E-10:00 p.m., C-9:00, M-8:00, P-7:00 c-old Gold-Fred Waring
CKOK KDB KERN KPBK KFPY KFRC KGB KHIJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMO hSL KTAT KTRH KTSA KVI KWG WAAB WABC WADC WBRC WBT WACLI WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WFBL WFBM WGN WGST WHAS WIHEC WHK WIBW WIAS WJSV WKBW WKRC WODX WOKO WOWO WCAM WREC WRR WSPD
R-Corn Cob Pipe Club
KDIL KFI KGHL KGIR KGO KGW KHQ KOA KOMO LSD WBEN WCAE WCSF WDUF WEAF WEFI WEXR WFBR WGY WHO WJAR WLIT WLW WOC WOW WRC WRVA WTAG WTAM WTIC HWJ
B-D. W. Griffith's Hollywood
KDK. KOIY KPRO liWh WBAL UBZ WBLA WPAA WGAR WIR WJZ WKY WMAQ WMC WREN WSB HSMB

E-10:15 p-m., C-9:15, M-8:15, P-7:15 B-Alice Joy, Contralto
KFYR KSO KTBS KWCR WBAL WBL WBZA WCKY WDAY WEBC WFLA WGAR WIBA WIS WJZ WKY WREN WSB WSMB WWNC
E-10:30 p.m., C-9:30, M-8:30, P-7:30 R Carveth Wells
KDYI, KPYJR KGA KGHL, KGIR hOA KPRC KSD KSTP KTBS KTHS WDAF WDAY WEAF WEBC WFAA WFBR WHO WIBA WKY WMAQ WOAI WOC WOW WRVA WTMJ
C - Edwin C. Hill, Sec Monday
E-10:45 p.m., C-9:45, M-8:45, P-7:45 C- Fray and Braggiotti, Piano
CFRB CLOK WAAB WABC WIDC WBCM WCAU WDRC WFBL WFEA WHEC WHK WJAS WJSV WKBW WLBW WLBZ WOKO WORC WOWO WSB'T WSPD
C - Myrt and Marge, See Monlay
E-11:00 p.m., C-10:00, M-9:00, P-8:00 C-Howard Barlow, See Monday
R Nellie Revell, Interview
KSD WCAE WCKY WEAF WFBR WGY WJAR WLIT WRU WTAM WHJ

B - Amos 'n' Andy, See Monday
E-11:30 p.m., C-10:30, M-9:30, P-8:30 C - Isham Jones, See Tuesday
B-Cesare Sodero and Orchestra
KSO KWCR KWK VBAL WBZ WBLA WCKY WENR WGAR WHAM WJZ WREN

E-12:00 p.m., C-11:00, M-10:00, P-9:00 C - Eddie Duchin and Orchestra CKOK KPAB KLZ KMBC KSCJ KTRH KVOR WABC WBRO WBT WCAEI WCAC WOCO WDAE WDOD WDSU WEAN WFBL WGST WHAS WHK WIIP WIOC WISN WJAS WISY WKBW WLBW WMBD WMT WNAC WNAX WNOX WOKO WORC WPG WREC WSBT WSPD WTOC
R - The Goldbergs, See Monday
B-Ben Bernie and Orchestra
KDKA KFYR KOIL KSO KWCR KWK WBZ WBZA WEBC WEXR WFLA WGAR WIBA WIOD WJZ WRES WWNC

E-12:15 p.m., C-11:15, M-10:15, P-9:15 8 - Sherlock Holmes
KDYI, KHI KFSD KGHL KGIR KGO KGW KHQ KOA KOMO KTAR

## THURSDAY

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

E-6:00 p.m., C-5:00, M-4:00, P-3:00 $\mathbf{C}$ - H. V. Kaltenborn, See Tuesday<br>R - Waldort-Astoria, See Monday

E-6:15 p.m., C-5:15, M-4:15, P-3:15
C Harold'Stern and Orchestra C-Harold Stern and Orchestra CFRB CKOK KFAB KFH KLZ KMBC KSCJ KSL hTRH KVOR WAAB WADC WBIG WBRC WBT WCAU WDAE WDOD WDRE WDSU WGR WHEC WISN WJAS WISV WKBH WLBW WLBZ WNAX WOhO WORC WQAM WSBT WSJS WSPD WTAC WTAR WTOC
E-6:30 p-m., C-5:30, M-4:30, P-3:30 R - Donald Novis, Tenor
KECA KEX $\operatorname{KFSD}$ KFYR KGA KJR KO: KPO KSD KT13S KTLIS WIPI WBEN WDAF WDAY WEAF WIBA WIS WJAR WMAQ WMC WOAL WRC WSAI WSB WSMB WTAG WWNC

E-6:45 p.m., C-5:45, M-4:45, P-3:45
C- Just Plain Bill, See Monday
B - Lowell Thomas, See Monday
B - Orphan Annie, See Monday
E-7:00 p.m., C-6:00, M-5:00, P-4:00 C - Myrt and Marge, Sce Monday
B - Amos 'n' Andy, See Monday
E-7:15 p.m., C-6:15, M-5:15, P-4:15
C - Buck Rogers, See Monday
A - Wheatenaville, See Monday
B - Carson Robison, See Wednesday
E-7:30 p.m., C-6:30, M-5:30, P-4:30
C-Keller, Sargent, See Tuesday
R - Van and Don, See Monday
E-7:45 p.m., C-6:45, M-5:45, P-4:45
B - Murder Mystery, See Tuesday
C - Boake Carter, See Monday

## THURSDAY-(Continued)

E-8:00 p.m., C-7:00, M-6:00, P-5:00 R-Rudy Vallee and Orchestra CFCF CKGW KDYL KFI KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTAR WAPI WBAF WBRN WCAE WCKY WCSI WDAF WDAY WEAF WEBC WEEI WFBR WFI WFI A WGY WHO WIOD WIAK WJAX WJDX WKY WMAQ WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WW,
C - Easy Aces, See Tuesday
E-8:15 p.m., C-7:15, M-6:15, P-5:15 C - Whispering Jack Smith
CKOK KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFRL WFBM WGN WGR WHAS WHK WJAS WJSY WKRC WNAC WOKO WSPD

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C - Kate Smith, Sce Tuesday B - Rin Tin Tin Thriller
KDKA KOIL KWK NBZ WBZA WGAR WHAM WJZ WLS WLH WREN

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C - Abe Lyman, Sce Tuesday
B - Howard Thurston, Magician
KDKA kOIL KWK WBZ WBZA WGAR WHAM WJR WJZ WLS WLW WIREN

E-9:00 p.m., C-8:00, M-7:00, P-6:00 R - Maxwell House Showboat
KDYL KFI kFSD KGO kGW KHQ KOA KOMO KPle KSD KSTP KTAR KTBS WAPI WBEN WCAE WCKY WCSH WDAF WEAF WEEI WFBR WFI WFLA WGY WHO WIOD WIS WJAR WJAY WJDX WKY WMAQ WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ IVWJ WWNC
C - Chesterfield, See Monday
B - Death Valley Days
KDKA KOII, KWK WBAL WBZ WBZA WGAR WHAM WJR WJZ WLS WLW WREN

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

E-9:30 p.m., C-8:30, M.7:30, P-6:30 C-Col. Stoopnagle and Budd
CKOK KDB KERN KFBK KPH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KSCJ KSL KTRH KTAT KTSA KVI KWG WABC WADC WBRC WBT WCAH WCAO WCAU WCCO WDAE WDBO WDRC WDSU WEAN WFBL WFBM WGN WGST WHAS WHEC WHK WJAS WJSV WKBW WKRC WLAC WNAC WOKO WOWO WQAM WREC WRR WSPD WTAR

## B - Len Joy's Dancing Strings

KDKA KFND KOIL KSO KWCR KWK WBAL UBZ WBZA WENR WGAR WIIAM WJZ WREN

E-10:00 p.m., C-9:00, M-8:00, P-7:00 B - Wilfred Glenn, Basso
CFCF CKGW KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR WHAM WJR WJZ WMAQ WREN

C - Five Star Theatre, Sce Tuesday
R-Lucky Strike, Sec Tuesday
E-10:15 p.m., C-9:15, M-8:15, P-7:15 B - Vic and Sade, See Monday

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C-Boswell Sisters
CFRB CKOK KLRA KIZ KMBC KSCJ KTRII KTSA KVOR WAAB WABC WADC WBBM WBCM WBIG WBRC WBT WCAH WCAO WCAU WCCO WDAE WDBJ WDOD WDRC WDSU WEAN WFBL, WFBM WFEA WGST WHAS WHEC WHK WHP WICC WISN WJAS WISV WKBH Whibn wKBW WLBW WIBZ WMBD WMT WNAX WNOX WODX WOKO WORC WOWO WPG WQAM WREC Wsis WSPD WTOC
8 - Ilomay Bailey, Sce Tuesday
E-10:45 p.m., C-9:45, M-8:45, P-7:45
C - Myrt and Marge, See Monday
B - Prof. Jack McLallen, See Tuesday
C - Morton Downey
CKOK WAAB WABC WADC WBCM WCAU WDRC WLAN WFBL WFEA WHEC WHK WICC WTJAS WISV WKBW WLBW WLBZ WOKO WORC WOWO WSPD

E-11:00 p.m., C-10:00, M-9:00, P-8:00 R - James Melton, Tenor
KSI) WCAE WCKY WEAF WBBR WRC WSAL WTAG WW.I
C - Howard Barlow, See Monday
B - Amos ' $n$ ' Andy, See Monday
E-11:15 p.m., C.10:15, M-9:15, P-8:15 B - Murder Mystery, See Tuesday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 B - Cesare Sodero and Orchestra
CFCF CKGW KDYL KEX KFSD KFYR KGA KJI KOA kOIL KPO KSO KWCR KWK WBAL WBZ WBZA WEBC WFLA WGAR WHAM WIBA WIS WJAS WJに WIZ WMC WRC WRFN WSB WSMB WHWC
C-Isham Jones, See Tuesday
R - Jack Denny, See Monday
E-12:00 p.m., C-11:00, M-10:00, P-9:00
R - The Goldbergs, See Mondity
C - Eddie Duchin, See Vednesday

## FRIDAY

E-5:45 p.m., C-4:45, M-3:45, P-2:45
B - Orphan Annie, See Mondiy
E-6:00 p.m., C-5:00, M-4:00, P-3:00 C - Vaughn DeLeath, See Whednesday R - Waldort-Astoria, See Monday

E-6:15 p.m., C-5:15, M-4:15, P-3:15 B - Del Lampe, Sce Monday

E-6:45 p.m., C-5:45, M-4:45, P-3:45
C - Just Plain Bill, See Monday
B - Lowell Thomas, See Monday
B - Orphan Annie, See Monday
E-7:00 p.m., C-6:00, M-5:00, P-4:00
C - Myrt and Marge, See Montay
B - Amos 'n' Andy, See Monday
R-Donald Novis, Tenor
KDYL KFYR KGO KOA KOMO KSTP KTBS KYW WAPI WCSH WDAF WDAY WEAF WEBC WEEI WFBR WGY WIBA WJAR WMC WOW WRC WSAI WSB WSM WT, M WWJ
E.7:15 p.m., C-6:15, M-5:15, P-4:15 C - Buck Rogers, See Monday

E-7:30 p.m., C-6:30, M-5:30, P-4:30
B - Five Star Theatre, See Monday
C - Dolphin Martin, Sce Monday
E-7:45 p.m., C-6:45, M-5:45, P-4:45
C - Boake Carter, Sce Monday
( - The Goldbergs, See Monday
E-8:00 p.m., C-7:00, M-6:00, P-5:00 C Trade and Mark
CKOK KLZ KMBC KMOX KSL WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WGR WHAS WHK WJSV WKIRC WNAC WOKO WSPD
R-Cities Service Concert
CKGW KDYL KOA KPRC KSD KSTP KTBS KYW WBEN WCAE WCSH WDAF WEAF WEBC WFEI WrAA WrBle WGY WHO WJAR WKY WIITT WOAI WOC WOW WIRC VSAI WTAG WTAM WTIC WTMJ WW.J
B - Nestle's Program
KDKA KOLI KWK WBAI WBZ WBZA WGAR WHAM WJR WJZ WLS WREN

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C-Singin' Sam, See Mond:ay

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

CKOK KDB KERN KPBK KFPY KFRC KGB hHJ KLZ KMBC KMJ KMOX KOIN KOL kSL KYI KWG WABC WADC WCAO WCAU WCCO WDRC WEAN WFBI, WFBM WGN WGR WHAS WHK WJAS WJSV WKRC WNAC WOKO WOWO WSPD B - Horlick Program, See Tuesday

## E-8:45 p.m., C-7:45, M-6:45, P-5:45 8 - Howard Thurston, See Thursday

## E-9:00 p.m., C-8:00, M-7:00, P-6:00 C - Chesterfiefid, See Monday B - First Nighter, Drama

KDKA KDYL KFI KFSD KGO KGW KILQ KOA KOIL KOMO KPIRC KSTP hTAR KTBS KWK WAPI WBAL WBZ WBZA WCKY WEBC WGAR WHAM W.JR WJZ WKY WLS WOAI WREN WSB WSM WSMB WTMJ
R - Three California Nuts
WCSII WEAF WEEI WJR WTAG WTIC

E-9:15 p.m., C-8:15, M-7:15, P-6:15 C - Mary Eastman, Soprano
CFRB CKOK KFH KLRA KLZ KMBC KMOX KSCJ KSL, KTRH KTSA KVOR WAAB WABC WACO WADC WBCM WBIG WBT WCAII WCAO WCCO WDAE WDBJ WDOD WDRC WDSU WEAN WFBL WFBM WFEA WGST WHAS WHEC WHP WIBW WICC WISN WJAS WISY WKBH WIBBW WTBW WLBZ WNAX WNOX WODA WOKO WORC WQAM WREC WSBT WSJS WSPD WTOC

E:9:30 p.m., C-8:30, M-7:30, P-6:30 R - Pond's Program
KSD WBEN WCAE WCSH WDAF WEAF WENR WFBR WGY WHO Witar wlit woc wow wre wsai WTAG WTAM WWJ

## FRIDAY－（Continued）

## C－Edwin C．Hill，Inside Story

CKOK KFH KLILA KMBC KMOX KOMA KRLD KTRH KTSA WABC WADC WBCM WCAH WCAO WCAU WCCO WDRC WEAN WFBI WTBM WGN WHAD WHAS WHK WHP WIBW WJAS WJSV WLBE WKBW WKRC WLBW WLBZ WMBD WNAC WOKO WORC WOWO WREC WSPD

## B－Armour Program

KDKA KDYL KFI KGO KGW KHQ KOA KOIL KOMO KIRC KSO KiNlP KWK WAPI WBAL WBZ，IVBZ WEBC WFAA WGAR WHAM WIOD WJAX WJR WJZ WKY WMAC WMC wOAI WREN WRVA WSB WSM WSMB WTMJ WWNC

E－10：00 p．m．，C－9：00，M－8：00，P－7：00 R－Chevrolet－AI Jolson
KDYI KFI KFSD KPYR KGHI． KGIR KGO Kiw KHQ KOA KOMO hPRC KSD KSTP KTAR KTISS KTHS KVOO WBEN WCAE WCSH WDAF WDAY WEAF WEBC EEEI WENR WFAA WFBR WFIA WGY WHO WIBA WIOD WIS WJAR WJAX WKY WLIT WLW WaIC WOAI WOC HOW WRC WRVA WSB WSM WSMB WTAG WTAM WTIC WTMJ IVWJ WWNC

## B－Alice Joy

CFCF CKGW KOIL，KSO KWCR KWK WRAL WCIY WHAM WIZ WMAQ WREN
C－Columbia Revue，See Monday
E－10：15 p．m．，C－9：15，M－8：15，P－7：15 B－Vie and Sade，Sec Monday

E－10：30 p．m．，C－9：30，M－8：30，P－7：30 B－Concert Orchestra
KDKA KPRC KSO KWCR WBAL WGAR WHAM WJZ WIEN

E－10：45 p．m．，C－9：45，M－8：45，P－7：45 C－Myrt and Marge，Sce Monday R－Borrah Minevitch，Harmonica CKGY KSD WBEN WCKY WCSH WDAF WEAF WEEI WIRR WGI WJAR WOW WS．II WTAG WTAM WIIC WW．I
C－Fray and Braggiotti，See Weduesday
E－11：00 p．m．，C－10：00，M－9：00，P－8：00 C－Howard Barlow，See Monday R－Anson Weeks and Orchestra
KSD WCAE WCKI WEAF WFBR WRC WTAG WWJ
B－Amos＇ $\boldsymbol{n}$＇Andy，See Monday
E－11：30 p．m．，C－10：30，M－9：30，P－8：30 C－Abe Lyman and Orchestra
CFRB CKOK KFAB KFH KL／ KMBC KSC：ISSL KTRH KYOR WAAB WABC WADC WBCM W BRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC W DSU WJAN WFBA WHEC WHK HICC WISN WJSY WLBW WLBZ WNBD WNAX WOKO WORC WUAN WSBT WSJS WSPD WTAR WTOC

## E－12：00 p．m．，C－11：00，M－10：00，P－9：00 C－Ben Pollack and Orchestra

CKOL KFAB KLZ KMBC K゙RID KSCJ KSL K＇IRH KVOR WIABC WBRC WBT WCAU WCCO WDAE WDOD WDSU WICC WISN WISV WLBW WMBD WNAC WNAN WOKO MPG WSBT WSPD WTOC

R－The Goldaergs，See Monday
B－Cab Calloway，See Tuesday

## SATURDAY

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

E－6：00 p．m．，C－5：00，M－4：00，P－3：00 C－America＇s Grub Street
CFRB CKOK KFAB KFII KSCJ KSJ ITRRH KVOR WAAB WABC WADC WBBM WBCM WBIG WBRC WBT WCAO WCAU WCCO WDAE WDB（） WDOD WDRC WDSU WEAN WFLA WHEC WICC WIS W WJSV WKBH WLBW WIBZ WNAX WOKO WORC WGAM WSBT WSFA WSJS WSPD WTIQ WTAR WTOC WWYA
R－Waldorf－Astoria，Sce Monday B－Litile German Band
KDKA KOII，KSO KWCR WBAL WENR WJR WJZ WLEEN

## E－6：30 p．m．，C－5：40，M－4：30，P－3：30 B－Laws That Safeguard

KD ${ }^{\prime} \mathrm{L}$ KEX KFSD KFYl KGA KGIR K゙JR KOd KOIL KPO KPlRC KSO KSTP KTAR FTBS KTHS KWCR KWK WBAL WBZ WBZA WCKY WEBC WFLA WJBA WIOD WIS WJAX WJR WJ／WKY WMAQ WMC WOAI WHEN WRVA WS13 WSMB WWNC

E－6：45 p．m．，C－5：45，M－4：45，P－3：45 B－Fields and Hall
HBAI，WGAR WHAM WIOD WIS WJJ WJZ WMC
B－Orphan Annie，See Monday

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

KMIBC KRLD KTRH WABC WADC WBBM WBCM WBIG WBIC WBT WCAO WCAU WDAE WDBO WDOD WDRC WDSU WHAN WJBII WFEA WGR WILEC WHI WICC WJAS WJSV WI．BW W＇LBZ WNAC WOKO WQAM WSFA WSPD WTAR WWVA B－Anson Wecks and Orchestra CFCF CKGW KDKA KSO KWK WBAL WBK WBZA WCKY WhLt WGAR WHAM WJZ WLW WOAI WS！WHNC

## E－7：15 p．m．，C－6：15，M－5：15，P－4：15

 C－William Hall，BaritoneCFRB CKOK KTlRH WaBC WaDC WBCM WBIG WBRC WCAO WCAU WDAF WDOD WDRC WDSU WLAN WFBM WFEA WGR WICC WJAS W．ISV WLBW WLBZ WNAC WOKO WORC WQAM WSFA WSJS WSPD WTAR WHVA
R－Ozzie Nelson and Orchestra
CKCW KGO KOA WBFN WACE W（KY WDAF WL．\F WFBR WEI WHO WJ．AR WOC WiAG WWJ
B－Merle Thorpe Talk
KDYL KDCA KEX KFSD KFYR KGA KJR KOA KOHLKDO KPRC K゙sl＇V KTBS KWCR KVK WHAI WBZ WBZ W WEBC WEAR WlPLA WGAR WHAM WIBA WIOD WIS WIIX W．TZ WHY WMC VOAI WREN WSB WSMB WWNC

[^2]WDOD WDRC WDSU WEAN WFBM WFFA WGR WHEC WISN WIAS WJSV WKBH WIBW WTBK WN゙AC WOKO WQAM WSEA WSPD WTAQ WTAR WTOC
B－Murder Mystery，Sec Tuesday
E－8：00 p．m．，C－7：00，R－6：00，P－5：00
C Easy Aces，Sce Tuesday
R－Archer Gibson，Organist
KEX KGI KIR KOA KPO KPRC KSD KTBS WBEN WDAF WEAF WPBC：WEEI WFI WHO WIBA WIS WJAR WMAQ VABC WOAI WOC WSB WSMIS WTAG WTAM WWJ WWSC
B－American Taxpayers＇League
KDKA KDYL KLX KFSD KГYR KGil KGHL KgIR KJi？KOA KOJI， Klo KIRC KTAR KWに Wlle WBAI WCKI WDIY WEBC WEI． WHAME WIBA WIOD WJAX WJIOX WJZ WTS WHC W＇REN WSM WSMB WWNC

[^3]
## E－8：30 p．m．，C－7：30，M－6：30，P－5：30 C－Alexander Haas Gypsy Ensemble

CFRB（KOK KFH liL\％IKMBC KSCH KSL KTRH KTSA KVOR WABC WADC WBCN WBLG WBRC WBT WCAO WCCO WDAE WDBO WDOD WIDRC WDSU WFAS WFBM WHEA WGR WIIEC WICC WISN W゙JsV WKBH WLBW WTABZ WNAS WOLO WORC WPG WQAM WSBT WAFA USPD WTAQ WTAR WTOC R－Economic Worid Today
KDYL KFsi）KFYR KG\＆KFHI， KGIl KJR KOA KPO KIRG KSD KSTU WAPI WBHP WBEN WCSH WDAF WDAY WEAF WEBC WEEI WFRR WFI WFFLA WGY WIIO WTBA WIOD WIS WJAR WJDX WKY HYAAQ WMC WOAI WOC WOW WRC WSAI WSMB WTAG WTAM WWS WW太心

E－9：00 p．m．，C－8：00，M－7：00 P－6：00 C－Chesterfieid，see Monday
R－Blue Danube，Waltz Program
KDYL KFI KFsD）KFER K（id）KGW KOA KOMO KIRC KSD KSTP KTBS WAPI WBAP WBEN WCAE WCSH HDAF WEAF WLBC WFBR WFL．WGY WIOD WIS WJAR WJAX WIDA WKY WMAQ WMC WOAI NEC WSB WSMB WIAG IVTAM WW．J WWNC

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

（FRB CKOK KilH KJAA Kı\％ KMBC KMOX KRLD KSCJ KS1， KTRH K＇TAA KVOR WAAB WABC W．${ }^{\circ} 0$ WADC WBBM WBCM WBIG WBRe WBT WCAII WCAO WCCO WDAE WDBJ WDBO WDOD WDSU WLAN WFBL WFBM WFEA WCis！ WHAS WHEC WIBW WICC WIP WISN WJAS WJSV WKBH WKBW WLBW WLBZ WMT WNAX WNOX WODS WOKO WORC WOWO WQAM WREC WSPD WTAR WTOC

SATURDAY-(Continued)
E-9:30 p.m., C-8:30, M-7:30, P-6:30 C - Carborundum Band
CKOI KMBC KMOX WAAB WABC WCAO WCAU WCCO WGN WHAS WHK WJAS WKBW WKRC WSPD R-George Olsen and Orchestra KDYL KFI KFSD KFYR KGO KGW KHQ KOA KOMO KSD KSTP WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WREI WFBR WPI WGY WHO WIBA WJAR WKY WLW WMAQ WOAI WOC WOW WIRC WSAI WSB WTAG WTAM WTMJ WWJ

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

CFRB CKOK KFH KlRA KLZ, KMBC KSC. KSL KTRH KTSA KVOR WALB WABC WADC WBBM WBCM WBIG WBRC WBT WCAH WCAO WCAU WCCO WDAE WDB. WDBO WDOD WDRC WDSE WEAN WFBL WFBM WFEA WGST NHAS WHBC WHK WHP WIBW WICC WIJAS WJSV WKIBH WKBW WLBW WLBZ WMBD WMT WNAX WNOX WODX WOKO WORC WOWO WQAM WREC USBT WSJE WSPD WTIQ WTAR WTOC

E-10:15 p.m., C-9:15, M-8:15, P-7:15 C - Public Affairs Institute
KFH KLZ KSCJ KTRII KTSA KVOR WAAB WBAC WADC WBBM WBCM WBIG WBRC WBT WCAO KCAU WCCO WDAE WDBO WDOD WDRC WDSU WEAN WFBA IITEA WHEC WICC WJAS WJSY WKBH WLBW WLBZ WMBD WNAX WOKO WORC WPG WQAM WSBT WSIS WSPD WTAR WTOC WWVA
B-Salon Singers
CECF CKGW KDKA KOIL KSO hWCR WBAL WBZ WBZA WGAR WHAM WJZ WMAQ WREN

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

CKGW KDKA KOII, KSO KWCR KWK KYW WBAL WCKY WGAR WHAM WJZ WREN WSYR

## E-11:00 p.m., C-10:00, M-9:00, P-8:00

 C-Guy Lombardo and Orchestra CFRB CKOK KFAB KL $Z \mathrm{KSC}$. KSL KTRII KVOR WAAB WABC WADC WBCM WBRC, WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WEAN WFBM WHEC WHK WICC WISN WJAS WJSV WLBW WLBZ WMBD WNAX WOKO WORE WPG WQ.AM WSB'T WSJS WSPD wTAR WTOC WWVA
## B-Buccancers, Vocal Trio

(PCF KDKA KOIL KSO KWCR KWK WBAL WBZ WHAM WJZ WREN

## E-11:10 p.m., C-10:10, M-9:10, P-8:10 R - Jack Denny and Orchestra

ISD WBEN WCAE WCKY WCSH WDAF WEAF WEEL WFBle WFI WGY WHO WJAR WMAQ WOC WRC WSAI WTAG IVWJ

E-11:15 p. m., C-10:15, M-9:15, P-8:15 KOIL KSO KWCR KWK WBAI, WBZ HBZA HGAR WHAM WJR WJZ WRC WREN
B - Murder Mystery, See Tuesday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C Harald Stern and Orchestra
CFRB CKOK KFAB KLZ KSCJ KSL KTRH KVOR WAAB WABC WADC WBCM WBRC WBT WCAO WCCO WDAF WDBO WDOD WDRC WDSU WEAN WPAN WFBM WHEC WICC WID WJSy WKBH WTABW WLBZ WNAX WOFO WORC WQAM WSBT WSJS WSID WTAR WTOC WWVA

## R - Paul Whiteman and Orchestra

 KSI WBEN WCAE WCKY WDAF WEAY WEEI WFBR WFI WGY WhO WJar wMaQ woc wTag WW.IE-12:00 p.m., C-11:00, M-10:00, P-9:00
R Ted Weems and Orchestra
KDY K KFSD KFYR KGA KGHT. KJR KOA KPO KPRC KSD KSTP KTAR KTBS WCAE WCKY WDAF WDAY WEAF WFAA WFBR WFI WGI WHO WIBA WIOD WJAR WJAX WMAQ WMC WOAI WOC WRC WSB WSAB WTAG WTAM WWNC

## B - Supper Ciub, Waldorf-Astoria

KOIL KSO KWCR KWK KYW WBZ WBZS WGAR WHAM WJR WJZ WRC WREN WSYR
C - Joe Haymes, See Tuestay
E-12:30 a.m., C-11:30, M-10:30, P-9:30 R - Vincent Lopez and Orchestra
KDYL KEX KFYR KGA K.IN KPO KPRC KSD KiSPP KTBS KVOO WBEN WCAE WCKY VDAF WEAF WEBC WEBR WFI WFLA WHO WIBA WIOD WJAR WJAX WKY WMC WOII WOC WSB WSBM WTAG WTAM WWNC

## SUNDAY

E-11:15 a.m., C-10:15, M-9:15, P-8:15 R - Major Bowes' Family
KDIL KEX KFSD KNYR KGA KJR KOA KPO KPRC KVOO WBAP WDAF WDAY WEAF WFBR WFLA WrGY WHO WIOI) WJAR WJAX WKY WMC WOC WRC WSA WSMB W1AG WTAM HTMJ WWJ WWNC

## E-12:00 p.m., C-11:00, M-10:00, P-9:00 C - Salt Lake Tabernacle Choir CFRB CHOK KFAB KLZ KSC, KSL

 KTRH KTSA KVOR WABC WADC WBC'M WBIG WB'T WCAO WCAU WCCO HDAE WDBO WDOD WDRC WDSU WEAN WFEA WGR WHEC WITK WIBW WISN W.JAS WJSV WKBL WKBN WLBW WLBZ WMBD WNAC WNAX HODX WOKO WORC $W P G$ WQAM WSBT WSJS WSPD WTAQ WCAR WWVAE-12:15 p.m., C-11:15, M-10:15, P-9:15
B - Roxy's Gang CFCF CKGW KDKA KDYL KECA KEY KFSD KFYR KGA KJl? KOA KOL, KPO KPRC KNTए KTAR KVOO KWK WAPI WBAL WBZ WBZA WDAY WEBC WFAA WFLA WGiAR WHAM WIBA WIOD WIS W.JAX WJR WHZ WKI WLW WMAQ WOAI WRC WREN WRVA WSB WSM WSMB WSIR WWNC

[^4]
## E-12:45 p.m., C-11:45, M-10:45, P-9:45 C-Street Singer <br> CFRB OKOK KFAB KLZ KMBC

 KSCJ KSI KTRH KTSA KVOI? WABC WADC WBCM WBIG WBT WCAO WC('OWAE WDBO WDOD WDSU WGR WHEC WHK WIBW WISN WJAS WJSV WKBH WKBN WLBU WLBZ WMBD WNAX WODX WOKO WPG WQAM WSIS WSPD WTAQ WTAR WTOC WWVAE-1:00 p.m., C-12:00, M-11:00, P-10:00 C - Freddie Rich's Orchestra CFRB CKOK KEAB KLZ KMBC KSC. KTRH KTSA KVOR WAAB WABC WADC WBCM WBRC WCAU WCCO WDAE WDBJ WDOD WDRC WDSU WFBL WFBM WGR WGSF WHIC WIIK WISN WJAS WKBH WhBN WLBW WI,BZ WMT WNOX WODX WOKO WPG WQAM WREC WSFA WSSS WSPD WTAQ WWVA

E-1:15 p.m., C-12:15, M-11:15, P-10:15 C - Little Jack Little
CFRB CKOK KLZ KMBC ISSC.I KTRII K'ISA KVOR WAAB WABC HIDC WBCM WCCO WDAE WDBJ WDOD WDRC WDSU WFBL WFBM WGR WGST WHEC WJAS WKBH WLBIV WLBZ WMT WNOX WODX WOKO WPG WQAM WREC WSJS WSPD WTAQ WWVA
R - Waiter Logan Pop Concert
ClCF CKGW KFYR KPRC KSD Kslep KTBS KVOO WAPI WBEN WCAE WCKI WCSH WDAF WDAY W!AF WEBC WFAA WFBR WFI W Pla WGYY WIRA WIOD WIS WJAR WJAX WKY WOAI WOW WRC WRVA WSAI WSB WSM WSMB W'AG WTAM WWJ WWNC

## E-1:30 p.m., C-12:30, M-11:30, P-10:30 C - Columbia Church of the Air

CFRB CKOK KLZ KSCJ KSL KTRH KTSA KVOR WAAB WABC WADC WBCM WBIG WCAO WCCO WDAE WDBO WDOD WDRC WDSU WGR WHEC WIBH WJAS WJSV WKBH WLBH WLBZ WNAX WODX WOKO WPG WQAM WSBT WSJS WSPD WTAQ WTAR WTOC WWVA

## E-2:00 p.m., C-1:00, M-12:00, P-11:00 C - Smiling Ed McConnell

CKOK KLRN KFBK KFPY KFRC hGB kLJ KLZ KMBC KMOX KOIN KOL KSL, KVI KHG WABC WBBM WBT WCCO WDSU WGR WGST WH $A S$ WHEC WJAS WISV WKRC WLAC WNAC WOWO WQAM WRR R - International Radio Forum
CFCF CKGW RFI RFSD KGO KGW KHQ KOA KOMO KSD KTBS WAPI WBEN WCAE WCKY WCSH WDAF WEAF WEEI WFAA WFBR WFLA WGY WIOD WIS WJAR WJAX WJDX WMC WOAI WOW WRVA WSAI WSB USM WSMB WTAG WTAM WW.J HWNC

## B - Monarch Mystery Tenor

KDKA KDYl/ RFI KFYR KGO KOA HOLL KSO KSTP KWCR KWK WBZ WBZA WC'KY WDAY WEBC WGAR WHIMI WIBA WJAR WJAX WJR WJZ WMAQ WREN WTMJ WWNC

E-2:15 p.m., C-1:15, M-12:15, P-11:15 C-Poet's Gold-David Ross
CFRB CROK KFAB KFH KLRA KLZ KMB! KSCI KSI, KTRH KVOR WABC WACO WADC WBBM WBCM

## SUNDAY-(Continued)

wBIG WBT WCAH wCAO WCAU WDad wdb, wdod wdic wdsu WFBM WGR WGST wHEC WHK WHP WISN WJAS WKBH WKBV WLBW WhBZ WMBD WMT WNox WODX WOKO WORC WQAM WREC WSBT WSFA WSIS WSID WTAQ wTOC WWVA

## R-Clyde Doerr's Saxophone Octet

CFCF CKCWW KFI KFSD KGO KGW KHQ KOA KOMO KPRC KSD KTBS KYW WAPI WBEN WCAE WCKY WCSH WDAF WEAF WFAA WFBR WFLA WGY WIOD WIS WIAR WJAX WJDX WKY WMC WOAI WOW WRC WRVA HSAI WSB WSM WSMB WTAG WTAM WWJ WWNC

## E-2:30 p.m., C-1:30, M-12:30, P-11:30

 R-Moonshine and HoneysuckleCFCF CKGH WCAE HCKY WCSH WDAF WEAF WEEI WFBR WGY WHO WJAR WMAQ WOC WOW WRC WTAG WTAM WWJ

## B - Yeast Foamers

KDKA KDYL KFI KFSD KFYR KGHL KGIR KGO KGH KHQ KO: KOIL KOMO KPRC KSO KSTP KTAR KIHS KVOO KHCR KWK KYW WAPI WBAL WBZ WHZA WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WIS WJAX WJDA WJR WJK WKY WLW WMC WOAI WITF WREN WRVA WSB WSM WSMB WTMJ WHNC

## C-Victor Arden-Harry Rose

CKOK KMBC KMOX WABC WBBM WCAO WCAU WGR WHEC WHK WJAS WJSV WKRC WNAC WOKO WOWO

E-3:00 p.m., C-2:00, M-1:00, P-12:00 $\mathbf{C}-\mathbf{N}$. Y. Philharmonic Orchestra CFRBCKOK KFAB KFH K1 $Z 2$ KMBC KRID KSCJ KSL KTRH KlOR WAAB WABC WADC WBCM WBIG WBRC WBT WCAO WCCO WDAE WDIO WDOD WDRC IIDSU WFAN WFBM WFEA WHEC WIIK WIBW WICC WIP WISN W.TAS W.JSY WLBBH WKBN WKBW WLBW WIBZ WMBD WODX WOKO WORC WQAM WSBT WSFA WSJS USPD WTAQ WTAR WTOC WWVA

## R-Wayne King and Orchestra

KDYL KFI KGO KGW KHQ KO: KOMO KPRC KSD KNTP KTBS KTHS KVOO KYW WBEN WCAE WCKY WCSH WDAF WEAF WEBC WEEI WFAA WPBR WGY WHO WIBA WJAR WKY WLIT WOAI WOC WOW WRC WSAI WTAG WTAM WTMJ WWJ

## B-Our American Music

KOIL KWCR KWK WBAL WFLA WGAR WIOD WJAX WIZ WMAQ WREN WRIA WSB WSM WSMB WWNC

[^5]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 WJAS WJR WIBZ WIN WMT WNAC WNBII WOC WOL, WOKO WOR WORC

## B-Temple of Song

CFCF KDKA FFI KFSD KFYR KGHL KGO KGW KOA KOIL KSO KSTP KTBS KWCR KWK WBAL WBZ WBZA WCKY WEBC WGAR WHAM WIBA IVOD WIS WIAX WJR WJZ WKY WMAQ WMC WREN WRVA WSB WSM WSMB WWNC

## E-4:15 p.m., C-3:15, M-2:15, P-1:15 R - Wildroot-Vee Lawnhurst

KDYI, KFI KGO KGW KHQ KOA KOMO WBEN WCAE WCSH WDAF WJAF WEEI WFBR WGY WJAR WLIT WMAQ WOW WRC WSAI WTAG WTAM WWJ

## E-4:30 p.m., C-3:30, M-2:30, P-1:30 R - Squibh's Program

WBEN WCAE WCSH WDAF WEAF WEEI WFBle WGY WJAR WMAQ WOW WRC WTAG WTAM WWJ B - National Youth Conference
KDYL KFSD KFYR KGHL KGO KGV KHQ KOA KOIL KOMO KP'RC KSO KSTP KTA! KVOO KWCR KWK WAPI WBAL WBZ WBZA WD IY WEBC WENR WHAM WIOD WIS WJAX WJDX WJZ WMC WOAI WPTF WRES WRVA WSB WSM WWNC

## E-5:00 p.m., C-4:00, M-3:00, P-2:00 C - Roses and Drums

CKOL KMBC KMOX KRLD WAAB WABC WADC WCAO WCCO WDSU WGN WGR WHAS WHK WJAS WJSV WKRC
R-Lowell Thomas
WBEN WCAE WEAF WEEI WFBR WGY UJAR WRC WSAI WTAG HTAM WWJ

## B - National Vespers

KPSD KFYR HGHL KGO KGW KHQ KOA KOIL KOMO KPRC KSO KTAR LTBS KWCR KWK WIPI WBAL WBAP WBZ WBZA WEBC WFLA WCiAR WIOD WIS WJax WJDA WIZ WOAI WPTF WREN WSB WSM WSMB WWNC

E-5:15 p.m., C-4:15, M-3:15, P-2:15 R - Big Ben's Dream Dramas
WBEN WCAE WCSH WEAF WEEI WFBR WFI WGY WJAR WMAQ WRC WSAI WTAG WTAM WWJ

E-5:30 p.m., C-4:30, M-3:30, P-2:30 C-Blue Coal Musical Revue
WAAB WABC WCAO WCAU WDRC WEAN WFBL WGR WHEC WHP WOKO

## B-Pages of Romance, Drama

KDKA KOIL KSO hWCR KWK KYW WBAL WBZ WBZA WGAR WJR WJZ WLW WREN

## B - Josef Kocstner's Orchestra

KDYL KPI KFYR KGHL KGIR KGO KGW KllQ KOA KOMO KPRC hsti KTAlk KTBS KVOO WAPI WBAP WDAF WDAY WEBC WIBA WJDA WhY WMC WOAI WS WSM WSMB WTMJ

## R-Swift Garden Program

CKGW KSD WBEA WCAE WCSH WDAF WEAF WEEI WFBR WFI

WGY WHO WJAR WMAQ WOC WOW WRC WSAI WTAG WTAM WWJ

## E-6:00 p.m., C-5:00, M-4:00, P-3:00 R - Catholic Hour

KDYL KEX KFYR KGHL KGIR K.JR KOA KPRC KSD KTAR KTBS KYOO WAPI WBAP WBEN WCAE WCKY WCSH WDAF WDAY WFAF WEBC WEEI WENR WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLIT WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WWJ WWNC

## B - Josef Koestner's Orchestra

KDKA KOIL KSO KWCR KWK WBAI WBZ WBZA WCKY WENR WG:AR WHAM WJR WJZ WREN

E-6:30 p.m., C-5:30, M-4:30, P-3:30
C-Cathedral Hour CFRB CKOK KFH KLZ KMBC KRID KSCJ KSI KVOR WAAB WABC WADC WBBM WBCM WIIG WBRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WPBM WFEA WHEC WIBW WICC WISN WJAS WJSV WKBH WKBA WVKB WLBW WLBZ WSAX WOKO WORC WQAM WSBT WSFA WSJS HSPD WTAR WTOC WHVA
R-Our American Schools
KDYL KECA KEX KFSD KFYR KGA KOA KPO KPRC KSD KSTr KTBS KVOO WBAP WBEN WCAE WCSH WDAY WEAF WEBC WEEI WENR WFBR WFLA WGY WIBA WIOD WJAR WKY WLIT WMC WOAI WOW WPTR WRC WRVA WSAI WSM WSMB WTAG WWJ WWNC
B - Paul Whiteman's Rhythmic Concert CECF CKGW KOLL KSO KWCR KWK WB.IL WBZ WBZA WCKY WGaR WHAM WJR WJZ WREN

## E-7:00 p.m., C-6:00, M-5:00, P-4:00 C World's Business Dr. Kleín

KFH KLZ KMBU KRLD KSCJ KSL KTRH KVOR WABC WACO WADC WBCM WBIG WBRC WBT WCAO WCCO WDAE WDBO WDOD WDRC WDSU WEAN WFAM WFBM WFEA WGR WHEG WIBW WICC WIP WISN WJAS WJSV WKBH WKBN WLBW WLBZ WNAC WNAX wOKO WORC WPG WQAM WSBT WSFA WSJS WSPD WTAR WTOC WWVA

## R - Borrah Minevitch, Harmonica

KDYL KFI KFSD KFYR KGO KGW KOA KPICC KTBS KVOO WBEN WCAE WCKY WDAF WDAY WEAF WEBC WFBR WFLA WGY WIBA WIOD WIS WJAR WJAX WMAQ WOAI WRC WSMB WTAM WWJ WWNC

[^6]SUNDAY-(Continued) E-7:30 p.m., C-6:30, M-5:30, P-4:30 R-James Melton, Tenor
CFCF KSD WBEN WCAE WCKY WDAF WEAF WFBR WGY WHO WJAR WMAQ WOC WSAI WTAG WWJ

## B - Great Moments in History

KDEA KDYI KFI KFSD KFYR KGO KGW KHQ KOA KOII, KOMO KIRC ISTP KTAR KYOO KWCR KWK WBAL WBZ WB7A WDAY WEBC WFAA WFIA W (AR WHAM WIBA WTOD W.JAX WTDX WITR W.J/, WKY WLS WIW WMC WOAI WPTF WRFN WRYA WSB WSM WSMB WTMJ WWNC

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

 C - Angelo Patri, Your ChildCKOK KMBC KMOX WABC WCAO W(AU WCCO WFBI WGN WGR WHAS WHK WJAS W.ISV WKRC WNAC

## R - Trade and Mark

KSD WBEN WCAE WDAF WEAF WFBR WGY WJAR WMAQ WRC WSAI WTAG WTAM WWJ

E-8:00 p.m., C-7:00, M-6:00, P-5:00
R-Chase and Sanborn-Eddie Cantor (VCF CKGW KDYL KFI KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KATR KYOO WBEN WCAE WCSH WD.AF WDAY WRAF WERC WFAA WFBR WFLA WGY WHO WIOD WIS WJAR WJDX WKY WLIT WLW WMAQ WMC WOAI WOC WOW WRC WSB HSM WSMB WTAG WTAM WTIC WTMJ WWJ WWNC

## C-John Henry-River Giant

CKOK KIRA KLZ KMBC KRLD KSCJ KSL KTRH KTSA KIOR $W^{7} A B C$ WACO WADC WBBM WBCM WBRC WBT WCAH WCAO WCCO WDAE WDBJ WDOD WDRC WDSU WFBT WFBM WFEA WGR WGST WHEC WHK WHP WISN WJAS WKBH WLBW WLBZ WNAX WNOX HOKO WORC WREC WSFA WSJS WSPD IVWVA

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C Andre Kostelanetz Presents CKOK KLZ KMBC KMOX KRID liSCJ KSL KTRH KTSA KYOR WABC WADC WPBM WBCM WBRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WLAN HTPBM WFEA WGR WHEC WHK HIBW WISN WJAS WISV WKBH WI.BW WJBZ WNAC WNAX WOKO WORC WSBT WSFA WSJS WSID WTAR WTOC WVVYA

E-8:30 p.m., C-7:30, M-6:30, P-5:30
B-Symphonic Marimba Orchestra
KDKA KOIL KSO KWCR WBAL
WCKY WGAR WJZ WLS WIEN WSYR

E-8:45 p. m., C-7:45, M-6:45, P-5:45 C- John Henry-River Giant
CKOK KLRA KIZ KMBC KRLD KSCJ KSL HTRH KTSA KYOR WABC WADC WBBN WBCN WBRC WBT WCAH WCAO WCCO WDAE WDBJ WDOD WDRC WDSU WFBL WFBM WFEA WGR WGST WHEC WHK WHP WISN WJAS WKBH WKBN WIIBW WLBZ WNAX WODA WOKO WORC WREC ITSFA WEJS WSPD

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

 C - Fred Allen's Bath ClubCKOK KDB KBRN KFBK KFPY KFROIGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KSCJ KSI, KVI KWG WABC WADC WBT WCAI WCAO WCAU WCCO WDAE WDBO WDOD WDRC WISSU WEAN WFBL WFBM WGN WGR WGST WHAS WHEC WHK WISN WJAS W.ISV WKRC WLAC WMT WNAC WOKO WORC WOWO W (AAM WREC WSPD WTAR

## R-General Electric Concert

KDYI KFI KTSD KFYR KGO KGW KHQ KOA KOMO KPRC hSD KSTP KTAR K'IBS KTHS WAPI WBEN WCAE WCSII WDAF WDAY WEAF WEBC WENR WFAA WFBR WFI WFLA WGY WHO WIBA WIS WJAR WJAX WJDX WKY WOII WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ WWNC
B - Warden Lawes-Sing Sing
KDKA KOIL KSO KWCR KWK KYW WBAL WB7, WBZA WGAR WHAM WJR WJZ WLW WREN

E-9:30 p.m., C-8:30, M-7:30, P-6:30
C Pennzoil Parade
CKOK KLIRA KMBC KMOX KOMA KTSA WABC WADC WBRC WBT W(AO WCAU HCCO WDRC WEAN WFBI WGN WGR WGST WHAS WHEC WJAS WJSV WKRC WLAC WLBZ WNAC WOKO WSPD
R - Album of Familiar Music
KDYL KFI KGO KGW KKQ KOA KOMO KPRC KSD KSTP KTHS WAPI WBEN WCAE WCKY WCSH WEAF HENR WFAA WFBR WPI WFIA WGY WHO WIOD WJAR WJAX WJDX WKY WMC WOAI WOC WOW WRC WRVA WSAT WSB WSM WSME WГAG WTAM WTMJ WWJ

## B - Walter Winchell

KDKA KOLL KSO KWCR KWK KYW WBAL WBZ WBZA WGAR WHAM WJR WJZ WLW WREN

E-10:00 p.m., C-9:00, M-8:00, P-7:00
B- D. W. Griffith, Sce Wednesday
C-Erbest Hutcheson, Pianist
CPRB CKOK KFII KLRA KLZ KMBC KSCJ KTRH KTSA KVOR WAAB WABC WADC WBBM WHCM WBIG WBT WCAH WCAO WCAU WCCO WDAE WDB. WDOD WDRC WDSU WFBL WFBM WFEA WGR WGST WILEC WHK WHP WISN WJAS WKBN WKBW WLBW WLBZ WMBD WMT WNAX WNOX WODX WOKO WORC WPG WQAM WREC WSBT WSIS WSPD W'OC

## R-David Lawrence

KDYI, KFI KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSTP KTBS WBEN WCAE WCKY WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFI WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WKY WMC WOA1 HOC WRC WSA1 WSM WSMB WTAG WTAM WTIC WWJ WWNC

[^7]E-10:30 p.m., C-9:30, M-8:30, P-7:30 C-Foreign Legion
CFRB CKOK KFI KLRA KIZ KMBC KSCJ KTHII KTSA KVOR WAAB WABC WADC WBBM WBCM WBBIG WBRC WBT WCAH WCAO WCAU WCCO WDAE WDBJ WDOD WDRC WDSU WFBL WFBM WFEA WGR WGST WHEC WHK WHP HISN WJAS WKBN WLBW WLBZ WMBD WMT WNAX WNOX WODX WOKO WORC WPG WQAM WREC WSBT WSJS WSPD WTOC
E-10:45 p.m., C-9:45, M-8:45, P-7:45
R Sunday at Seth Parker's
CFCF CKGW KDYI, KFSD KFYI
KGFIG KGIR KGO KGW KHQ KOA
KPRC KSTP KTAR KTBS KTHS
KYW WAPI WBAJ WBEN WCAE
WCKY WCSH WDAF WDAY WEAF
WHBC WEEI WFBR WFI WFLA
WGY WHO WIBA WIOD WIS WJAR
WJAX WJDX WMC WOAI WOC
WOW WRC WRVA WSAI WSB WSM
WSMB WTAG WTAM WTMJ WWJ
WHNC
B Orange Lantert, Hystery Drama
KDKA KSO KWCR KWK WBAL
WGAR WHAM WJZ WREN
E-11:00 p.m., C-10:00, M-9:00, P-8:00
C- The Gauchos
CKOK К゙FAB KFH KLZ KSCJ KTRH K YOR WAAB WABC WADC WBCM WBRC WBT HCAO WDAE WDBO WDOD WDIRC WDSU WEAN WFAN WFBM WGl WHEC WIBW WICC WIP WISN WJAS WJSV WKBN WLBW WIAB7, WMBD WNAX WODX WOKO WPG WQAM WSJS HSPD WTAR WTOC

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C-Isham Jones and Orchestra
CFRB KTRH WABC WADC WBCM WBRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WEAN WGIR WICC WISN WJSV WKBN WLBZ WNAC WOKO WPG WUAM WSBT WSJS WSPD WTAR W'TOC
R-Melodic Serenade
KIYYL KPSD KFYR KGHL KGO KHQ KPRC KSTP KTAR KTBS WAPI WBAP WCAE WCSH WDAF WLAF WEBC WENR WFBR WFLA WGY WHO WIBA WIS WJAR WMC WOC WOW WRC WSB WSMB WTAG WTAM WTIC WWNC

## B - Jesse Crawford, Organist

KDKA KOII, KSO KWCIR KYW WBAL WBZ WBZA WCKY WHAM WJZ IVREN

[^8]
# CLASSIFIED INDEX TO CHAIN PROGRAMS 

Time in Eastern Standard

## BANDS

Carborundum Band, 9:30 p.in., Saturday, C.
Little German Band, 6:00 p.m., Saturday, B.

## CONCERTS

Howard Barlow, 11:00 p.m. daily, ex. Sat. and Sun, C.
Blue Danube, 9:0f p.m., Saturday, R.
Boston. Symphony, 8:15 p.m., Siturday. B.
Concert Orchestra, 10:30 p.m., Friday, B.
Gauchos, 11:00 p.m. Sunday, C.
General Electric, 9:00 p.m., Sunday, R.
Alexnder Hass, 8:30 p.m. Saturday, C
Walter Logan, 1:15 p.m., Sunday, R.
New York Philharmonic, 3:00 p.m. Sunday, C.
Walter Smith, $7: 15$ p.m., Sunday, C.
Cesare Sodero, $11: 30$ p.in., Wed und Thurs. B.
Symphony Concert, 9:00 p.m., Wednesday. R.
Symphonic Marimba. 8:30 p.m., Sunday, B.
Waldorf-Astoria, 6:00 p.m., daily, es. Sunday, R.
Mischal Weishord, 7:00 p.m., Wednesday, K.

## DANCE BANDS

Victor Arden, 2:30 p.m. Sund:ay, C.
Ben Bernie, 12 mid. Wed., B; 9:00 p.m. and 12:30 a m. . Tuesday, R.
Cab Calloway, 12 mid. Tuesilay and Friday, B.
Jack Denny, 11:30 p.m., Mon. and Thurs.; 11:10 p.in. . Saturday, R.
Eddie Duchin, 12 mid. Wednesday and Thursiay, C.
Clyde Doerr, 2:15 p.m., Sunday, R.
Joc Furst, 12 mid., Sundty, R.
Joe Haymes, 12 mid., Tuesday and Saturday, C.
Isham Jones, 11:30 p.m., Sun., Tues., Wed. and Thurs, C Len Joy, $9: 30$ p.m., Thursday, B.
Wayne King, 3:00 p.m., Sunday; 8:30 p.m., Tuesilay, R.
Dei Lampe, b:15 p.m., Monday and Friday, B
Guy Lombardo, 11:30 p.m., Mon.; 9:30 p.m., Wed.; 11:00 p.m., Saturday, C.

Vineent Lojez, 10:15 p.m., Sunday, B; 12:30 a.m., Sat., R.
Abe Lyman, 12 mid., Monday; 11:30 p.m., liday; 8:45 p.m., Tuesday, Wernesday, Thursday, C.

Dick Mansfield, $6: 15$ p.m. Welnesday, C.
Dolph Martin, 7:30 p.m., Monday, Wednesday, Friday, C
Freddie Martin, 12 mid., Mouday, R
Ozzie Nelson, 7:15 p.m., Siturday, R.
Georse Olsen, $9: 30$ p.m., Saturday, R
Ben Pollack, 12 mid., Sunday and Friday, C.
Freddic Rich, 1:00 p.m., Sunlay, C.
Willard Robison, $9: 30$ p.m. Tuesday, B.
Harold Stern, 11:30 p.m. Saturdiy, C.
William Stoess, 12 mid., Sunday, B
Ruly Vallec, $8: 00$ p. m. ., Thursday, R.
Fred Waring, 10:00 p.m., Wednesday, C.
Anson Weeks, 7:00 p.m., Sat., B; 11:00 p.m.. Fri., R.
Ted Weerns, 11:00 p.m., Monday: 12 rid., Saturday, R
Paul Whiteman, 6:30 p.m., Sun., B; 9:30 p.m., Mon.; 11:30 p.m., Sat., R.

## DIALOG

Fred Allen, 9:00 p.m. Sunday, C.
Amos 'n' Andy, 7 and 11 p.m., daily, ex. Sat. and Sun.. B
Burns and Allen, 9:30 p.m., Wedncsday, C.
Cuckoo, 10:30 p.m., Saturday, B.
Easy Aces. 8:00 pim., Tueslay, Thursday and Saturday, C. Marx Bros. 7:50 p.m., Monday, B.
Jack Melatlen, 10:45 p.in., Tuesday ani Thursday, B
Baron Munchausen, 10:00 p.m., Thursday, R.
Ken Murray, 8:00 p.m., Wednesday, Re.
Drs. Pratt and Sherman, 10-i5 p.m., Sunday, B.
Reis and Dunn, $6: 1$ p p.m., Monday and Tuesday, C Stoopuagle and Budd, 9:30 p.m., Thursday, C.
Three Califormia Nuts, $9: 00$ p.min, Friday, R.
Van and Don, $7: 30 \mathrm{p} . \mathrm{m}$. , Monday and Thursday, R.
Vic and Sade, 10:15 p.m., Mon., Tues., Thurs., Fri., B.
DRAMA
Big Ben, 5:15 p.m., Sunday, R.
Oetavus H . Colien Mystery, 7:45 and 11:15 p.m., Tues.
Thurs., Sat., B.

Death Valley Days, 9:00 p.m., Thursday. B.
Eno Crime Club, 8:00 p.m., Tuesday and Wednesday, B.
First Nighter, 9:00 p.m., Friday, B.
Foreign Legion, 10:30 p.m., Sunday, C.
Fu Manchn Mystery, 8:30 p.m., Monday. C.
Goldhergs, $7: 45$ p.m. and 12 mid., daily, ex. Sat. and Sun., R.
Great Moments in Iistory $7: 30$ p.m., Sunday. B.
Gritith's Hollywood, 10:010 p.n.. Sun. and Wed, B.
John Henry. 8:00 and 8:45 $\mathrm{p} . \mathrm{m}$., Sunday, C
Sherlock Ifolmes, 9:00 p.n. and 12:15 a m., Wednesday, B.
Orange Lantern, 10:45 p.m.. Sund:ay, B.
Phillips Lord, 8:45 p.m., Mon., Tucs, and Wed., B.
Magic Yoire. 8:15 p.m., Tuesday and Saturday, C.
March of Time, 8:30 p.m., Friday, C.
Moonshine and Honeysuckle, 2:30 p.m.. Sunday, R.
Myrt and Marge, 7:00 and 10:45 p.m., daily, ex Sat. and Sun., C.
Mysteries in Paris, $9: 30 \mathrm{p} . \mathrm{m}$., Monlay, C.
Pages of Ronance, 5:30 p.m., Sunday. B.
Rin Tin Tin, 8:30 p.m., Thursday, 13.
Buck Rogers, $7: 15$ p.m., daily. ex. Sat. and Sun.. C.
Roses and Drums, 5:00 r.m.. Sunday, C.
The Shadow, 8:30 p.in., Welnesday, R.
Soconyland Sketches 8:00 p.m., Monday, R.
Squibl's, 4:30 p.m., Sunday, R.
Wheateraville, $7: 15$ p.m. daily, ex. Friday and Saturday, IR Jesse Crawford, 11:30 p.m., Sunday, B.

## PIANO AND ORGAM

Fray and Braggiotti. 10:45 pm. Wednesday and Friday, C.
Archer Gibson. 8:00 p.in., Saturday, R.
Giruen and Iall, 7:00 p.m., Monday, R.
Harding Sisters, $6: 30$ p.m., Welnusday, R.
Ernest Hutcheson, 10:00 p.m.. Sunday, C.
Vec Lawnhurst, 4:15 jom., Surday, R.
Ohman and Arden, 2:30 p.m., Sun. C.; 9:30 p.m., Sun., R.
Lew White, 11:15 p.m., Saturday, B.

## POPULAR PROGRAMS

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

Abum of Familiar Music, $9: 30$ p.m., Sunday, R.
Armour Program, 9:30 p.m. Pritiay, B.
Bath Club. 4:00 0.m.. Sunday, C.
Blue Coal Revuc, $5: 30$ p.m.. Sunday, C.
Major Bowes' Family, 11:15 am.m, Sunday. R.
California Mclodies, 9:30 p.m., Tuesday. $\mathbf{C}$
Chase and Sanborn, 8:00 p.m., Sunday, R,
Cities Service, 8:00 p.m.. Fiday, R.
Clicquot Club Eskimos, 8:00 p.m., Monday, B
Columbia Revue, 10:00 p.m., Monday and Friday, C.
Contented Program, 10:00 p.m., Monday, R.
Corn Cob Pipe Club, 10:00 p.m. Wednesday, R.
Firestone, $8: 30$ and 11:30 p.m., Monday. In
Five Star Theatre, 10:00 p.m., Tues. and Thurs., C.; 7:30 p.m. Mon.. Wen, and Fri., B.

Jack Irost's Melody, 9:30 p.m., Monday, 13.
Houschold Musical Menories, 9:00 p.m., Tuesday, B
Inside story, $5: 30$ p.m., Friday, C.
Lucky Sirikc, 10:00 p.m. Tuesday tnd Thursday, IR.
Manhattan Merry-fio-Round, $3: 30 \mathrm{p} . \mathrm{m}$., Sunday, 13.
Maxwell House, 9:00 p.m., Thersday, R.
Borrah Minevitch, 7:00 p.m., Sun.; 10:45 p.in., Fri., I2.
Nestle's Program, 8:00 p.m., Friday, B.
Old (iold, 10:00 p.m., Wednesday, C.
Pennzoil Parade $9: 30$ p.m., Sunday, C.
Poct's Gold, $2: 15$ p.in., Sunday, C.
Pond's Progran, 9:30 p.m. Friday, R
Roxy's Gang, 12:15 p.m., Sunday, B
Roya! Vagabonds, 8:00 p.1n, Wednestay, R
Andy Sunella, 6:45 p.m., Wednesday, R.
Sinclair Minstrels, 9:00 p.m., Mondiay, B.
Supper Club, 12 mid.. Saturday, B.
Swifts (arden. 5:30 pm., Sunday, R.
Wildroot Institute, $4: 15 \mathrm{p}$. m., Sunday, R.
Isd Wynn, $9: 30 \mathrm{pm}$. Tuestay, R.
Yeast Foumers, $2: 30 \mathrm{p} . \mathrm{m}$, Sunday, B
QUARTETS
Mills Brothers, 9:15 p.m.. Monday and Thursday, C.
Revelcrs, $4: 30$ p.un. Sunday, R.
Singing Cylinders, 5:30 and 6:30 p.m., Sunday, B.

## RELIGIOUS

Dr. S. Parkes Cadman, 3:30 p.m., Sunday, R.
Cathedral Hour, 6:30 p.m. Sunday, C.
Catholic Hour, 6:00 p.m., Sunday R.
Church of the Air, $1: 30$ p.m., Sunday, C.
Rev. Charles E. Coughlin, 4:00 p.m., Sunday.
Mid-Week Hymn Sing, 6:30 p.m., Tucslay, R.
National Vespers, 5:00 p.m., Sunday, B.
National Youth Conference, 4:30 p.m., Sunday, B.
Our Church Music, 3:00 p.m., Sunday, B.
Seth Parker's, 10:45 p.m., Sunday, R.
Salt Lake Choir, 12 noon, Sunday, C.
Temple of Song, 4:00 p.m., Sunday, B.

## SINGERS

Ilomay Bailey, 10:30 p.m., Tuesday and Thursday, B.
Elizabeth Barthell, 6:00 p.m., Monday C.
Al Bernard, 6:30 p.m., Monday, R.
Boswell Sisters, 10:30 p.m., Thurs.; 9:15 p.m., Sat., C.
Buccanecrs, 11:00 p.m., Saturday, B.
Eddie Cantor, 8:00 p.m., Sunday, R.
Charles Carlile, $10: 45$ p. m., Tuesdiy, C.
Richard Crooks, 8:30 and 11:30 p.m., every other Monday, R.

Bing Crosby, 9:00 p.m., Wednesday and Saturday, C.
Kaughn DeLeath, 6:30 p.m., Mon.; 6:00 p.m., Wed., Fri., C.
Morton Downey, 10:45 p.m., Thurs; 10:00 p.m., Sat., C ; 9:30 p.m., Wed., B.
Jessica Drigonette, $\mathrm{s}: 00 \mathrm{p} . \mathrm{m}$, Friday, R.
Mary Eastman, 8:15 p.m., Sunday; 9:10 p.m., Friday, C.
Ruth Etting, 9:00 p.m., Monday and Thursday, C.
Fields and Hall, 6:45 p.m., Saturday, B.
Jaek Fultor, 11:00 p.m., Tuesday, B
Wilfred Glemn, 10:00 p.m., Thursday. B.
Alice Joy, 10:30 p.m., Mon.; 10:15 p.m., Wed.; 10:00 p.m. Fri, B.
Al Jolson, 10:00 p.m., Friday, R.
Keller, Sargent and Ross, 7:30 p.m., Tues. and Thurs., C .
Jeannie Lang, 9:30 p.m. Thursday, C.
Harriet Lee, $8: 30 \mathrm{pm} . \mathrm{m}$., Wednesday, B.
Little Jack Little, $1: 15 \mathrm{p} . \mathrm{m}$., Sunday, C .
Nino Martini, 11:00 p.m., Wednesday and Friday, C.
Smiling Ed McConnell, 2:00 p.m., Sunday, C.
Tommy McLaughlin, $9: 15 \mathrm{j} . \mathrm{m}$., Tuesday, C.
Janues Melton, 7:30 p.m., Sunday; 7:00 p.m., Tuesday; 11:00 p.m., Thursday, R.
Monarch Mystery fenor, 2:00 p.m., Sunday, B.
Frunk Munn, 9:30 p.m., Suaday, R.
Donald Novis, $9: 30$ p.m., Wednesday; 6:30 p.m., Thursday; 7:00 p.m., Friday, H.
Carson Robison, 7:15 p.m., Welnesday and Thursday, B.

Lanny Ross. 9:00 p.m., Thursday, R.
Romantic Bachelor, $9: 15$ p.m., Wednesday. C.
Harry Rose, 2:30 p.m., Sunday, C.
Salon Singers, 10:15 p.m., Saturday, B.
Sanderson-Crumit, 8:00 p.m., Tuesday, R.
Ethel Shutta, 9:30 p.m., Saturday R.
Singin' Sam, 8:15 p.m., Monday, Wednesday, Friday, C.
Sizzlers Trio, 10:00 p.m., Monday, B.
Kate Smith, 8:30 p.m., Tuesday, Wednesday, Thursday, C.
Aileen Stanley, 11:15 p.m., Sunday, B.
Street Singer, 12:45 p.m., Sunday 7:45 p.m., Saturday, C.
Tastyeast Jesters. 7:15 p.m., Monday, B.
Lawrence Tibbett, 8:30 and 11:30 p.m., every other Monday, R.
Trade and Mark, 8:00 p.m., Fri., C; 7:45 p.m., Sunday, R.
Gus Van, 9:30 p.m., Saturday, R.
Whispering Jack Smith, 8:00 p.m., Mon. and Wed. 8:15 p.m.. Thurs., C.

Women's Octet, 11:15 p.m., Tueslay, B.

## TALKS

America's Grub Strect, 6:00 p.m., Saturday, C.
American Taxpayers' League, 8:00 p.m. Saturday, B.
Boake Carter, 7:45 p.m., daily, cx. Sat. and Sun., C.
Don Carney Dog Chats, 8:30 p.m., Monday, B.
Economic World Today, 8:30 p.m., Saturday, R.
William Hard 6:45 p.m., Tuesday, R.
Edwin C. Hill, 10:30 p.m., Mon., Tues., Wed.; 9:30 p.m.. Friday, C.
Horlick's Health, 8:30 p.m., Tuesday and Friday, B.
International Forum, 2:00 p.m., Sunday, R.
H. V. Kaltenborn, 6:00 p.m. Tuesday and Thurstay, C.

Dr. Julius Klein, 7:00 p.m., Sunday, C.
Warden lawes, 9:00 p.m., Sunday B.
David Lawrence, 10:00 p.m., Sunday, R.
Laws That Safeguard, 6:30 p.m., saturday, B.
National Rudio Forum, 10:30 p.m., Monday, R.
Our American Schools, 6:30 p.m., Sunday, R.
Angelo Patri, 7:45 and 11:15 p.m., Sunday C.
Public Affairs Institute, $10: 15$ p.m., Saturday, C.
Radio in Education, $7: 15$ p.m., Tuesday, B.
Nellie Revell, 11:00 p.m., We. Inesday, IR'
Sigmund Spaeth, 10:00 p.m., Tucsday, B.
Lowell Thomas, 6: 55 p.m., daily, ex. Sat. and Sun., B; 5:00 p.m. Sunday, R.

Merle Thorpe, 7:15 p.m., Saturduy, B.
Howard Thurston, 8:45 p.m., Thurs. and Fri., B.
Carveth Wells, 10 ;:30 p.m., Wednesday, R.
Frederic William Wile, 7:00 p.m., Saturday, C.
Walter Winchell, 9:30 and 11:15 p.m., Sunday, B.

## KEY TO SYMBOLS

Frequency is given in kilocycles; wavelength in meters. Night power is shown in watte in third column. Daytime power is shown in parenthesis in fourth column in killowatts, 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 mail addresses.

## Second Column Symbols

a Verifies reception for return postage.
Verifies only occasionally.
c Does not verify.
d Verification 10c; letter 25e.
e Sends Ekiko stamp for 10 c .
$f$ Sends Ekko stamp for 5 c .
$g$ Sends Ekko stamp for postage.
h Sends own station stamp for 10 c .
i Sends own station stamp for 5c.
j Sends own station stamp for postage.
$k \quad$ Has no stamps.
$z$ No information available.
Fourth Column Symbols
A These stations are synchronized.

B National "Blue" network.
C Columbia network.
D Daytime only.
Dn Daytime with occasional cvening hours.
E Trans-Canada network.
F Canadian National Railways network.
G All Canadian networks.
H Yankee network.
I Orange and gold network.
K Mexican networks.
L Canadian Pacific Ry. network (Dominion).
M Canadian Radio Corp. network.
N National "Red" and "Blue" networks.

[^9]
## NOTICE OF COPYRIGHT

The method of logging by wave-lengths or frequencies was devised by The Radex Press in 1924 and has been copyrighted and recopyrighted each year since that time. The arrangement of stations in groups by frequencies or wave-lengths, with dial readings in connection therewith, is fully covered by our copyright and all infringers will be vigorously prosecuted.

FOR KEY TO SYMBOLS SEE PAGE 45


550 kilocycles 545.1 meters

| KFDY | ae | 1000 | 1 | Brookings, S. D. |
| :---: | :---: | :---: | :---: | :---: |
| KFUO | ae | 1000 | 2(1) | St. Louis, Mo. |
| KFYR | ah | 1000 | $1 \mathrm{~N}(2.5)$ | Bismarck, No. Dakota |
| KOAC | ak | 1000 |  | Corvallis, Ore. |
| KSD | ak | 500 | 2R | St. Louis, Mo. |
| WDEV | ae | 500 | D | Waterbury, Vt. |
| WGR | ae | 1000 | C | Buffalo, N. Y. |
| WKRC | ak | 1000 | C | Cincinnati, Ohio |

560 kilocycles 535.4 meters

| KFDM | ak | 500 | (1) | Beaumont, Texas |
| :---: | :---: | :---: | :---: | :---: |
| KLZ | ae | 1000 | C | Denver, Colo. |
| KTAB | ae | 1000 |  | San Francisco, Calif. |
| WFI | ae | 500 | 1 R | Philadelphia, Pa. |
| WIBO | ae | 1000 | (1.5) a | Chicago, Ill. |
| WLIT | ak | 500 | 1 R | Philadelphia, Pa. |
| WNOX | ak | 1000 | $\mathrm{C}(2)$ | Knoxville, Tenn. |
| WPCC | ak | 500 | Sa | Chicago, Ill. |
| WQAM | ae | 1000 | C | Miami, Fla. |

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

Sabine Broadcasting Co., Inc.
Reynolds Radio Co., Inc. Associated Broadcasters, Inc. WFI Broadcasting Co.
Nelson Bros. Bond $\&$ Mtg. Co. Lit Bros. Broadcasting System, Inc. WNOX Inc.
North Shore Congregational Church Miami Broadcasting Co.

570 kilocycles 526.0 meters

| KGKO | $z$ | 250 | (.5) | Wichita Falls, Texas |
| :---: | :---: | :---: | :---: | :---: |
| KMTR | aeh | 500 |  | Hollywood, Calif. |
| KVI | ae | 500 | C | Tacoma, Wesh. |
| WEAO | ae | 1000 | 1 | Columbus, Ohio |
| WKBN | ak | 500 | 1 C | Youngstown, Ohio |
| WMCA | ak | 500 | 3 | New York, N. Y. |
| WNAX | ae | 1000 | C(2.5) | Yankton, S. D. |
| WNYC | ak | 500 | 3 | New York, N. Y |
| WSYR | ak | 250 | B2 | Syracuse, N. Y. |
| WWNC | ae | 1000 | N | Asheville, N. C. |

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
Central N. Y. Brdestg. Corp., (VMAC)
Citizens Broadcasting Co., Inc.

580 kilocycles 516.9 meters

| CFCY | ae | 500 | E | Charlottetown, P. E. I. | Island Radio Broadcasting |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CHMA | ak | 250 | 4 S | Edmonton, Alta. | Christian \& Missionary Alliance |
| CKCL | aj | 500 |  | Toronto, Ont. | The Dominion Battery Co. |
| CKUA | ak | 500 | 4F | Edmonton, Alta. | University of Alberta |
| CMDD | z | 150 | 588 | Havana, Cuba | G . deSequeira |
| CMW | ae | 1400 | 585 | Havana, Cuba | Troncoso y Gil |
| KMJ | ak | 500 | CT | Fresno, Calif. | McClatchy Radio Stations (Fresno Bee) |
| KSAC | ak | 500 | 2 (1) | Manhattan, Kans. | State Agricultural College |
| WDBO | ae | 250 | CU | Orlando, Fla. | Orlando Broadcasting Co., Inc. |
| WIBW | ae | 1000 | C 2 | Topeka, Kans. | Topeka Brodestg Assn., Inc. |
| WOBU | ak | 250 | 1(.5) | Charleston, W. Va | WOBU, Inc., Ruffner Hotel |
| WSAZ | ak | 250 | 1(.5) | Iuntington, W.Va. | WSAZ, Inc. |
| WTAG | ae | 250 | R(.5) | Worcester, Mass. | Worcester Telegram Pub. Co., Inc. |
| XEPN | $z$ | 100000 | 585 | Piedras Negras, Mex. | (Yolanda Hotel), Eagle Pass, Texas |

590 kilocycles 508.2 meters

| CJGC | ae | 5000 | $595 G Z$ | London, Ont. |
| :--- | :--- | ---: | :--- | :--- |
| KHQ | ak | 1000 | N(2) | Spokane, Wash. |
| WCAJ | ae | 500 | 1 | Lincoln, Neb. |
| WEEI | $a k$ | 1000 | R | Boston, Mass. |
| WKZO | ae | 1000 | D | Kalmazoo, Mich. |
| WOW | aeh | 1000 | IR | Omaha, Neb. |

Free Press Printing Co., Ltd.
Louis Wasmer, lnc.
Nebraska Wesleyan University
Edison Electric Illuminating Co.
WKZO, Inc., Burdick Hotel
woodmen of the World


| 610 | kilocycles |  |  |
| :--- | :--- | ---: | :--- |
| KFRC | ae | 1000 | C |
| WDAF | ae | 1000 | R |
| WIP | ak | 500 | C |
| WJAY | ae | 500 | D |
| XETR | $z$ | 1000 | $\ldots$ |

## 491.5 meters

San Francisco, Calif. Don Lee Broadcasting System Kansas City, Mo. Kansas City Star Co.
Philadelphia, Pa. Pennsylvania Bdctg. Co. (WFAN)
Cleveland, Ohio Cleveland Radio Broadcasting Corp. Mexico City, Mexico Cia. Difusora Mexicana S. A.

| 620 kilocycles |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| KGW | ae | 1000 | N | Portland, Ore. | Oregonian KTAR Br |  |
| KTAR | ae | 500 1000 | $\mathrm{Na}_{\mathrm{Na}(2.5)}$ | Phoenix, Ariz. Clearwater, Fla. | Florida | Co., Inc. |
| WLBZ | ak | 500 |  | Bangor, Maine | Maine Br | Inc., Inc. |
| WSUN | ae | 1000 1000 | $\xrightarrow{\mathrm{Na}(2.5)}$ | St. Petersburg, Fla Milwaukee, Wis. | Florida | Co., Inc. |



| 640 | ilo | ycl | 468.5 meters |  |
| :---: | :---: | :---: | :---: | :---: |
| CHRC | ak | 100 | ${ }^{645 a G}$ | Quebec, Que. |
| $\mathrm{CKCI}^{\text {CKP }}$ | ck | 100 | ${ }_{6454}{ }^{\text {a }}$ | Quebec, Que. |
| ${ }_{\text {KFI }}$ | ${ }_{\text {ah }}$ | 50000 | ${ }^{\mathrm{N} 1}$ | Los Angeles, Calif. |
| WAIU | ae | 500 | 1 | Columbus, Ohio |
| WOI | ae | 5000 | D | Ames, Iowa |

$\square$

CHRC, Ltd., Victoria Hotel
Le Soleil, Ltd.
Mitchell \& Liddle
Earl: C. Anthony, Inc.
Associated Radiocasting Corp.
State College of Agriculture

650 kilocycles 461.3 meters

| KPCB | ae | 100 |  |
| :--- | :--- | ---: | :--- |
| WSM | aej | 50000 | N |

660 kilocycles

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

670 kilocycles 447.5 meters WMAQ ae 5000 N
680 kilocycles

| CMAF | ak | 1000 | $\ldots$ |
| :--- | :--- | :--- | :--- |
| KFEQ | ae | 2500 | D |
| KPO | ak | 5000 | N |
| WPTF | ae | 1000 | N Dn |

454.3 meters

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

Seattle, Wash.
Nashville, Tenn.


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

Chilliwack Broadcasting Co., Ltd.
Jas. Richardson $\&$ Sons, Ltd.
Jas. Richardson \& Sons, Ltd.
Republic of El Salvador
Omaha Grain Exchange
National Broadcasting Co., Inc.

Chicago, Ill.
WMAQ, Inc. (NBC Lessees)

International Broadcasting Co.
Scroggin \& Co., Bank
National Broadcasting Co., Inc.
Durham Life Insurance Co.


700 kilocycles 428.3 meters
WLW ae 50000 N
Cincinnati, Ohio



WGN, Inc., Drake Hotel


740 kilocycles 405.2 meters

| CJCA | ae | 500 | 745EL | Edmonton, Alberta | Edmonton Journal, Ltd. |
| :--- | :--- | ---: | :--- | :--- | :--- |
| KMMJ | bk | 1000 | Dn | Clay Center, Neb. | M. M. Johnson Co. (R/C Lincoln) |
| WSB | aeh | 5000 | N | Atlanta, Ga. N. | Atlanta Journal, Biltmore Hotel |
| WHEB | ak | 250 | D | Portsmouth, N. H. | Granite State Broadcasting Co. |



| 760 | kilocycles | 394.5 |  | meters |
| :--- | :---: | :---: | :---: | :--- |
| KXA | ae | 250 | (.5) | Seattle, Wash. |
| WBAL | ae | 10000 | BA | Baltimore, Md. |
| WEW | ae | 1000 | D | St Louis, Mo. |
| WJZ | ck | 50000 | BA | New York City |




KFAB Broadcasting Co.
WBBM Bdetg. Corp. (Wrigley Bldg.)


800 kilocycles
374.8 meters

WBAP ak 50000 Na WFAA ak 50000 Na

Fort Worth, Texas Dallas, Texas



KCYS. 890 MTRS. 336.9 DIAL


Oscar S. Mechoso
The Louisville Times Co., Inc.
L. Valdes Figueroa

General Electric Co. (NBC Opr.
Berks Broadcasting Co.
Matheson Radio Co., Inc.
State of Florida (Univ. of Fla.) Rafael M. Pena

840 kilocycles 356.9 meters

| CHNC | $z$ | 5000 |  | Toronto, |
| :---: | :---: | :---: | :---: | :---: |
| CKGW | ae | 5000 | NEa | Toronto, O |
| CKLC | ak | 1000 | G | $\mathbf{R}$ |
| CMC | $z$ | 500 |  | He |
| CPRY | ae | 5000 | La | To |
| XETH | $z$ | 100 |  | Puebla, Mexico |
| XETM | $z$ | 15000 | P845 | Matamoros, Mex. |
| XFB | $z$ | 500 |  | Jalapa |
| 850 kilocycles |  |  |  |  |
| KIEV | $z$ | 100 | D | lendale, Calif. |
| KWKH | ae | 10000 |  | Shr |
| WWL | ak | 10000 | 1DnX | New Orleans, La |


|  |
| :--- |
| Canadian National Carbon Co., Ltd. |
| Gooderham \& Worts, Ltd. |
| Alberta Pacific Grain Co., Ltd. |
| Cuban Telephone Co. |
| Canadian Pacific Co., Royal York Hotel |
| Ramon Huerta |
| Miguel Murquiz, A. |
| Estado de Vera Cruz |

860 kilocycles 348.6 meters

| VOGY | $z$ | 500 | P | St. John's, N. F. |
| :--- | :--- | ---: | :--- | :--- |
| WABC | ae | 50000 | aC | New York City |
| WBOQ | ae | 50000 | a | New York City |
| WHB | ae | 500 | D | Kansas City, Mo. |
| XFX | $z$ | 500 | $\ldots \ldots$ | Mexico City, Mexico |

870 kilocycles 344.6 meters
WENR ak 50000 Na Chicago, III.
WLS ae 50000 Na Chicago, Ill.
880 kilocycles 340.7 meters


| Great Lakes Bdetg. Co. NBC Opr. |
| :--- |
| Agricultural Broadcasting Co. |
|  |
| Maple Leaf Radio Co., Ltd. <br> Nathansan's Radio Headquarters <br> Vandry, Inc. <br> Cyrus Dolph <br> Mid-Western Radio Corp. <br> Tribune Publishing Co. <br> Pillar of Fire <br> Mississippi Broadcasting Co., Inc. <br> Scranton Broadcasters, Inc. <br> Scranton Times <br> State University of Iowa |

Atlantic Broadcasting Corp.
Atlantic Broadcasting Corp. (tests)
WHB Broadeasting Co.
Secretaria de Educacion Publica

Great Lakes Bdctg. Co. NBC Opr.
Agricultural Broadcasting Co.

Maple Leaf Radio Co., Ltd.
Nathansan's Radio Headquarters
Vandry, Inc.
Mid-Western Radio Corp.
Tribune Publishing Co.
Mississippi Broadcasting Co., Inc.
Scranton Broadcasters, Inc.
State University of lowa
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


## INDEX BY FREQUENCIES AND DIAL NUMBERS

| 970 | kilocycles | 309.1 | meters |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| KJR | ae | 5000 | N | Seattle, Wash. |
| WCFL | ak | 1500 | RX | Chicago, II. |

Northwest Broadcasting System, Inc. Chicago Federation of Labor

| CFCN | ak | 10000 | $985 F L$ | Calgary, Alberta <br> CMGF <br> $z$ |
| :--- | :--- | :--- | :--- | :--- |
| Katanzas, Cuba |  |  |  |  |

The Voice of the Prairies, Ltd.
Bernabe R. de la Torre
Westinghouse Elec. \& Mfg. Co.



## 1010 kilocycles 296.9 meters

| CFCO | ak | 250 |  | Chatham, Ont. |
| :---: | :---: | :---: | :---: | :---: |
| CKIC | ak | 50 |  | Wolfville |
| CMBZ | ak | 150 |  | Havana, Cuba |
| CMCX | $z$ | 150 |  | Havana, Cuba |
| KGGF | ak | 500 | 2(1) | Coffeyville, Kans. |
| KQW | ae | 500 | T | San Jose, Calif. |
| WHN | ae | 250 |  | New York City |
| WIS | ae | 500 | N(1) | Columbia, S. C. |
| WNAD | ae | 500 | 2 | Norman, Okla. |
| WPAP | ae | 250 | 1 a | New York City |
| WOAO | ae | 250 | la | New York City |
| WRNY | $z$ | 250 | 1 | New York City |
| XEU | ak | 100 |  | Veracruz, Mexico |

$|c|$
John Beardall (Wm. Pitt Hotel)
Acadia University
Manuel \& Guillermo Salas
Diario "El Mundo""
Powell \& Platz
Pacific Agricultural Foundation, Ltd.
Marcus Loew Booking Agency
WIS, Inc.
University of Oklahoma
Marcus Loew Booking Agency
Marcus Loew Booking Agency
Marcus Loew Booking Agency
Baltasat Pazos Sosa


| 1030 | kilocycles | 291.1 meters |  |  |
| :--- | ---: | ---: | :--- | :--- |
| CFCF | ae | 500 | NG | Montreal, Que. |
| CMHI | ck | 30 | a | Santa Clara, Cuba |
| CMKC | z | 150 | $1034 a$ | Santiago de, Cuba |
| CMRV | ak | 500 | $\ldots . .$. | Vancouver, B. C. |
| CNEB | ak | 1000 | $\ldots . .$. | Mexico City, Mexico |



1040 kilocycles 288.3 meters

| CMGH | $z$ | 15 | $\ldots$ | Matanzas, Cuba |
| :--- | :--- | ---: | :--- | :--- |
| KRLD | ae | 10000 | iC. | Dallas, Tex. <br> KTHS <br> ae |
| 10000 | 1N | Hot Springs, Ark. |  |  |
| WWSG | ae | 1000 | D | Emmira, N. Y. |
| WKAR | ae | 1000 | D | East Lansing, Mich. |

$\left.\begin{array}{l}\text { O.y J. Alvarez } \\ \text { KRLD Radio Corp. (Adolphus Hotel) } \\ \text { Chamber of Commerce } \\ \text { WESG, Inc. } \\ \text { Michigan State College }\end{array}\right)$

1050 kilocycles 285.5 meters

| CMJG | $z$ | 50 |  | Camaguey, Cuba |
| :---: | :---: | :---: | :---: | :---: |
| KFBI | ae | 5000 | Dn | Abilene, Kan |
| KNX | ae | 25000 | X | Hollywood, Calif. |
| XEFC | $z$ | 10 |  | Merida, Yuc. |
| XES | dk | 250 | 1055K | Tampico, Mexico |

Jose Antonio Lefran
Farmers \& Bankers Life Ins. Co.
Western Broadcast Co.
Hugo Molina Font
Difusora Portena

## INDEX BY FREQUENCIES AND DIAL NUMBERS

| 1060 | kilocycles | 282.8 meters |  |  |
| :--- | :---: | :---: | :---: | :---: |
| KWJJ | m | 500 | Dn | Portland, Ore. |
| WBAL | ae | 10000 | 1B | Baltimore, Md. |
| WJAG | ak | 1000 | Dn | Norfolk, Neb. |
| WTIC | ak | 50000 | 1R | Harford, Conn. |


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



| Station WBT, Inc. <br> Wilbur Glenn Voliva <br> Moody Bible Institute |
| :---: |

## 1090 kilocycles 275.1 meters <br> кмоX ak 50000 c <br> St. Louis, Mo.


272.6 meters

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


## 1110 kilocycles 270.1 meters

| CMJO | $z$ | 15 |  |
| :--- | :--- | ---: | :--- |
| KSOO | ae | 1000 | Dn(2.5) |
| WRVA | ae | 5000 | N |
| XENT | $z$ | 150000 | 1115 |

Ciego de Avila, Cuba
Sioux Falls, So. Dak.
Richmond, Va.
Neuvo Laredo, Mex.

## Rey-Borges

Sioux Falls Broadcast Assn., Inc.
Larus $\&$ Bros. Co., Inc.
Compania Industrial Universal, S. A.

## 1120 kilocycles 267.7 meters

| CFCA | ak | 500 | G |
| :--- | :--- | :--- | :--- |
| CFJC | ak | 100 | EL |
| CHGS | ce | 100 | VX |
| CJOC | ak | 100 | ii2. |
| CMHJ | ae | 40 | i125 |
| KFIO | ae | 100 | D |
| KFSG | ak | 500 | a |
| KRKD | aeh | 500 | a |
| KRSC | ak | 100 | D |
| KTRH | ak | 500 | $2 C$ |
| WDEL | aj | 250 | $(.5)$ |
| WHAD | ae | 250 | $1 \mathbf{C}$ |
| WISN | ak | 250 | 1 C |
| WTAW | ae | 500 | 2 |

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

Toronto Daily Star
Review Publishing Co., Ltd.
R. T. Holman, Ltd.

Harold R. Carson
Victorino Lopez (Hotel Bristol)
Spokane Broadcasting Corp.
Echo Park Evangelistic Assn.
Fireside Broadcasting Co.
Radio Sales Corp. (Wash. Ath. Club)
KTRH Broadcasting Co. (Rice Hotel)
WDEL, Inc.
Marquette University
American Radio News Corp.
Agricultural \& Mech. College

1130 kilocycles
KSL ae 50000 C
$\begin{array}{llrl}\text { WJJD ze } & 20000 & \text { Dn } \\ \text { WOV } & \text { ae } & 1000 & \text { D }\end{array}$
$\begin{array}{llrr}\mathrm{XEH} & \mathrm{ak} & 250 & 1132\end{array}$

## 265.3 meters

Salt Lake City, Utah
Chicago, Ill.
New York City
Monterrey, Mexico


## 1140 kilocycles 263.0 meters

| CMBJ | $z$ | 150 |  |
| :---: | :---: | :---: | :---: |
| CMCD | aeh | 250 |  |
| KVOO | ae | 5000 | 1 N |
| WAPI | aj | 5000 | 1 |
| XETA | z | 250 |  |
| 1150 kilocycles |  |  |  |
| CMJH | ak | 50 |  |
| WHAM | ae | 5000 | BX |
| XED | $z$ | 500 | 1155 |
| 10-AT | ak | 25 | 1155 |

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

Emilio Perera
Angel Bertematy y Garcia
Southwestern Sales Corp.
WAPI Broadcasting Corp.
Manuel Espinosa Tagle

1150 kilocycles
260.7 meters

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

Luis Marauri Mendoza
Stromberg-Carlson Tel. Mfg. Co.
International Broadcasting Co.
Trail Amateur Radio Assn.


## 1190 kilocycles 252.0 meters

WOAI ach 50000 N
San Antonio, Texas
St. John's, N. F.
$\square 1$
Southern Equipment Co.
Dominion Brdestg. Co., Led.

| 1200 |  |  |  | 249.9 meters |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CHCH | $z$ | 100 | 2 | Montreal, Que. | Montreal Radio Corp. |  |
| CHLP | 2 | 100 | 2 | Montreal, Que. | La Patrie, Ltd. |  |
| CKOV | ak | 100 |  | Kelowna, B. C. | Okanagan Broadcasters, Ltd. |  |
| CMGB | $z$ | 30 | 1205 | Matanzas, Cuba | Jose Anorga |  |
| KBTM | ak | 100 | D | Paragould, Ark. | Beard's Temple of Music |  |
| KERN | ak | 100 | CT | Bakersfield, Calif. | Bee Bakersfield Broadcasting Co. |  |
| KFJB | ak | 100 | (.25) | Marshalltown, Iowa | Marshall Electric Co., Inc. |  |
| KFWF | ak | 100 |  | St. Louis, Mo. | St. Louis Truth Center, lnc. | KCYS. |
| KFXD | ae | 100 |  | Nampa, Idaho | Frank E. Hurt (R/C Boise) |  |
| KFXJ | ak | 100 |  | Grand Junction, Colo. | Western Slope Brdcstg. Co. | 1210 |
| KGDE | ae ak | 100 100 | (.25) | Fergus Falls, Minn. Huron, S. | Jaren Drug Co. | MTRS. |
| KGEK | ak | 100 |  | Yuma, Colo. | Beehler Electrical Equipment Co. |  |
| KGEW | ak | 100 | 9 | Ft. Morgan, Colo. | City of Fort Morgan | 247.8 |
| KGFJ | ae | 100 |  | Los Angeles, Calif. | Ben. S. McGlashan |  |
| KGHI | ak | 100 |  | Little Rock, Ark. | O. A. Cook | DIAL |
| KGVO | ak | 100 |  | Missoula, Mont. | Mosby's, Inc. |  |
| KMLB | ae | 100 |  | Monroe, La. | Liner's Broadcasting Station, lnc. |  |
| KVOS | 2 | 100 |  | Bellingham, Wash. | KVOS, Inc. |  |
| WWABI | ak | 100 | CT | Stockton, Calif. | McClatchy Newspapers |  |
| WABI | ak | 100 |  | Bangor, Maine | First Universalist Society |  |
| WABZ | ak | 100 | 1 | New Orleans, La. | Samuel D. Reeks |  |
| WBBZ | ak | 100 |  | Ponca City, Okla. | C. L. Carrell (R/C various cities) |  |
| WBHS | ak | 100 | 4 | Huntsville, Ala. | Radio Station WBHS, Inc. |  |
| WCAT | ak | 100 | D | Rapid City, S. D. | State School of Mines |  |
| WCAX | ak | 100 |  | Burlington, Vt. | Burlington Daily News |  |
| WCLO | ak | 100 |  | Janesville, Wis. | WCLO Radio Corp. (R/C Bcioit) |  |
| WCOD | ae | 100 |  | Harrisburg, Pa. | Keystone Broadcasting Corp. |  |
| WFAM | ak | 100 | 8 C | South Bend, Ind. | South Bend Tribune (WSBT) |  |
| WFBC | $z$ | 100 | (.25) 4 | Greenville, S. C. | News-Piedmont Co. |  |
| WFBE | ak | 100 | (.25) | Cincinnati, Ohio | Radio Station WFBE, Inc. |  |
| WHBC | ak | 10 |  | Canton, Ohio | Edward P. Graham |  |
| WHBY | ak | 100 |  | Green Bay, Wis. | WHBY, Inc. |  |
| WIBX | $z$ | 100 | (.3) | Utica, N. Y. | WIBX, Inc. |  |
| WIL | ae | 100 | 5 (.25) | St. Louis, Mo. | Missouri Broadcasting Corp. |  |
| WJBC | ae | 100 | 6 | LaSalle, Ill. | Kaskaskia Broadcasting Co. |  |
| WJBL | ae | 100 | 6 | Decatur, Ill. | Commodore Broadcasting, Inc. |  |
| WJBW | ak | 100 | 1 | New Orleans, La | C. C. Carlson |  |
| WKJC | ae | 100 | 3 | Lancaster, Pa. | Lancaster Bdctg. Service, Inc. |  |
| WLAP | ae | 100 | (.25) | Louisville, Ky. | American Broadcasting Corp. of Ky |  |
| WNBO | aeh | 100 |  | Washington, Pa. | Spriggs Symplex |  |
| WNBW | $z$ | 10 | (1) | Carbondale, Pa . | WNBW, Inc. |  |
| WORC | ak | 100 | CH | Worcester, Mass. | A. F. Kleindienst |  |
| WPHR | ae | 100 | (.25) | Petersburg, Va. | WLBG, Inc. |  |
| WRBL | ak | 100 |  | Columbus, Ga. | WRBL Radio Station, Inc. |  |
| WWAE | aeh | 100 | 8 | Hammond, Ind. | Hammond-Calumet Bdetg. Corp. |  |
| 10-AB | ak | 25 |  | Moose Jaw, Sask. | Moose Jaw Radio Assn. |  |
| 10-AK | ak | 15 |  | Stratford, Ont. | M. 1. Higgins Elec. \& Radio Co. |  |
| 10-BI | ak | 25 |  | Prince Albert, Sask. | Prince Albert Radio Club |  |
| 10-BP | ak | 25 | 1199 | Wingham, Ont. | W. T. Cruickshank |  |
| 10-BQ | ak | 15 |  | Brantford, Ont. | Tom Brown \& Harold Brown |  |
| $10-\mathrm{BU}$ | $z$ | 15 |  | Canora, Sask. | Canora Radio Assn. |  |
| 1210 | il | c |  | 247.8 meters |  |  |
| CFNB | ae | 100 | E | Fredericton, N. B. | James S. Neill \& Sons, Ltd. |  |

# INDEX BY FREQUENCIES AND DIAL NUMBERS 

| CJOR | ak | 500 | E | Vancouver, B. C. |
| :---: | :---: | :---: | :---: | :---: |
| CKMC | ak | 100 | 8 | Cobalt, Ont. |
| KASA | ak | 100 |  | Elk City, Okla. |
| KDLR | ak | 100 |  | Devils Lake, N. Dak. |
| KFJI | ak | 100 |  | Klamath Falls, Ore. |
| KFOR | ak | 100 | (.25) | Lincoln, Neb. |
| KFPW | ak | 100 |  | Fort Smith, Ark. |
| KFVS | ae | 100 | 6 | Cape Girardeau, Mo. |
| KFXM | ak | 100 | 9 | San Bernardino, Calif. |
| KGCR | ah | 100 |  | Watertown, S. Dak. |
| KGNO | ak | 100 |  | Dodge City, Kans. |
| KGY | ak | 100 |  | Olympia, Wash. |
| KIEM | $z$ | 100 | DP | Eureka, Calif. |
| KPPC | ak | 50 | 9 | Pasadena, Calif. |
| KWEA | z | 100 |  | Shreveport, La. |
| WALR | ae | 100 |  | Zanesville, Ohio |
| WBAX | ae | 100 | 1 | Wilkes-Barre, Pa. |
| WBBL | ak | 100 | 7S | Richmond, Va. |
| WCBS | ak | 100 | 2 | Springfield, Ill. |
| WCRW | ae | 100 | 4 | Chicago, IIl. |
| WEBQ | ae | 100 | 6 | Harrisburg, It1. |
| WEDC | $z$ | 100 | 4 | Chicago, IIl. |
| WFAS | ak | 100 | 3 | White Plains, N. Y. |
| WGBE | ae | 100 | 3 | Freeport, N. Y. |
| WGCM | ae | 100 |  | Gulfport, Miss. |
| WGNY |  | 50 | P | Chester Twp., N. Y. |
| WHBF | ae | 100 |  | Rock Island, 111. |
| WHBU | aj | 100 |  | Anderson, Ind. |
| WHET | ak | 100 | D | Troy, Ala. |
| WIBU | ae | 100 |  | Poynette, Wis. |
| WJBI | ak | 100 | 3 | Red Bank, N. J. |
| WJBU | ae | 100 | 1 | Lewisburg, Pa. |
| WJBY | aeh | 100 |  | Gadsden, Ala. |
| WJEJ | aeh | 100 | D | Hagerstown, Md. |
| WJW | ae | 100 |  | Akron, Ohio |
| WKFI | ak | 100 |  | Greenville, Miss. |
| WMBG | aj | 100 | 7 C | Richmond, Va. |
| WOCL | ak | 50 |  | Jamestown, N. Y. |
| WOMT | ae | 100 |  | Manitowoc, Wis. |
| WPAW | ak | 100 | 9Y | Providence. R.I. |
| WPRO | ak | 100 | aY | Providence, R.I. |
| WQDX | z | 100 |  | Thomasville, Ga. |
| WSBC | $z$ | 100 | 4 | Chicago, [11. |
| WSEN | ak | 100 |  | Columbus, Ohio |
| WSIX | ae | 100 |  | Springfield, Tenn, |
| WSOC | ae | 100 |  | Gastonia, N. C. |
| WTAX | ae | 100 | 2 | Springfield, In. |
| XEX | $z$ | 500 |  | Mexico City, Mexico |

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

KDLR, Inc.
KFJI Broadcasters, Inc.
Howard A. Shuman
Southwestern Hotel Co.
Oscar C. Hirsch
J. C. 8 E. W. Lee

Greater Kampeska Radio Corp.
Dodge City Broadcasting Co.
KGY, Inc. (Capitol Park Bldg.)
Harold H. Hanseth
Pasadena Presbyterian Church
Hello World Broadcasting Corp.
WALR Broadcasting Corp.
John H. Stenger, Jr. (Morris Bldg.
Grace Covenant Pres. Church
WCBS, Inc.
Clinton R. White
Harrisburg Broadcasting Co.
Emil Denemark, Inc.
Westchester Broadcasting Corp.
Harry H. Carman
Great Southern Land Co.
Peter Goelet (Orange County)
Rock Island Broadcasting Co
Anderson Broadcasting Corp.
Troy Broadcasting Co.
Wm. C. Forrest
Monmouth Broadcasting Co., Inc.
Bucknell University
Ingrams Broadcasting Co.
A. V. Tidmore

WJW, Inc.
J. Pat Scully

Havens \& Martin, Inc.
A. E. Newton

Francis Mangin Kadow
Cherry 8 Webb Broadcasting Co.
Cherry \& Webb Broadcasting Co.
Stevens Luke
WSBC, Inc.
Columbus Bdctg, Corp. (Seneca Hotel)
638 Tire \& Vulc. Co. (R/C WLW)
WSOC, Inc.
WTAX, Inc
Excelsior, Cia Editorial S. A.



## 1240 kilocycles 241.8 meters

| CMAB | $z$ | 20 | 1249 |
| :--- | :--- | :--- | :--- |
| KGCU | ak | 250 | 3 |
| KLPM | ak | 250 | 3 |

Pinar del Rio, Cuba
Mandan, N. Dak. Minot, N. Dak.

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

KTAT
KTFI
WACO
WKAO
WXYZ
XEFW

| ak | 1000 | 1 | Fort Wo |
| :---: | :---: | :---: | :---: |
| ak | 500 |  | Twin Falls, Idaho |
| ak | 1000 | 1 C | Waco, Teras |
| ae | 1000 |  | San Juan, P. R |
| ak | 1000 |  | Detroit. Mich. |
| $z$ | 70 |  | Tampico, Mex. |

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


## 1260 kilocycles



Gilberto Gessa Lopez
Mona Motor Oil Co.
KRGV, Inc. (Rio GrandeNa. Life Bldg.)
Robert M. Riculfi
Frank P. Jackson
Broadcasters of Pennsylvania. Inc.
WNBX Broadcasting Corp.
Savannah Broadcasting Co., Inc.



## 1300 kilocycles 230.6 meters

| CMKJ | z | 20 |  |
| :--- | :--- | ---: | :--- |
| KALE | ak | 500 | 3 |
| KFAC | aj | 1000 |  |
| KFH | ae | 1000 | Ci |
| KFJR | ag | 500 | 3 |
| WBBR | aej | 1000 | 1 |
| WEVD | ae | 500 | 1 |
| WFAB | $z$ | 1000 | 1 |
| WHAZ | ae | 500 | 1 |
| WIOD | aeh | 1000 | N |
| WOQ | ae | 1000 | 1 |

[^11]
## Luis Morlote

KALE, Inc.
Los Angeles Broadcasting Co.
Wichita Eagle-Hotel Lassen
Ashley C. Dixon-KFJR, Inc.
Peoples Pulpit Assn.
Debs Memorial Radio Fund, Inc. Fifth Avenue Broadcasting Corp. Rensselaer Polytechnic Institute Isle of Dreams Broadcasting Corp. Unity School of Christiani y

| 1310 | 228.9 meters |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CMJP | $z$ | 7.5 |  | Moron, Cuba | Ces |  |
| KCRJ | ak | 100 | D | Jerome, Arizona | Chas. C. Robins |  |
| KFBK | ak | 100 | C | Sacramento, Calif. | Jas. McClatchy Co. |  |
| KFGPL | ${ }_{\text {ak }}^{\text {ak }}$ | 100 | 7 | Boone, Iowa | Boone Biblical College |  |
|  | ck | 100 |  | Oublin, Texas | New Furniture Co. |  |
| KFXR | ak | 100 | (.25) | Oklahoma City, Okla. | Exchange Ave. Baptist | hurch |
| KFYO | ak | 100 | (.25) Z | Lubbock, Texas | Kirksey Brothers |  |
| KGBX | ae | 100 |  | Springfield, Mo. | KGBX, Inc. ${ }^{\text {a }}$, |  |
| KGCX | ${ }_{\text {aj }}^{\text {ak }}$ | 100 100 | (.25) | Wolf Point, Mont. | First State Bank of Vida |  |
| KGFw | ah | 100 |  | Kearney, Neb . | Central Nebraska Bdct | Corp. |
| KIFH |  | 100 |  | Juneau, Alaska | Juneau Broadcasting |  |
| KIT | ${ }^{\text {ak }}$ | 100 |  | Yakima, Wash. | Valley Broadcasters, Inc |  |
| KMED | ${ }^{\text {ak }}$ | 100 |  | Medford, Ore. | MRM. W. Inc Virgin |  |
| KRMD | ak | 100 100 |  | Shreveport, La. | KRMD, Inc. Jefferso |  |
| KXRO | ak | 100 |  | Aberdeen, Wash. | KXRO, Inc. (Hotel Mò | k) |
| WAML | $z$ | 100 |  | Laurel, Miss. | Southland Radio Corp |  |
| WBEO | , | 100 |  | Marquette, Mich. | Lake Superior Broadcas | ing Co. |
| WBOW | ak | 100 |  | Terre Haute, Ind. | Banks of Wabash, Inc. |  |
| WBRE | $z$ | 100 |  | Wilkes-Barre, Pa. | Louis G. Baltimore |  |
| WDAH | ae | 100 |  | Ei Paso, Texas | Tri-State Broadcasting | Co., Inc. |
| WEBR | ae | 100 | Q(.25) | Buffalo, N. Y. | Howell Broadcasting St |  |
| WEXL | ak | 50 |  | Royal Oak, Mich. | Royal Oak Broadcastin | Co. |
| WFDF | ${ }_{\text {ae }}^{\text {ae }}$ | 100 |  | Flint, Mich. | Frank D. Fallain (Unio | d. Bl |
| wGAL | ae | 100 |  | Lancaster, Pa. | WGAL, Inc. (Lancaster | Newsp. Bldg. |
| WGH | ae | 100 |  | Newport News, Va. | Hampton Roads Broadc | asting Corp. |
| WHAT | ak | 100 |  | Philadelphia, Pa. | Independence Broadcas |  |
| wiAS | ${ }_{\text {ak }}^{\text {ak }}$ | 100 100 | 7 3 | Ottumwa, Iowa | Iowa Bdctg. Co. (Hote | Ottumw |
| WKAV | ae | 100 |  | Leconia, N.' ${ }^{\text {L }}$. | Laconia Redio Club |  |
| WKBB | ae | 100 | bYZ | Joliet, in. | Richard W. Hoffman |  |
| WKBC | 兄 | 100 |  | Birmingham, Ala. | R. B. Broyles Furnitur |  |
| WLBC | ak | 50 | 6 | Muncie, Ind. | D. A. Burton-A. J. M | ott |
| WMBO | ak | 100 |  | Auburn, N. | WMBO, Inc. (Masonic | mple) |
| WNBH | ${ }^{\text {ae }}$ | 100 | H(.25) | New Bedford, Mass. | New Bedford Bdctg. ${ }^{\text {cos }}$ | N. B. Hotel |
| WRAL | ae | 100 |  | Washington, D. C. | American Broadcastin | Co. |
| WROL | ${ }_{\text {ak }}^{\text {ak }}$ | 100 |  | Reading, Pa. | Reading Broadcasting Stuart Bdetg. Co. (Farr | agut Hotel) |
| WSAJ | ae | 1100 |  | Grove City, Pa. | Grove City College |  |
| WSJS | ae | 100 | C | Winston-Salem, N. C. | Winston-Salem Journal | Co. |
| WTEL | ae | 100 |  | Philadelphia, Pa. | Foulkrod Radio Eng. Cu | Inc |
| WTJS | ${ }^{\text {ak }}$ | 100 50 | (.25) | Jackson, |  | Bldg.) |
| $\begin{aligned} & \text { XEFB } \\ & \text { XEI } \end{aligned}$ | ak | 100 150 | 1315 | Monterrey, N. L., Mex. <br> Morelia, Mexico | Quintanilla y Stevenson Carlos Gutierrez M. |  |

## 1320 kilocycles 227.1 meters

| CMBF | $z$ | 150 | 1325 |
| :--- | :--- | ---: | :--- |
| CMCY | ak | 1000 | 1325 |
| KGHF | 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.

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

## Ramon Bardales

M. D. Autran
C. P. Ritchie \& J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc.


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

## 1340 kilocycles 223.7 meters

| KFPY | ae | 1000 | CT | Spokane, Wash. <br> Pensacola, Fla. |
| :--- | :--- | :--- | :--- | :--- |
| WCOA | agj | 500 |  |  |
| WSPD | ae | 1000 |  | Poledo, Ohio |

Symons Bdctg. Co. (Symons Bldg.)
Pensacola Bdetg. Co. (San Carlos Hot.)
Toledo Bdetg. Co. (Com. Perry Hotel)

## 1350 kilocycles 222.1 meters

KIDO KWK WAWZ WBNX WCDA WEHC WMSG
ak
ae
ae
ae $\quad 250$
ae 250 1a
ae 500 DY

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 Coro.
Italian Educ. Bdetg. Co., Inc.
Emory \& Henry College
New York Met. Broadcasting Corp.

## 1360 kilocycles 220.4 meters

KGER
KGIR WCSC WFBL
WGES
wJKs
WOBC
XEFH

| ah | 1000 | $\ldots$ |
| :--- | ---: | :--- |
| ak | 500 | NJ |
| ae | 500 | $\cdots$ |
| ak | 1000 | C $(2$. |
| ae | 500 | $1(1)$ |
| agj | 1000 | $1 Z$ |
| ak | 500 | P |
| $z$ | 250 | P |

Long Beach, Calif. Butte, Mont. Charleston, $\dot{S} . \mathrm{C}$. Syracuse, N. Y. Chicago, Ill. Gary, Ind. Vicksburg, Miss. Mexico City, Mexico
$\square$
Consolidated Bdctg. Co. (R/C Los An.) KGIR, Inc.
So. Carolina Broadcasting Co., Inc. Onondaga Radio Broadcasting Corp. Oak Leaves Broadcasting Station, Inc. Johnson-Kennedy Radio Corp.
Delta Bdetg. Co. (Post-Herald Station)
Francisco Hornedo


## INDEX BY FREQUENCIES AND DIAL NUMBERS

| 1390 | kilocycles | 215.7 meters |  |  |
| :--- | :---: | ---: | :--- | :--- |
| CMCH | ak | 50 | 1395 | Havana，Cuba |
| CMCM | $z$ | 15 | 1395 | Havana，Cuba |
| CMDB | $z$ | 40 | 1395 | Havana，Cuba |
| KLRA | ae | 1000 | 1 C | Little Rock，Ark． |
| KOY | ae | 500 | C（1） | Phoenix，Arizona |
| KUOA | bk | 1000 | 1 | Fayetteville，Ark． |
| WHK | ae | 1000 | C（2．5） | Cleveland，Ohio |

$\mid 1$
Wifredo \＆Hum．Fontanals Sanchez
Aurelio Balino
Julio Powers
Arkansas Broadcasting Co．
Nielson Radio \＆Sportiny Goods Co．
Southwestern Hotel Co．（Ft．Smith）
Radio Air Service Corp．（Higbee Store）

## 1400 kilocycles 214.2 meters

| KLO | ae | 500 | $\ldots$ |
| :--- | :--- | :--- | :--- |
| KOCW | $z$ | 250 | $(.5)$ |
| WBAA | ak | 500 | 1 |
| WBBC | ae | 500 | 2 |
| WCGU | ak | 500 | 2 |
| WFOX | ak | 500 | 2 |
| WKBF | ak | 500 | $1 \mathbf{W}$ |
| WLTH | ae | 500 | 2 |

Ogden，Utah
Chickasha，Okla．
Lafayette，Ind．
Erooklyn，N．Y．
Brooklyn，N．Y．
Brooklyn．N．Y．
Indianapolis，Ind．
Brooklyn，N．Y．

Interstate Bcg．Corp．
J．T．Griffin
Purdue University
Brooklyn Broadcasting Corp．
United States Broadcasting Corp．
Paramount Broadcasting Co． Indianapolis Broadcasting，Inc．
Voice of Brooklyn，Inc．

## 1410 kilocycles

| KFLV | ak | 500 | 4 |
| :---: | :---: | :---: | :---: |
| KGRS | ae | 1000 | 1 |
| WAAB | ae | 500 | CH |
| WBCM | ae | 500 | C |
| WDAG | ae | 1000 | 1 |
| WHBL | ae | 500 | 4 |
| WHIS | ak | 250 | 2 |
| WODX | ea | 500 | 3 CU |
| WRBX | ae | 250 | 2 |
| WSFA | ak | 500 | 3C |

212.6 meters

Rockford，Ill． Amarillo，Texas Boston，Mass． Bay City，Mich． Amarillo，Texas Sheboygan，Wis． Bluefield，W．Va．
Mobile，Ala．
Roanoke，Va．
Montgomery，Ala．

Rockford Broadcasters，Inc．
E．B．Gish
Bay State Broadcasting Corp．
James E．Davidson
National Radio \＆Bdetg．Corp．
The Press Publishing Co．
Daily Telegraph
Mobile Broadcasting Corp．
Richmond Development Corp．
Montgomery Broadcasting Co．，Inc．

|  |  |  |  | 1 meters |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }_{\text {KABC }}$ | ak | ${ }_{100}^{100}$ |  | San Antonio，Texas | Alamo | y Benso | $\begin{aligned} & \text { re) } \\ & \text { pol } \end{aligned}$ |
| KCMC | ${ }_{\text {ak }}^{\text {aj }}$ | 100 |  | Texarkana，A | Texarka | e 2 | ews |
| ${ }_{\text {KFGFF }}$ | ${ }_{\text {ak }}^{\text {ak }}$ | 10 |  | Fond | Reporter | rinting Co． | Hotel） |
| KGGC | ${ }^{\text {ak }}$ | 100 |  | San Francisco．Calif． |  | Wilsond |  |
| kGIX | ${ }_{\text {ak }}^{\text {ak }}$ | 100 |  | Lrin Vegas，Nevada | J．M．Hea | on |  |
| KGKX | ${ }_{z}^{z}$ | 100 100 |  | Lewiston， | Red Oak | Radio |  |
| KIDW | 右 | 100 | 1 | Lamar，Colo． | La |  |  |
| KOR | ${ }^{\text {a }}$ eh | 100 |  |  |  | 佼 |  |
| KWCR | ${ }_{\text {ae }}$ | 100 | B （25） | ${ }_{\text {Cedar }}$ | Ced | ds Broadc |  |
| KXL | ${ }_{\text {ae }}$ | 100 |  | P | KX | dcasters（H） | Multnomah |
| WAGM | ${ }^{\text {af }}$ | 100 |  | Pres | Arous |  |  |
| wazL | $z$ | 100 |  | Hazle | Hazleto | Brd | nc． |
| wehs | ${ }^{\text {ak }}$ | 150 | a | ${ }_{\text {Cicero，}}^{\text {Cill }}$（inlek， | WEHS，In | News Co． |  |
| WEN | ${ }_{\text {ak }}$ | 100 | D | Americus， $\mathbf{C a}$ a． | Americu | －w |  |
| ${ }_{\text {WHDL }}^{\text {Were }}$ | $\xrightarrow[\text { ae }]{\text { aeh }}$ | 100 |  | Erie， | Erie Broa | casti |  |
| WHF | ae | 100 | ${ }^{\text {a }}$ | Cicero，ill． | WHFC，In | c． |  |
| ${ }_{W}^{\text {WILM }}$ IBO | ${ }_{z}^{\text {ae }}$ | 100 100 100 | ${ }^{2}$ | Wilmington，D | Delaware | Broadcasting C |  |
| ${ }_{\text {wJM }}$ | ak | 100 |  | Ironwood，Mich． | S | （St． |  |
| $\underset{\text { WLBF }}{\text { WKBI }}$ | ${ }^{\text {ak }}$ | 100 |  | Cicero，${ }^{\text {Kill }}$ | wLbe | ditg．Co．（Aladd | din |
| wMAS | ak | 100 |  | Springifild，Mass． | WMAS，In |  |  |
| $\underset{\sim}{\text { wMBH }}$ | ${ }_{\text {ak }}^{\text {ae }}$ | ${ }_{100}^{100}$ | （．25） | Je | W． |  |  |
| AD | ak | 100 |  | Pad |  |  |  |
| TBO | ae | 100 |  | Cumberiand，Md． |  |  |  |



Earle C．Anthony，Inc．
Great Plains Broadcasting Co．
Pennsylvania State Police

| WCAH | ae | 500 | 1 C | Columbus, Ohio |
| :--- | :--- | :--- | :--- | :--- |
| WFEA | ae | 500 | CH | Manchester, N.H. |
| WHEC | ae | 500 | C | Rochester, N. Y. |
| WHP | ak | 500 | lC(1) | Harrisburg, Pa. |
| WNBR | ae | 500 | $\cdots \cdots$ | Memphis, Tenn. |
| WOKO | ae | 500 | C | 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 |  |  |  | 2 meters |
| :---: | :---: | :---: | :---: | :---: |
| CMBL | ak | 20 | 1444 | Havana, Cuba |
| CMBN | ak | 30 | 1444 | Havana, Cuba |
| KDFN | ak | 500 |  | C |
| KLS | ae | 250 | D | Oakland, Calif. |
| $\underset{\text { WBIG }}{ }$ | ak ae | 500 500 |  | Houston, Texas |
| ${ }_{\text {WCBA }}$ | ae | 500 250 |  | Greensboro, $\mathrm{N} . \mathrm{C}$ |
| WMBD | ae | 500 | ${ }^{3} \mathrm{C}(1)$ | Peoria, Inl. |
| WSAN | ${ }_{\text {ak }}^{\text {a }}$ | 250 500 | $\stackrel{\text { a }}{3}$ | ${ }_{\text {Allentown, }}^{\text {Ald }}$ |

$\square$
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.


| $\mid$ |
| :--- |
| Tri-State Bdctg. System, Inc. |
| WGAR Broadcasting Co., Inc. |
| New Jersey Broadcasting Corp. |
| Radio Investment Co., Inc. |
| Doughty \& Welch Electric Co., Inc. |
| Liberty Broadcasting Co. |

1460 kilocycles 205.4 meters
KSTP ae 10000 N(25)

WJSV ck 10000 C
St. Paul, Minn. Washington, D. C.

National Battery Broadcasting Co.
Old Dominion Broadcasting Co.
(Transmitter at Alexandria, Va.)

| 147 | kil | ycl |  |  | 04. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\xrightarrow[\substack{\text { ak } \\ \text { ae }}]{ }$ | $\begin{aligned} & 5000 \\ & 5000 \end{aligned}$ | ${ }_{\text {B }}$ |  |  |  |



1480 kilocycles

| CMBK | $z$ | 15 | 1485 |
| :--- | :--- | ---: | :--- |
| KOMA | ak | 5000 | C |
| WKBW | ae | 5000 | C |

202.6 meters

Havana, Cuba Oklahoma City, Okla. Alberto Alvarez National Radio Mfg. Co. Buffalo, N. Y. Buffalo Broadcasting Corp.
1490 kilocycles WCKY ae 5000 N
201.2 meters

Covington, Ky.


1500 kilocycles

| CMBR | $z$ | 40 |  |
| :---: | :---: | :---: | :---: |
| KDB | ak | 100 |  |
| KGFI | aj | 100 | (.25) |
| KGFK | ak | 100 |  |
| KGIZ | ak | 100 |  |
| KGKB | bk | 100 |  |
| KGKY | ck | 100 |  |
| KNOW | ak | 100 |  |
| KPJM | ak | 100 |  |
| KPQ | aj | 100 |  |
| KREG | ak | 100 |  |
| KXO | az | 100 |  |
| WFDV | ak | 100 |  |
| WHEF | ak | 100 | (.25) |
| WKBV | ${ }^{z}$ | 100 |  |
| WKBZ | ${ }_{\text {ak }}$ | 100 100 |  |
| WLOE | ae | 100 | (.2 |
| WMBQ | ae | 100 |  |
| WMIL | ak | 100 | 1 |
| WMPC | ak | 100 |  |
| WNBF | ae | 100 |  |
| WPPI | ae ce | 100 100 | (.25) |
| WRDW | ae | 100 |  |
| WSYB | aeh | 100 |  |
| WWRL | ak | 100 |  |
| WWSW | ${ }_{\text {ae }}^{\text {ae }}$ | 100 | X (.25 |
| XEFZ | ae | 100 |  |

Havana, Cuba
Santa Barbara, Calif.
L. B. Wilson, Inc. (Mabley \& Carew)


## INDEX BY LOCATIONS WITH MAP KEY

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

| ALABAMA | Watts |  | Kcys. |  | Watts |  |  | Kcys. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anniston $\mathrm{O}-21 \mathrm{tr}$ Birmingham O-21 | 100 | WAMC | 1420 | San Jose J-1 | 500 | KQW |  | 1010 |
|  | 5000 | WAPI | N 1140 | Santa Ana M-3 | 100 | KREG |  | 1500 |
|  | 500 | WBRC | C 930 | Santa Barbara M-2 | 100 | KDB | C | 1500 1100 |
|  | 100 | WKBC | 1310 | Stockton | 250 | KGDM |  | 11200 |
| Gadsden O-21 | 100 | WJBY | 1210 |  | 0 | KWG |  | 0 |
| Huntsville $\mathrm{N}-21 \mathrm{c}$ | 100 | WBHS | 1200 | COLORADO |  |  |  |  |
| Mobile Q-20 | 500 | WODX | C 1410 | Colorado Springs K-11 | 1000 | KVOR | C | 1270 |
|  | 500 | WHET | $\begin{array}{r} \text { C } 1410 \\ 1210 \end{array}$ | Denver K-11 | 500 | KFEL | C | 1270 |
|  | 100 |  |  |  | 500 | KFXF |  | 920 |
|  |  |  |  |  | 1000 | KLZ | C | 560 |
|  |  |  |  |  | 12500 | KOA |  | 0 |
| Anchorage Juneau | 250 | KFQD | 1230 |  | 500 | KPOF |  | 880 |
|  | 100 | KIFH | 1310 | Fort Morgan J-11 | 100 | KGEW |  | 1200 |
| Ketchikan | 500 | KGBU | 900 | Grand Junction K-9 ic | 100 | KFXJ <br> KFKA |  | 1200 880 |
| ARIZONA |  |  |  | Lamar L-12 1c | 100 | KIDW |  | 1420 |
| Jerome M-6Phoenix N -6 | 100 | KCRJ | 1310 | Pueblo L-11 | 250 | KGHF |  | 1320 |
|  | 500 | KOY | C 1390 | Trinidad L-11 | 100 | KGIW |  | 1420 |
|  | 500 | KTAR | N 620 | Yuma J-12 | 100 | KGEK |  | 1200 |
| Prescott M-6 <br> Tucson O-7 | 100 | KPJM | 1500 | CONNECTICUT |  |  |  |  |
|  | 100 500 | KGAR | 1370 1260 | Bridgeport H-27 | 250 | WICC | C | 600 |
| Yuma O-5 tl | 100 | KUMA | 1420 | Hartford H-27 | 500 | WDRC | C | 1330 |
|  |  |  |  |  | 50000 | WTIC | R | 1060 |
| ARKANSAS |  |  |  | Storrs H-28 | 250 | WCAC |  | 0 |
| Blytheville M-19 | 50 | KLCN | 1290 | DELAWA |  |  |  |  |
| Fayetteville M-16 | 1000 | KUOA | 1390 | DELAWA |  |  |  |  |
| Fort Smith N-16 | 100 | KFPW | 1210 | Wilmington J-26 | 250 | WDEL |  | 1120 |
| Little Rock N-17 | 10000 | KTHS | N 1040 |  | 100 | WILM |  | 1420 |
|  | 250 | KARK | 890 | DISTRICT OF COLUMBIA |  |  |  |  |
|  | 1000 | KGRA | C $\begin{array}{r}1200 \\ \hline 1390\end{array}$ |  |  |  |  |  |
| Paragould M-18 | 100 | KBTM | C 1200 | Washington J-26 | 10000 | WJSV | C | 1460 |
| Texarkana O-17 bl | 100 | KCMC | 1420 |  | 250 | WMAL | B | 630 |
| CALIFORNIA |  |  |  |  | 100 | WOL |  | 1310 |
| Bakersfield L-2 br | 100 | KERN | C 1200 | FLORIDA |  |  |  |  |
|  | 100 | KRE | 1370 | Clearwater R-24 | 1000 | WFLA | N | 620 |
| Beverly Hills M-3 bl | 500 | KMPC | 710 | Clearwater ${ }^{\text {Gainesville } \mathrm{Q}-24}$ | 5000 | WRUF | C | 830 |
| Burbank M-3 | 500 | KELW | 780 1500 | Jacksonville Q-24 | 1000 | WJAX | N | 900 |
| El Centro $\mathrm{N}-4$ | 100 | KXO | 1500 | Miami T-25 | 1000 | Wiod | N | 1300 |
|  | 500 | KMEM | C $\begin{array}{r}1210 \\ \hline 880\end{array}$ |  | 1000 | WQAM | C | 560 |
| Glendale M-3 | 100 | KIEV | C 850 | Orlando R-24 | 250 | WDBO | C | 580 |
| Hollywood M-3 | 500 | KMTR | 570 | Pensacola Q-21 | 500 1000 | WSUA | N | 1340 620 |
|  | 25000 | KNX | - 1050 | Tampa R-24 | 1000 | WDAE | ${ }^{\text {c }}$ | 1220 |
| Long Beach M-3 | 1000 | KFOX | C 1250 | Tampa R-24 | 100 | WMBR |  | 1370 |
| Los Angeles M-3 | 1000 | KECA | N 1430 | GEORGIA |  |  |  |  |
|  | 1000 | KFAC | 1300 |  | 100 | WENC |  | 1420 |
|  | 50000 | KFI | N 640 | Americus $\mathrm{P}-22 \mathrm{c}$ Athens $\mathrm{N}-23 \mathrm{bc}$ | 100 | WTFI |  | 1450 |
|  | 500 | KFSG | 1120 | Athenta $\mathrm{O}-22$ | 250 | WGST | C | 890 |
|  | 250 | KFVD | 1000 |  | 100 | WJTL |  | 1370 |
|  | 1000 | KFWB | 950 |  | 5000 | WSB | N | 740 |
|  | 100 | KGFJ | C $\begin{array}{r}1200 \\ 900\end{array}$ | Augusta O-23 | 100 | WRDW |  | 1500 |
|  | 1000 500 | KHJ | C $\begin{array}{r}900 \\ 1120\end{array}$ | Columbus $\mathrm{O}-22$ | 100 | WRBL |  | 1200 |
|  | 500 | KRKD | 1120 | LaGrange O-22 1 | 100 | WKEU |  | 1500 |
| Oakland J-1 | 250 | KLS | 1440 | Macon O-23 | 500 | WMAZ |  | 180 |
|  | 500 | KLX | 880 | Rome N-22 | 100 | WFDV |  | 1500 |
|  | 500 | KROW | 930 | Savannah O-24 | 500 | WTOC | C | 1260 |
| Pasadena M-3 | 50 | KPPC | 1210 | Thomasville Q-22 | 100 | WQDX |  | 1210 |
| Sacramento J-2 <br> San Bernardino M-3 | 100 | KFBK | C 1310 | HAWAII |  |  |  |  |
|  | 100 1000 | KFXM | N $\begin{array}{r}1210 \\ 600\end{array}$ | Honolulu | 250 | KGMB | C | 1320 |
| San Diego N -3 | 1000 | KGB | C 1330 |  | 1000 | KGU | N | 750 |
| San Francisco J-1 | 1000 | KFRC | C 610 | IDAHO |  |  |  |  |
|  | 500 | KFWI | 930 |  | 1000 | KIDO |  | 1350 |
|  | 100 | KGGC | 1420 | Idaho Falls G-7 | 250 | KID |  | 1320 |
|  | 7500 100 | KGO | $\begin{array}{r}790 \\ \\ \hline 1070\end{array}$ | Nampa G-5 | 100 | KFXD |  | 1200 |
|  | 5000 | KPO | N $\begin{array}{r}\text { - } \\ \hline\end{array}$ | Pocatello H-7 | 250 | KSEI |  | 890 |
|  | 1000 | KTAB | 560 | Lewiston E-5 rc | 100 500 | KGKX |  | 1420 |
|  | 1000 | KYA | N 1230 | Twin Falls H-6 | 500 | KTFI |  | 1240 |

## INDEX BY LOCATIONS WITH MAP KEY

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

| ILLINOIS | Watts |  | Kcys. | KANSAS | Watts |  | Kcys. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carthage J-18 <br> Chicago I-20 | 50 | WCAZ | 1070 | Abilene K-15 bl | 5000 | KFBI |  | 1050 |
|  | 10000 | KFKX | 1020 | Coffeyville M-15 tr | 500 | KGGF |  | 1010 |
|  | 10000 | KYW | N 1020 | Dodge City L-13 | 100 | KGNO |  | 1210 |
|  | 500 | WAAF | N 920 | Kansas City K-16 | 100 | WLBF |  | 1420 |
|  | 25000 | WBBM | C 770 | Lawrence K-16 | 500 | KFKU |  | 1220 |
|  | 1500 | WCFL | R 970 | Lawrence | 1000 | WREN | B | 1220 |
|  | 100 | WCRW | 1210 | Manhattan K-15 | 500 | KSAC |  | 580 |
|  | 100 | WEDC | 1210 | Topeka K-16 | 1000 | WIBW | C | 58 |
|  | 50000 | WENR | N 870 | Wichita L-15 | 1000 | KFH | C | 1300 |
|  | 500 | WGES | C 1360 |  |  |  |  |  |
|  | 25000 | WGN | C 720 | KENTUCKY |  |  |  |  |
|  | 20000 | WJJD | 1130 | Covington K-22 | 5000 | WCKY | N | 1490 |
|  | 50000 | WLS | N 870 | Hopkinsville M-20 | 1000 | WFIW | N | 1490 |
|  | 5000 | WMAQ | N 670 | Louisville L-21 | 25000 | WHAS | C | 820 |
|  | 5000 | WMBI | 1080 |  | 100 | WLAP |  | 1200 |
|  | 500 | WPCC | 560 | Paducah M-19 | 100 | WPAD |  | 1420 |
|  | 100 100 | WSBC | 1210 |  |  |  |  |  |
| Cicero I-20 | 100 100 | WEHS WHFC | 1420 1420 | LOUISIANA |  |  |  |  |
|  | 100 | WKBI | 1420 | Monroe P-18 | 100 | KMLB |  | 1200 |
| Decatur K-19 | 100 | WJBL | 1200 | New Orleans R-19 | 100 | WABZ |  | 1200 |
| Harrisburg L-19 | 100 | WEBQ | 1210 |  | 1000 | WDSU | C | 1250 |
| Joliet I-19 | 100 | WCLS | 1310 |  | 100 | WJBO |  | 1420 |
|  | 100 | WKBB | 1310 |  | 100 | WJBW |  | 1200 |
| La Salle J-19 | 100 | WJBC | 1200 |  | 500 | WSMB | N | 1320 |
| Peoria J-19 | 500 | WMBD | C 1440 |  | 10000 | WWL |  | 850 |
| Quincy K-18 | 500 500 | WTAD KFLV | 1440 | Shreveport P-17 | 1000 | KRMD |  | 1310 1450 |
| Rock Island I-18 | 100 | WHBF | 1210 |  | 1000 100 | KTBS | N | 1210 |
| Springfield K-19 | 100 | WCBS | 1210 |  | 10000 | KWKH |  | 850 |
|  | 100 | WTAX | 1210 |  |  |  |  |  |
| Tuscola K-20 | 100 | WDZ | 1070 | MAINE |  |  |  |  |
| Zion I-20 | 5000 | WILL | 1080 | Augusta F-28 <br> Bangor F-29 <br> Portland F-28 | 100 | WRDO |  | 1370 |
|  |  | WCBD |  |  | 100 | WABI |  | 1200 |
|  |  |  |  |  | 500 | WLBZ | C | 620 |
| INDIANA |  |  |  | Portland F-28 <br> Presque Isle D-29 1c | $\begin{array}{r} 1000 \\ 100 \end{array}$ | WCSH WAGM | R | 940 1420 |
| Anderson J-21 | 100 | WHBU | 1210 | MAR YLAND |  |  |  |  |
| Connersville K-21 | 100 | WKBV | 1500 | MAR YLAND |  |  |  |  |
| Elkhart I-21 bc Evansville L-20 | 50 500 | WTRC | 1310 | Baltimore J-26 | 10000 250 | WBAL <br> wCAO | ${ }_{\text {B }}$ | 1060 600 |
| Fort Wayne J-21 | 100 | WGL | C 1370 |  | 100 | WCBM |  | 1370 |
|  | 10000 | WOWO | C 1160 |  | 500 | WFBR | R | 1270 |
| Gary I-20 | 1000 | WJKS | 1360 | Cumberland J-25 | 100 | WTBO |  | 1420 |
| Hammond I-20 bc | 100 | WWAE | 1200 | Hagerstown J-25 rc | 100 | WJEJ |  | 1210 |
| Indianapolis J-21 | 1000 | WFBM | C 1230 |  |  |  |  |  |
| Lafayette J-20 | 500 500 | WKBF | 1400 1400 | MASSACHUSETTS |  |  |  |  |
| Muncie J-21 | 50 | WLBC | 1310 | Babson Park G-28 | 500 | WBSO |  | 920 |
| South Bend 1-20 | 100 | WFAM | C 1200 | Boston G-28 | 500 | WAAB | C | 1410 |
|  | 500 | WSBT | C 1230 |  | 25000 | WBZ | B | 990 |
| Terre Haute K-20 | 100 | WBOW | C 1310 |  | 1000 | WEEI | R | 590 |
|  |  |  |  |  | 1000 | WHDH |  | 830 |
|  |  |  |  |  | 100 1000 | WLOE | C | 1500 1230 |
| IOWA |  |  |  | Fall River H-28 | 250 | WSAR |  | 1450 |
| Ames I-17 | 5000 | WOI | 640 | Lexington G-28 | 100 | WLEY |  | 1370 |
| Boone I-17 | 100 | KFGQ | 1310 | New Bedford H-28 | 100 1000 | WNBH WBZA |  | 1310 990 |
| Cedar Rapids I-18 | 100 | KWCR | $\begin{array}{ll}\text { B } & 1420 \\ \text { B } & 1260\end{array}$ | Springfield H-27 | 1000 100 | WBZAS | B | 990 1420 |
| Council Bluffs $\mathrm{Davenport} \mathrm{I}-18 \mathrm{l}$ | 1000 5000 | KOIL | B <br> R <br> R <br> 12000 <br> 1000 | Worcester G-28 | 100 | WORC | C | 1200 |
| Davenport 1-18 Decorah H-18 | 5000 100 | WOC | R $\begin{gathered}1000 \\ 1270\end{gathered}$ |  | 250 | WTAG | R | 580 |
| Des Moines I-17 | 100 | KWLC | 1270 | MICHIGAN |  |  |  |  |
|  | 100 | KSO | B 1370 | MICHIGAN |  |  |  |  |
|  | 5000 500 | WHO | R 1000 | Battle Creek I-21 | 50 | WELL |  | 1420 |
| Iowa City I-18 Marshallitown I-17 | 500 100 | WSUI | 880 1200 | $\xrightarrow{\text { Bay City H-22 }}$ | 500 100 | WBCM | C | 1410 1370 |
| Ottumwa J-17 ${ }^{\text {O-17 }}$ | 100 | WIAS | 1200 1310 | Calumet E-19 | 100 100 | WHDEF |  | 1370 1370 |
| Red Oak J-16 | 100 | KICK | 1420 |  | 10000 | WJR | B | 750 |
| Shenandoah J-16 | 500 | KFNF | 890 |  | 100 | WMBC |  | 1420 |
|  | 500 1000 | KMA | 930 $C \quad 1330$ |  | 1000 1000 | WWJ | R | 920 1240 |
| Waterloo I-17 | 1000 500 | WMT | Cr $\begin{array}{r}\text { C } \\ \text { C } \\ \hline\end{array}$ | East Lansing H-21 | 1000 | WXYAR |  | 1240 1040 |

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

| Flint H-22 <br> Grand Rapids H-21 | Watts |  | Kcys. | NEVADA <br> Las Vegas L-5 | Watts |  | Kcys. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100 | WFDF | 1310 |  | 100 | KGIX |  | 1420 |
|  | 500 | WASH | 1270 1270 | Reno 1-3 | 500 | KOH |  | 1380 |
| Ironwood F-18 rc | 500 100 | WJMS | 1270 1420 |  |  |  |  |  |
| Jackson I-21 | 100 | WIBM | 1370 | NEW HAMPSHIRE |  |  |  |  |
| Kalamazoo 1-21 t1 | 1000 | WKZO | 590 | Laconia G-28 1c | 100 | wKAV WFEA WHEB |  | 1310 |
| Lapeer H-22 | 100 | WMPC | 1500 | Manchester G-28 | 500 |  |  | 1430740 |
| Ludington H-20 | 100 | WKBZ | 1500 1310 | Portsmouth G-28 tc | 250 |  |  |  |
| Royal Oak H-22 50 WEXL 1310 |  |  |  |  |  |  |  |  |
|  |  |  |  | NEW JERSEY |  |  |  |  |
| MINNESOTA |  |  |  | Asbury Park I-27 | 500 | WCAP |  | 1280 |
| Fergus Falls F-15 <br> Minneapolis G-17 | 100 | KGDE | C $\begin{array}{r}1200 \\ 810\end{array}$ | Atlantic City J-27 Camden I-26 | 5000 500 | WPCAM |  | 1280 |
|  | 50000 | WCCO | C 818 | Jersey City I-27 | 300 | WAAT |  | 940 |
|  | 1000 | WDGY | 1180 | Jersey City 1-27 | 250 | WHOM |  | 1450 |
|  | 1000 | WLB | 1250 | Newark I-27 | 1000 | WAAM |  | 1250 |
|  | 1000 | WRHM | 1250 |  | 250 | WGCP |  | 1250 |
| Moorhead F-15 <br> Northfield G-17 | 100 | KGFK | 1500 |  | 250 | WNJ |  | 1450 |
|  | 1000 | KFMX | 1250 |  | 5000 | WOR |  | 710 |
|  | 1000 | WCAL | 1250 | Paterson 1-27 | 1000 | WODA |  | 1250 |
| St. Paul G-17 | 10000 | KSTP | N 1460 | Red Bank 1-27 | 100 | WJBI |  | 1210 |
|  |  |  |  | Trenton I-26 | 500 | WOAX |  | 1280 |
| MISSISSIPPI |  |  |  | Zarephath I-27 | 250 | WAWZ |  | 1350 |
| Greenville O-18 <br> Gulfport Q-19 <br> Hattiesburg Q-19 | 100 | WKFI | 1210 | NEW MEXICO |  |  |  |  |
|  | 100 | WGCM | 1210 1370 |  |  |  |  |  |  |  |  |
|  | 100 1000 | WJJD | ( 1270 | Albuquerque $\mathrm{N}-7$ | 250 | KGGM |  | 1230 |
| Kosciusko O-19 be | 100 | WHEF | N 1500 |  | 20000 | KOB |  | 1180 |
| Laurel P-19 br | 100 | WAML | 1310 | Clovis O-11 tr | 100 | KICA |  | 1370 |
| Meridian P-20 | 500 | wCOC | 880 | Santa Fe M-10 | 100 | KGFL |  | 1370 |
| Vicksburg P-18 | 500 | WQBC | 1360 | NEW YORK |  |  |  |  |
| MISSOURI |  |  |  | Albany G-27 bl | 500 | WOKO | C | 1430 |
|  | 100 | KFVS | 1210 | Auburn ${ }^{\text {H-25 }}$ | 100 | WMBO |  | 1310 |
| Columbia K-17 | 500 | KFRU | 630 | Binghamton H-26 | 100 | WNBE |  | 1500 |
| Grant City J-16 | 100 | KGIZ | 1500 | Brooklyn I-27 | 500 | WBBC |  | 1400 |
| Jefferson City L-17 | 500 | WOS | 630 |  | 1000 | WBBR |  | 1300 |
| Joplin M-16 | 100 | WMBH | C 1420 |  | 500 | WCGU |  | 1400 |
| Kansas City K-16 | 1000 | KMBC | C $\begin{array}{r}1350 \\ 1370 \\ \hline\end{array}$ |  | 500 500 | WFOX |  | 1400 |
|  | 1000 | WDAF | R 610 |  | 100 | WMBQ |  | 1500 |
|  | 500 | WHB | 860 | Buffalo H-24 | 100 | WMIL |  | 1500 |
|  | 1000 | WOQ | 1300 |  | 1000 | WBEN | R | 900 |
| St. Joseph K-16 St. Louis L-18 | 2500 | KFEQ | 680 |  | 100 | WEBR |  | 1310 |
|  | 500 | KFUO | 550 |  | 1000 | WGR | C | 550 |
|  | 100 | KFWF | 1200 |  | 5000 | WKBW | C | 1480 |
|  | 50000 | KMOX | C 1090 |  | 50 | WSVS |  | 1370 |
|  | 500 | KSD | R 550 | Canton F-26 | 500 | WCAD |  | 1220 |
|  | 1000 | KWK | B 1350 | Chester Twp. | 50 | WGNY |  | 1210 |
|  | 1000 | WEW | 760 | Elmira H-25 c | 1000 | WESG |  | 1040 |
|  | 100 | WIL | 1200 | Freeport 1-27 | 100 | WGBB |  | 1210 |
| Springfield M-17 | 100 | KGBX | 1310 | Hudson Falls G-27 <br> Jamestown H-24 <br> New York City I-27 | 50 | WGLC |  | 1370 1210 |
| MONTANA |  |  |  |  | 50 50000 | WOCL | C | 1210 860 |
| Billine 1000 KGHL N 950 |  |  |  | New York City 1-27 | 250 | WBNX |  | 1350 |
| Butte F-7 | 500 | KGIR | N 1360 |  | $\begin{array}{r}50000 \\ \hline 250\end{array}$ | WBOQ |  | 860 1350 |
| Great Falls E-8 | 1000 | KFBB | 1280 |  | 50000 | WEAF | R | 660 |
| Kalispell D-7 | 100 | KGEZ | 1310 |  | 500 | WEVD | R | 1300 |
| Missoula E-7 | 100 | KGVO | 1200 |  | 1000 | WFAB |  | 1300 |
| Wolf Point E-11 | 100 | KGCX | 1310 |  | 500 | WINS |  | 1180 |
| NEBRASKA |  |  |  |  | 250 | WHN |  | 1010 |
| NEBRASKA |  |  |  |  | 50000 5000 | WJZ | B | 760 1100 |
| Clay Center J-14 | 1000 | KMMJ | 740 1310 |  | 5000 500 | WMCA |  | 1100 |
| Lincoln J -15 | 5100 | KGFAB | C $\begin{array}{r}1310 \\ \hline 70\end{array}$ |  | 250 | WMSG |  | 1350 |
|  | 100 | KFOR | C 1210 |  | 500 | WNYC |  | 570 |
|  | 500 | WCAJ | 590 |  | 1000 | WOV |  | 1130 |
| Norfolk I-15North Platte J-13Omaha J-15 | 1000 | WJAG | 1060 |  | 250 | WPAP |  | 1010 |
|  | 500 | KGNF | 1430 |  | 500 | WPCH |  | 810 |
|  | 500 | WAAW | R $\begin{array}{r}660 \\ \hline 990\end{array}$ |  | 250 | WRNY |  | 1010 |
|  | 1000 100 | WOW | R $\begin{array}{r}590 \\ 1500\end{array}$ | Rochester G-25 | 5000 | WHAM |  | 1150 |
| $\begin{aligned} & \text { Scottsbluff I-11 } \\ & \text { York J-15 } \end{aligned}$ | 500 | KGBZ | 930 |  | 500 | WHEC |  | 1430 |

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

| Saranac Lake F-26 Schenectady G-27 Syracuse G-25 | Watts |  | Kcys. |  | Watts |  | Kcys. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50 | WMBZ | 1290 | Portland E-3 | 500 | KALE | C | 1300 |
|  | 50000 | WGY | $\mathrm{R} \quad 790$ |  | 5000 | KEX | N | 1180 |
|  | 1000 | WFBL | C 1360 |  | 100 | KBPS |  | 1420 |
|  | 250 | WMAC | 570 |  | 500 | KFJR |  | 1300 |
|  | 250 | WSYR | B 570 |  | 1000 | KGW | N | 620 |
| Troy G-27 | 500 | WHAZ | 1300 |  | 1000 | KOIN | C | 940 |
| Tupper Lake F-26 | 100 | WHDL | 1420 |  | 500 | KWJJ |  | 1060 |
| Utica G-26 | 100 | WIBX WWRL | 1200 1500 |  | 100 | KXL |  | 1420 |
| White Plains H-27 bl | 100 | WFAS | 1210 |  |  |  |  |  |
|  |  |  |  | PENNSYLVANIA |  |  |  |  |
| NORTH CAROLINA |  |  |  | Allentown 1-26 | 250 | WCBA |  | 1440 |
| Asheville M-23 | 1000 | WWNC | N 570 | Altoona I-25 <br> Carbondale H-26 <br> Erie H-24 | 100 | WSAN |  | 1440 |
| Charlotte M-24 | 25000 | WBT | C 1080 |  | 10 | WNBW |  | 1200 |
| Gastonia M-24 | 100 | WSOC | 1210 |  | 100 | WERE |  | 1420 |
| Greensboro M-24 | 500 | WBIG | C 1440 | Glenside I-26 rc | 500 | WLBW | C | 1260 |
| Raleigh M-25 | 1000 | WPTF | N 680 |  | 25 | WIBG |  | 930 |
| Wilmington $\mathrm{N}-26$ | 100 | WRAM | 1370 |  | 100 | WSAJ |  | 1310 |
| Winston-Salem M-24 | 100 | WSJS | 1310 | Harrisburg I-25 | 100 100 | WBAK <br> WCOD |  | 1430 |
|  |  |  |  |  | 500 | WCOD <br> WHP | C | 1200 |
| NORTH DAKOTA |  |  |  | Hazleton I-26 1c | 100 | WAZL |  | 1430 |
|  |  |  |  | Johnstown J-24 | 100 | WJAC |  | 1310 |
| Bismarck F-13 | 1000 | KFYR | N 550 | Lancaster I-26 | 100 | WGAL |  | 1310 |
| Devils Lake E-14 | 100 | KDLR | 1210 |  | 100 | WKJC |  | 1200. |
| Fargo F-15 | 1000 | WDAY | N 940 | Lewisburg I-26 <br> Philadelphia I-26 | 100 | WJBU |  | 1210 |
| Grand Forks E-15 | 100 | KFJM | 1370 1240 |  | 50000 | WCAU | C | 1170 |
| Minot E-13 | 250 | KLPM | 1240 |  | 100 500 | WDAS | R | 1370 560 |
|  |  |  |  |  | 100 | WHAT |  | 1310 |
| OHIO |  |  |  |  | 500 | WIP | C | 610 |
|  | 1000 |  |  |  | 500 | WLIT | R | 560 |
| Akron 1-23 |  | WADC | C 1320 |  | 100 | WPEN |  | 1500 |
| Canton 1-23 Cincinnati K-22 | 100 | WJW | 1210 |  | 250 | WRAX |  | 1020 |
|  | 10 | WHBC | 1200 | Pittsburgh J-24 | 100 50000 | WTEL | B | 1310 |
|  | 1000 | WFBE | C $\begin{array}{r}1200 \\ \hline 50\end{array}$ |  | 5000 | KQV | B | 1380 |
|  | 50000 | WLW | N 700 |  | 1000 | WCAE | R | 1220 |
|  | 500 | WSAI | R 1330 |  | 1000 | WJAS | C | 1290 |
| Cleveland 1-23 | 500 | WGAR | B 1450 | Reading 1-26 | 100 | WWSW |  | 1500 |
|  | 1000 | WHK | C 1390 |  | 1000 | WEEU |  | 830. |
|  | 500 50000 | WJAY | R $\begin{array}{r}610 \\ 1070\end{array}$ |  | 100 | WRAW |  | 1310 880 |
|  | 50000 500 | WTAM | R 1070 | Scranton H-26 | 250 250 | WGBI |  | 880 880 |
| Columbus J-22 | 500 | WCAH | C 1430 | Weshington J-24 | 100 | WNBO |  | 1200 |
|  | 1000 | WEAO | 570 | Wilkes-Barre I-26 | 100 | WBAX |  | 1210 |
|  | 100 | WSEN | 1210 |  | 100 | WBRE |  | 1310 |
| Dayton J-22 | 200 | WSMK | 1380 | Williamsport I-25 | 100 | WRAK |  | 1370 |
| Mount Orab K-22 | 100 | WHBD | 1370 |  | 100 | WJEQ |  | 1370 |
| Toledo I-22 | 1000 | WSPD | C 1340 | York J-25 tr | 1000 | WORK |  | 1000 |

PHILIPPINES

| Cebu Manila | 500 | KZRC | 937.5 |
| :---: | :---: | :---: | :---: |
|  | 1000 | KZKA | 1110 |
|  | 50000 | KZRM | 618.5 |
| PORTO RICO |  |  |  |
| San Jua | 1000 | WKAQ | 1240 |

## RHODE ISLAND

| Providence $\mathrm{H}-28$ | 250 | WEAN | C | 780 |
| :--- | :--- | :--- | :--- | ---: |
|  | 250 | WJAR | 890 |  |
|  | 100 | WPAW | 1210 |  |
|  | 100 | WPRO | 1210 |  |

## OREGON

| Corvallis E-2 | 1000 | KOAC | 550 |
| :--- | ---: | :--- | ---: |
| Eugene F-2 | 100 | KORE | 1420 |
| Klamath Falls G-3 c | 100 | KFJI | 1210 |
| Marshfield F-1 | 100 | KOOS | 1370 |
| Medford G-2 | 100 | KMED | 1310 |

SOUTH CAROLINA

| Charleston O-25 | 500 | WCSC |  |
| :--- | :--- | :--- | :--- |
| Columbia N-24 | 1360 |  |  |
| Greenville N-23 tc | 500 | WIS | N |
| Spartanburg N-23 | 100 | WFBC | 120 |
| SpS | 100 | WSPA | 1420 |

## INDEX BY LOCATIONS WITH MAP KEY

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


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



Map Key: For locating cities not shown on the RADEX Map of North America, use the small letters following the equare in which that city is located thus: tl top left, te top center, tr top right, bl bottom left, be bottom center, br bottom right, l left, e center, r right.

TIME CONVERSION TABLE

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

## cFAC

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

CFBO 890 St. John, N. B.
CFCA 1120 Toronto, Ont., ESTT.
7:15-now; 1:(0) p.m.-11:30
CFCF 1030 Montreal, Que., EST. 8 a.m.mid.
CFCH 930 North Bay, Ont., EST. Noon-1 p.m.; 5-8.
CFCN 985 Calgary, Alta., MST .
7:30 a.m.-1:30 p.m.
cfco 1010 Chatham, Ont., ESTR. Silent.
CFCT $\quad 630$ Victoria, B. C., PST. 8:30 a.m.-12:30 p.m.; 6-8 p.m.; 10-11 p.m.
CFCY 580 Charlottetown, P. E. I. AST.
11:30 a.m.-noon; 4:30-8 p.m.
CFJC 1120 Kamloops, B. C., PST.
7:30-9:30 a.m.; nooti-2 p.il.; 5:30-7 p.m.
CFLC 915 Prescott, Ont., EST.
8-10 a.m.; noon-2 p.m.; 5-7:30 p.m.

CFNB 1210 Frederieton, 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 lingston, Ont.
CHCH 1200 Montreal, Que.
CHCK 960 Charlottetown, P. E. I,
Noon-2 p.m.; 5-7:30 p.m. $\mathbf{4 S T}$.
CHGS 1120 Summerside, P. E. I. 6:30 a m. -2 p.m.; 4-8 p.m.,-4ST.
CHLP 1200 Montreal, Que.
CHLS 730 Vancouver, B. C., PST. 7:30-8:30 p.m. ; 8:50-11:30 p.m.
CHMA 580 ldmonton, Alta., MST. Silent.
CHML 880 Hamilton, Ont., EST. 9 a.m. -2 p.m.
CHNC 840 Toronto, Ont.
CHNS 815 Halifax, N. S., AST. 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-mid.

CHWK 665 Chilliwack, B. C., PST. Noun-8 p.m.
CHYC 730 Montreal, Que.
CJCA 745 Edmonton, dita., MST. 7:45-9:15 a.m.; noon-1; 5-7:30; mid.-1 a.m.
CJCB 880 Sydney, N. S., AST . 10 a.m. -2 p.m.; 6-9 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'. Silent.
CJGX 630 Yorkton, Sask., CST'. 8:30-9:15 a.m.; 10:30-10:45 a. m.; 11:25-noon; 7:15-8 p.m.

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 Vancouver, B. C., PST. 7:30 a.m. -1 p.m.; 4-7:30; 10:301 a.m.
CJRM 665 Moose Jaw, Sask., MST. 8-10:30 a.m.; noon-2:30 p.m.; $10-\mathrm{mid}$.

CJRW 665 Fleming, Sask., MST.
7:30-10 $\mathrm{p} . \mathrm{m}$.
CKAC 730 Montreal, Que, EST.
7:30 a.m.-mid.
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.
CKCL 580 Toronto, Ont., EAT. 8:30-10 a.m.; 11:45 a.m.-11 p.m.
CKCO 890 Ottaw: Ont
CKCR 645 Waterloo, Ont., BST'.
10 a.m.-1:15 p.m.; 4-7:30 p.m.
CKCV 880 Quebec, Que., EST.
Noon-2 p.m. ; 6:30-7:30
CKFC 730 Vancouver, B. C.
Silent.
CKGW 840 Toronto, Ont., EST.
6:45 it.m.-mild.
GKIC 1010 Wolfville, N. S., AST'
7:30-8:30 it.m.; 12:15-1:15 p.m.; 6-7 p.m.
GKLC 840 Red Deer, Alta., MST.
8 a.m. 8 l .m.
CKMC 1210 Cobalt, Ont., ESTT.
Silent.
CKMO 730 Vancouver, B. C.
CKNC 960 Totonto, Ont., EST.
8 a.m.-12:30 p.m. 5-11:15 p.m.
CKOC 635 Hanilton, Ont., EST.
8 a.m.-10:30 p.m.
CKOK 540 Windsor, Ont., EST.
7:30 a.m-mid.
CKOV 1200 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.
CKPC 880 Preston, Ont., IST.
CKPR $\quad \begin{gathered}4 \text { p.m. }-11 \\ 890 \\ \text { Ft. William, } \\ \text { Ont., }\end{gathered}$ EST.
10 a.m.-2 p.m.; 6-8 p.m.
CKTB 635 St. Catharines, Ont., 1:30-5 p.m.; 6-10 p.m., EST.
CKUA 580 Edmonton, Alta., MST. Sitent.
CKwX 730 Vancouver, B. C., PST.
8-8:30 a.m.; 10:30 a.m.-noon; 4:30-7:30; 11:30-mid.
CKX 930 Brandon, Man., CST.
8:30-9:30 a.m.
CKY 780 Winnipeg, Mant, CST.
8:30 a.m. 4 p.m. 7-10:45 p.m.
Cmab 1249 Pinar del Rio, Cuba.
CMAF 680 Havana, Cuba, NST'. 5-11:30 p.m.
$\begin{array}{ll}\text { CMAY } & 965 \\ \text { CMBC } & 1270 \\ \text { Havana, Cuba, } \\ \text { Hava, Cuba, } & \text { EST. }\end{array}$
11 a.m. -5 p.m.
CMED 965 Havana, Cuba
CMBF 1325 Havana, Cuba
CMBG 1070 Havina, Cuba.
CMBJ 1140 Havana, Cuba.
CMBK 1485 Havana, Cuba.
CMBL 1444 Havana, Cuba, ESTT.
3-5 p.m.
CMBN 1444 Havana, Cuba, EST.
2-3 p.m.; 9:15-11 p.m.
CMBR 1500 Havana, Cuba.
CMBS 780 Havana, Cuba
CMBW 925 Havana, Cuba.
CMBY 1235 Havana, Cuba
CMBZ 1010 Havana, Cuba, EST .
9-10:30 a.m.; noon-2 p.m.; 4-5 p.m.; 6-7 p.m. ; 8-11 p.m.

CMC 840 Havana, Cuba.
CMCA 1235 Havana, Cuba
CMCB 1070 Havara, Culn, EST .
11:30 a.m.-1 p.m.; 5-6 p.m.; 7:30-10 p.m.

CMCD 1140 Havana, Cuba, EST .
Nonn-3 p.m.; 8 p.m.-mid.
CMCF 890 Havana, Cuba, EST . 5-8 p.m.
CMCH 1395 Havaqa, Cuba, EST . $5-9 \mathrm{p} . \mathrm{m}$.
CMCJ 1185 Havana, Cuba.
CMCM 1395 Havana, Cuba.
CMCN 925 Havana, Cuba.
CMCO 780 Havana, Cuba,
CMCR 1375 Havana, Cuba.
CMCU 630 Havana, Cuba.
CMCW 965 Harana, Cubsi, EST. 6 p.m.-mid.
CmaCX 1010 Havana, Cuba.
GMCY 1325 Havana, Cubra, EST 8:311-10:30 p.m.
CMDB 1395 Havana, Cuba
CMDD 588 Havana, Cuba,
CMDE 925 Havana, Cuba.
CMGA 834 Colon, Cuba.
CMGB 1205 Mat:nzas, Cuba.
CMGC 820 Matanzas, Cuba.
GMGE 1375 Cardenas, Cuba, EST. Noon-2;8-10 p.m.
CMGF 987 Matanzas, Cuba
CMGH 1040 Matanzas, Cuba
CMHC 790 Tuinucu, Cuba
CMHD 950 Caibarien, Cuba
CMHI 1030 Santa Clara, Cuba, EST:
11 :3.m.-1 p.m. ; 8 -10 p m.
смнJ 1125 Cienfuegos. Cuba, EST.
11 a.m. -1 p.m.; $7-9$ p.m.
CMHK 1225 Cruees, Cuba
CMHL 1290 Cienfutgos, Cuba.
CMJC 1382 Camaguey, Cuba.
CMJE 1175 Camaguey, Cuba.
CMJF 930 Camaguey, Cubu.
CMJG 1050 Camaguey, Cubic.
CMJH 1150 Ciego de Avila, Cuba. 10 a.m. -2 p.m. ; 5-10 p.m., ESST.
CMJI 1260 Ciego de Avila, Cuba.
10 a.m.-1:30 p.m.; 6-10, EST.
CMJK 790 Camaguey, Cuba
CMJL 960 Camaguey. Cuba.
CMJN 1270 Camaguey, Cuba.
CMJO 1110 Ciego de Àvila, Cuba.
CMJP 1310 Moron, Cuba.
CMK 730 Havana, Cuba, ESTT.
10 a .m.-noon; 6 J .m.-mid.
CmKC 1034 Santiago, Cuba.
CMKJ 1300 Guantanamo, Cuba.
CMQ 630 Havana, Cuba.
CMW 585 Havina, Cuba, ESTT. 7:30 a.m.-11:30 p.m.
CMX 890 Havana, Cuba, $E S T$.
11 a.m.-2 p.m.; 8-mid.
CNRA 630 Moncton, N. B., AST.
12:30-2 p.m.
CNRH 815 Halifax, N. S., AST. Silent.
CNRO 600 Ottawa, Ont., EST.
Noon-1 p.m.; (6-8:30 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.
HHK 920 Port-au-Prince, Haiti.
HIX 630 Santo Domingo, EST.
Silent.
KABC 1420 San Antonio, Tex., CST. 6:45 a.m. $-1: 30$ p.m.; 4-mid.
KALE 1300 Portland, Ore, PST.
7-10:30 a.m.; 2:30-5; 6-7 p.m.; 8 -mid.
KARK 890 Little Roek, Ark., CST.
7:30 a.m. 9 p.m.
KASA 1210 Elk City, Okla., CST'.
7 a.m. -9 p.m.

## KBPS

1420 Portland Ore., PST. Silent.
KBTM 1200 Paragould, Ark., CST. 7:30 a.m. $-3 \mathrm{p} . \mathrm{m}$.
KCMC 1420 Texarkana, Ark., CST 6:45 a.m.-9 p.m.
KCRC 1370 Enid, Okla., CST 10 a.m.-2 p.m.; 3:45-7:45 p.m
KCRJ 1310 Jerome Ariz. MST 7:30-4:30 a.m.; noon-1 p.m. 3:45-6 p.m.
KDB 1500 Santa Barbara, Calif. 8 a.m.-mid., ${ }^{1}$ ST
KDFN 1440 Cisper, Wyo., MST. 9 a.m.-9 p.m.
KDKA 980 Pittsburgh, Pa., EST .
7 a.m.-12:30 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. 6:30 a.m.-1 a.m., MST.
KECA 1430 I, as Angeles, 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 Bakersfield, Calif., PST 7:30 a.m--mid.
KEX 1180 Portland, Ore., PST 7 a.m.-noon; 1 p.m.-mid.
KFAB 770 Lincoln, Neb., CST. 6 a.m.-10:30 p.m.
kFAC 1300 Los Angeles, Calif., PST 7 a.m.-mid.
KFBB 1280 Great Falls, Mont., MST. 8 a.m.-3 p.m.; 5-10 p.m.
KFBI 1050 Abilene, Kans., CST. 5 a.m. 9 p.m.
KFBK 1310 Sacramento, Calif., PST 7 a.m.-11 p.m.
KFBL 1370 Everett, Wash., PST. 8:30 a.m.-noon;3-6 p.m. i3-6 a.m.
KFDM 560 Beaumont, Tex., 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.m.
KFEQ 680 St. Joseph, Mo., CST $6 \mathrm{a} . \mathrm{m} .-7: 45 \mathrm{p} . \mathrm{m}$.
KFGQ 1310 Boone, Iowa, CST. 6-7:30 a.m.; 1:30-2:30 p.m.
KFH 1300 Wichita, Kins., CST 7-8:30 a.m.; 9-11 a.m.; 11:30 a.m.-2 p.m.; 3-10; 11-11:30 p.m.

KFI 640 Los Angeles, Calif., PST. 6:30 a.m-mid.
KFIO 1120 Spokane, Wash., PST. 6 a.m.-sunset.
KFIL 1420 Fond du Lac, Wis., CST . 10 a.m.-1 p.m.; 4 - 10 p.m.
KFJB 1200 Marshalltown, Iowa.
6-9 a.m.; noon-3 p.m.; 6-9 p.m.
KFJI 1210 Klamath Fills, Ore. 7:30 a.m.-9 p.m., PST
KFJM 1370 Grand Forks, N. D. 7 a.m.-9 p.m., CST'.
KFJR 1300 Portland, Ore., PST. 10:30 a.m.-2:30 p.m.; 5 -6 p.m.; $7-8$ p.m.
KFJZ 1370 Fort Worth, Texas, CST. $7 \mathrm{a} . \mathrm{m} .-11 \mathrm{p} . \mathrm{m}$.
KFKA 880 Greeley, Colo, MST 6-7:30 a.m.; 9 a.m.-2:30 p.m; 8-11 p.m.
KFKU 1220 Limprence, Kans., CST . 2:30-3 p.m.; ti-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.m.
KFLX 1370 Galveston, Texas.
KFMX 1250 Northfield, Minn., CST' 10:15-10:35 a.m.
KFNF 890 Shenandoah, Iowa, CST . 5-8 a.m.: 9-10 a.m.; 12:15-5 p.m; 6-10 p.m.

KFOR 1210 Lincoln, Nebr., CST. 7 a.m.-10 p.m.
KFOX 1250 Long Beach, Calif, PST. 6 a.m.-mid.
KFPL 1310 Dublin, Texas, CST. 6) a.m.-10:30 p.m.

KFPM 1310 Greenville, Texas, CST. 7:45-9 a.m.; 1-2:45 p.m.; 6-9.
KFPW 1210 Fort Smith, Ark.,CST. 18:30 a.m.-2 p.m.; 5-10:30 p.m.
KFPY 1340 Spokane, Wash., PST. 7 1.m.-12:30 a.m. next day.
KFQD 1230 Anchorage, Alaska. 6 p.m.-mid. (Zone 6)
KFRC 610 San Franciseo, Calif. 7 a.m.- 1 a.m., $P S T$
KFRU 630 Columbia, Mo., CST. 6:30-9 a.m.; 2-9 p.m.
KFSD 600 San Diego, Calif., PST. 7:30 a.m.-mid.
KFSG 1120 Los Angeles, Calif., PST. 1:30-3 p.m.; 7:30-mid.
KFUL 1290 Galveston, Texas, CST. 8-9:30a.m.;11a.m.-1 p.m.;2:304 p.m. ; 5:30-8p.m.; 10:15-mid.
KFUO 550 St. Louis, Mo, CST. 6:30-7 a.m.; 12:15-12:40 p.m
KFVD 1000 Ios Angeles, Calif., $P S T$. 6 a.m.-6:45 p.m.; 10 p.m.-mid. 1210 Cape Girardeata, Mo. 9 a.m.-rtoon; 4-7:30; $9-\mathrm{mid}$., CST.
KF WB 950 Los Angeles, Calif., PST. 7:30 a.m.-mid.
KFWF 1200 St. Louis, Mo., CSTT. Silent.
KFWI 930 San Francisco, Calif. 7-8 a.m.; 9 a.m.-1 p.m.; 6-7:30 p.m. ; 11-1 a.m, $P S T$.

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 1200 Grand Jet., Colo., MST. 8 a.m.-2 p.m.; 6-9 p.m.
KFXM 1210 San Bernardino, Calif. 7 a.m.-mid. $P S T$.
KFXR 1310 Oklahoma City, Okla. 7:30 a.m.-2 p.m.; 4-10, CST.
KFYO 1310 Lubbock, Texas, CST. 6 a.m.-2 p.m. ; 4-10 p.m.
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.-mid.
KGBU 900 Ketchikan, Alaska.
(Zone 8), 10 a.m.-3 p.m.; 5-7; 10 p.m.-3 a.m.
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.; 5-6:30 p.m.; 8:30-10 p.m.

KGCA 1270 Decorah, Iowa, CST.
8:30-9:45 a.m.: 10:40-11:30 a
m.; 12:30-2:30 p.m.

KGCR 1210 Watertown, S. D.,CST 6:30 a.m. 3 p.m. $5-9$.
KGCU 1240 Mandan, N. D., MST.
Noon-5 p.m.; 6:45-9 p.m.
KGCX 1310 Wolf Point, Mont., MST. 6:30-9 a.m.; 11:30-3; 6-9 p.m.
KGDA 1370 Mitchell, S. D., ©ST. 8 a.m. - $4: 30$ p.m.; 5:30-9.
Kgde 1200 Fergus Falls, Minn. 7 a.m.-9 p.m., CST
KGDM 1100 Stockton, Calif, PST. 6 at.m.-sunset.
KgDY 1200 Huron, S. D., CST. 7 a.m. -2 p.m. ; $4-9$ p.m.
KGEK 1200 Yuma, Colo., MST. 11:30 a.m.-mid.
KGER 1360 Long Beach, Calif., PST. 6 a.m.-1:15 a.m.
KGEW 1200 Ft. Morgan, Colo., MST. Silent.
KGEZ 1310 Kalispell, Mont., MST.
8 a.m.-9 p.m.
KGFF 1420 Shawnee, Okla, CST.
7:30 a.m.-9 p.m.
KGFG 1370 Oklahoma City, Okla. 7:15-10 a.m.; 3-3:45 p.m.; 7:459:15 p.m., CST.
KGFI 1500 Corpus Christi, Texas.
7 a.m. 3 p.m.; 6-10 p.m.,CST.
KGFJ 1200 Los Angeles, Calif.
24 hours daily.
KGFK 1500 Moorhead, Minn., CST 8 at.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. 7:30 a.m.-1:30 p.m.; 5-10:30 p.m
KgFX 630 Pierre, S. D.
KGGC 1420 San Francisco, Calif. 9 a.m.-9 p.m., PST
KGGF 1010 Coffeyville, Kans., CST 7:30 a.m.-2 p.m.; 5-10:30.
KGGM 1230 Albuquerque, N. M.
8 a.m.-2 p.m.; 4-10 p.m., MST.
KGHF 1320 Pueblo, Colo., MST. 7 a.m.-1 p.m. $; 4-10 \mathrm{p} . \mathrm{m}$.
KGHI 1200 Little Rock, Ark., CST 8:30 a.m.-1:30 p.m.; 5-9. mid3 a.m.
KGHL 950 Billings, Mont., MST. 7:30 a.m. 4 p.m.; 5:30-11.
KGIR 1360 Butte, Mont., MST. 7 a.m.-mid.
KGIW 1420 Trinidad, Colo., MST. 6-8 a.m.; 10-2 p.m.; 5-8 p.m.
KGIX 1420 Las Vegas, Nev., PST. $6-9$ in.m.; noon-3 p.m.; $6-9 \mathrm{p} . \mathrm{m}$.
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.-11:30 p.m.
KGKO 570 Wichita Falls, Texas.
KGKX 1420 Lewiston, Idaho.
KGKY 1500 Scottsbluff, 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 p.m. (Zone 5)
KGNF 1430 North Platte, Neb. 7 a.m.-sunset, MST.
KGNO 1210 Dodge City, Kans. 7:30 a.1n.-3:30 p.m.; 5-9, MST.

KGO
790 San Francisco, Calif
7 a.m.-12:30 a.m., PST.
KgRS 1410 Amarillo, Texas, CST. 6-8 a.m.; 10 a.m.-12:30 p.m.; 3-4:30, 6-7:30; 9-10 p.m.
KGU 750 Honolulu, Hawaii.
6:15-10:30 a.m.: noon-1 p.m.;
3:15-11 p.m. (Zone 5)
Kgvo 1200 Missouli, Mont., MST. 6 a.m.-mid
KGW 620 Portland, Ore., PST. 6:30 a.m-rnid.
KGY 1210 Olympia, Wash., PST'. 6 a m.-mid.
KHJ 900 Los Angeles, Calif., PST. 7 a.m. -1 a.m. next day.
KHQ 590 Spokane, Wash., PST. 7 anm-mid.
KICA 1370 Clovis, N. M.
KICK 1420 Red Oak, Iowa. Silent.
KID 1320 Idaho Fails, Idaho,MST. 9 a.m.-mid.
KIDO 1350 Boise Idaho, MST . 7 a m. $-10 \mathrm{p} . \mathrm{m}$.
KIDW 1420 Lamar, Colo., MST.
6-8 a.m.; 2-6 p.m.; 8-10.
KIEM 1210 Lureka, Calif, PST.
KIEV 859 Gilendale, Calif., PST. 6 a.m.-sunset.
KIFH 1310 Juneau, Alaska.
KIT 1310 Yakima, W:sh., PST.
7 a.m.-mid.
KJBS 1070 San Francisco, Calif.
Mid. to local sunset, $P^{\prime} S^{\prime} T$.
KJR 970 Seattle, Wush., PST. 7 a.m-mid.
KLCN 1290 Blytheville, Ark.
KLO 1400 Ogden, Utah.
8:30 a.m.-10:30 p.m., MST.
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 .
$\begin{array}{ll}K L S & 8-11 \text { a.m. } 1-5 \text { p.m; } ; 6: 30-11 \text { p.m. } \\ \text { 1440 } & \text { Oakland, Calif., PST. }\end{array}$ 8:30a.m.-7:30 p.m.
KLX 880 Oakland, Calif., PST. 7 a.m.-11 p.m.
KLZ 560 Denver, Colo., M/S $T$ 6:30 a.m.-11:30 p.mn.
KMA 930 Shenandoah, Iowa, CST . 6-7:30 a.m.: 4:30-11 a.m.; 12:30-

2 p.m.; 3:30-5 p.m.; 6:30-8:30 p.m.

KMAC ${ }^{1370}$ Sun Antonio, Tex., CST. 7-8:30 a.m.; 10-11 a.ill; noon1:30 p.m.; 4-6 p.m.; $7-8$ p.m.; $10 \mathrm{p} . \mathrm{m} .-2 \mathrm{am}$.
KMBC 950 Kitnsas City, Mo., CST. 6:15 a.m.-mid.
KMED 1310 Medford, Ore., $I S T$. 8a.m.-9:30 p.m.
KMJ 580 Fresno, Calif., PST. 7 a.m.-mid.
KMLB 1200 Monroc, La., CST. $7 \mathrm{a} . \mathrm{m} .-10 \mathrm{p} . \mathrm{m}$.
KmmJ 740 Clay Center, Neb., CST . 5:45 a.m.-sunset.
Kmo 1330 Tacoma, Wash., PST. 6:30 a.m. 11 p.m.
KMOX 1090 St. Louis. Mo., CST. 6:45 a.m.-1 a.m.
KMPC 710 Beverly Hills, Calif. 6:30 a.m.-5:15 p.m.; 8-1 a.m. IST.
KMTR 570 Ifollywood, Calif, PST'. 6:30 a.m.-mid.
KNOW 1500 Austin, Texas, CST . 7:30 a.m.-1 p.m.; i-11 p.m.

KNX
KOA
1050 Hollywood, Calif., PST 6:30 a.m.-1 a.m. next day.
830 Denver, Colo., MST.
7 a.m.-mid.
KOAC 550 Corvalis, Ore, PST.
6:30 a.m.-4 p.m.; 6-8:30 p.m.
КОВ 1180 Albuquerigue. N. M.
$7 \mathrm{a} . \mathrm{m} .-9 \mathrm{p} . \mathrm{m}$. . $/ 1 S T$.
KOCW 1400 Chickasha, Okla.
KOH 1380 Reno, Nev., PST.
8 a.m.-mid.
KOIL 1260 Council Bluffs, Ia., CST 6 a.m. -1 a m .
KOIN 940 l'ortland, Ore, PST.
6 a.m.-1 a.m. next day
KOL 1270 Seattle, Wash., PST.
6:45 a m.-mid
KOMA 1480 Oklahoma City, Okla.
7 a.m.-11 p.m., CST.
KOMO 920 Serttle, Wash., IST.
6:55 a.m.-12:30 a.m. next day.
KONO 1370 San Antonio, Tex., CST
8:30-10 a.m.; 11 a.m.-noon 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., PST'.
7:45 a.m.-8:30 p.m.
KOY 1390 Phoenix, Ariz, MST'.
7 t. m. 10 p.m.
KPCB 650 Seattle, Wash., PSTT.
5:30 a.m.-8 p.m.; 10 p.m. -4 a m.
KPJM 1500 Prescot1, Ariz, MST'.
4 a.m. -2 p.m. ; 41 p.m.
KPO 680 San Francisco, Calif.
7-30 a m-mid. $P$ PT
KPOF 880 Denver, Colo., MST.
7:30-9 a.m.; 2:30-4:30 p.m.; 6-8
KPPC $\quad 1210$ P.m. Pasadena, Calif., PST. Silent.
KPQ 1500 Wenatchee, Wash., PST
$7 \mathrm{a}-\mathrm{m},-10 \mathrm{~m} . \mathrm{m}$.
KPRC 920 Houston, Texas, CST.
6:30 a.m.-nid
KQV 1380 littshurgh, Pili, EST.
8:30 a.m.-1 p.m.; 2-11 p.m.
KQW 1010 San Jose, Calif., PST.
7 a.m. -3 p.int; $4: 30-10 \mathrm{p} . \mathrm{ml}$.
KRE 1370 Berkeley, Calif., PST.
6:30-9:30 a.m.; noon-3 p.m.; 6-9 p.m.
KREG 1500 Sauta Ana, Calif., PST. 9 a.m.-11 p.m.
KRgV 1260 Harlingen, Texas, CSTT. 7-9:30 a.m.: 12:30-3:30 p.m.
KRKD 1120 Los Angeles, Calif., PST
6 a.m.-1:30 p.m.; 3-7:30 p.m.
KRLD 1040 Dallas, Texas, (ST).
6-7:15 a.m.; 7:45-9 a.m.; 10-11 a.m.; 12:30-4:30; $5: 30-7 ; 9: 30-$ mid.
KRMD 1310 Shreveport, Ia., CST . - a.m.-1 p.m.; 2-5 p.m.

KROW 930 Oikland, Calif., PST. 8-9 a.m.; 1-6 p.m.; 7:30-11 p.m.
KRSC 1120 Seattle, Wash., PST. Sunrise to local sunset.
KSAC 580 Manhattan, Kans., CST 8-9 a.m.; 10-10:30 a.m.; 12:301:30 p.in.
KSCJ 1330 Sioux City, Iowa, CST . 6:30 a m. -11 pm .
KSD
550 St. Louis, Mo. CST
7:a.m.-12:15 p.m.; 12:40-1; 4:3011 p .m.
KSEI $890{ }^{11}$ Pocatello, Idaho, MST. 8 t.m.-11 p.m.
KSL 1130 Salt Lake City, Utah.

KSO 1380 Des Moines, Iowa.
KSOO 1110 Sioux Falls, S. D., CST.
6 a.m. 8 p.m.
KSTP 1460 St. I'aul, Minn., CST.
6:30 a.m.-12:30 a.m. next day.
KTAB 560 San Francisco. Calif.
6:45 a m. 1 a.m., PST'.
KTAR 620 Phoenix, Ariz., MST.
$7 \mathrm{a} . \mathrm{m} .-11: 15 \mathrm{pm}$.
KTAT 1240 Ft. Worth, Texas.
7-9 in.m.; noon-1:30 p.m.; 4-7
p.m.; 9-mid.

Ktes 1450 Shreveport, La., CST.
6 a.m.-mid.
KTFI 1240 Twin Falls, Idaho, MST. f:30 a.m-mid.
KTHS 1040 Hot Springs, Ark., CST:
9-10 a.m.; 11 a.m.-12:30 p.m.; 4:30-5:30; 7-9:30 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, C'ST
6:31-11 a.m.; noon-11:30 p.m.
KTSA 1290 San Antonio. Tex., CST'
6-8 a.m.; 9:30-11:30 a.m.; 3-5 p.m. ; 7 - 10 p.m

KTSM 1310 El I'aso, Texas.
KTW 1220 Seattle, Wash.
KUJ 1370 Walla Walla, Wash. $6 \mathrm{a} . \mathrm{m}$.sunset, $/$ 'ST
KUMA 1420 〕uma. Ariz,, MTST 7-9 a.m.; noon-3 p.in.; 6-9 p.m.
KUOA 1390 Fayetteville, Ark., CST. 7-8 a.m.; 11 a m.-1 p.m.; 5-6:30.
KUSD 890 Vermillion, S. D., CST.
Silent.
570 Tacoma, Wash., IST. 6:30 a.m.-1 a.m.
KVL 1370 Seattle, Wash.
KVOA 1260 Tucson, Ariz.
6-9 a.m.; noon-3 p.m.; fi-9 p.m.
Kvoo 1140 Tulsa, Okla., CST' 7 a.m.-1:30 p.m; $3-7: 45 ; 9$-mid.
Kvor 1270 Colorado Springs, Colo.
$7 \mathrm{a} . \mathrm{m} .-10 \mathrm{p} . \mathrm{m} ., \mathrm{M} /{ }^{\prime}{ }^{\prime}$
Kvos 1200 Relingham, Wash.
KWCR 1420 Cedar Rapids, Ia., CST.
6:30 $\mathrm{i} . \mathrm{m}$.-mid.
KWEA 1210 Shreveport, La.
KWG 1200 Stockton, Calif., PST. 7 a $\mathrm{a} . \mathrm{m}$.-mid.
KW JJ 1060 Portland, Ore.
KWK 1350 St. Louis, Mo., CST.
6:55 a.m.-12:15 al.m. next day.
KWKC 1370 Kansas City, Mo.
KWKH 850 Shreveport, La., CST. 8:30 p.mı.-niid.
KWLC 1270 Decorah, Iowa, CST. 6:30-8:30 al.m.; 9:45-10:45; 11:30 a.m.-12:30 p.m.
KwSC 1220 Pullman, Wash., PST. 6:4.5-8 a.m. ; 10:30 a.m. $-9: 30$ p.m.
KWWG 1260 Brownsvile, Texas.
KXA 760 Seattle, Wash., PST. 7 a.m.-sundown; 9 p.m.-mid.
KXL 1420 Portland, Ore., PST. 7 a.m.-mid.
KxO 1500 El Centro, Calif
KXRO 1310 Aberdeen, Wash., PST. 7:30 at.m.-mid.
KXYZ 1440 Houston, Texas, CST. 7-10 a.m.; 11 a.m.-1:15 p.m.; 3:30-10:30 p.m.
KYA 1230 Surn Francisco, Calif. 7:30 a.ma.-mid., PST'
KYW 1020 Chicago, Iil., CST . $7 \mathrm{c} . \mathrm{m} .-1 \mathrm{a}$ am. next day.

## KZRM

618.5 Manila, P. I.

6:30-7:30 i.m.; 12:15-1:15; 3$10: 30 \mathrm{p} . \mathrm{m}$.
NAA 690 Arlington, $V a$.
RUS 664 Salvador.
TICR 911 San Jose, C. IR
VAS 685 Glace Bay, N. S., AST
1-1:15 p.m.; mid-12:15 a.m.
VOAS 810 St. Jolins, N. F.
11 a.m.-12:30 p.m.; 4-5:30 p.m.; 7:45-10 р.m. (7one 19)
VOGT 893 Wabana, N. F. Silent.
VOGY 860 St. Johns, N. F.
VONA 950 St Johns, N. F'. 12:30-2 p.m. ; 6:30-8 p.m. (Zonc 19)
VONF 1195 St. Johns, N. P.
Noon-2 p.m.; 6-8 p.m. (Zone 19)
VOWR 750 St. Johns, N. F.
I Silent.
WAAB 1410 Boston, Milss, EST 7:45 a.m. -mid.
waf 920 Chicago, Ill., CST
) 6 a.m.-local sunset.
WAAM 1250 Newark, N. J., WST. 7-9 a.m1.; 10 a.m.-noon; 2-430; 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- $6 \mathrm{~g} . \mathrm{m}$.
WABC 860 New lork City, ISST

- 7:30 a.m.-2 a.m. next day.
"WABI 1200 Bangor, Maine, EST 9 a.m.-2 p.m.;6-10 p.m.
WABL 1200 New orleans, La., CST.
Waco $\begin{aligned} & \text { Noon-4 p.m.; } 8 \text { pim.-mid } \\ & 1240 \text { Waco, Texas, ( } S T \text {. }\end{aligned}$ 6-7 a.m.; 1 -noon; 1:30-4 p.m.; $7-9 \mathrm{p} . \mathrm{m}$.
WADC 1320 Akron, Ohio, $E S T$. 8.30 a.m. -mid .

WAGM 1420 Presque Isle, Me., $E S T$. 10 a.m.-1 p.m.; 4:30-9:30 p.m.
WalU 640 Columbus, Ohio. EST. 7 :1.m.-surset.
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.
WAML 1310 Laurel, Miss
WAPI 1140 Kirmingham, Ala., CST. 6 a.m. 9 p.m.
WASH 1270 Grl. IRapids, Mich., $A S T$ 7 a.m-mid.
WAWZ 1350 Zarephath, N. J., EST 7:4.5-8:45 a.m.
WAZL 1420 Hizzelton, Pa, E'ST.
WBAA 1400 Lafajette. Ind. CST Silent.
WBAK 1430 Harrisburg. Pa., LST. 10:3 (t-11:30 a.m.
WBAL 1060 Baltimore, M1., $E S T$ 7 a.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-noon; 6-11 p.m.
WBBC 1400 Brooklyn, N. Y., EST. 7 a.m.-11; 7:30 p.m-9 p.m.
WBBL 1210 Richmond, Va., EST. Silent.
WBBM 770 Chicago. Ill., CST 6:45 a.m. 10 p.m.; $11: 30$ p.m.2 a.m.

WBER 1300 Brooklyn, N. Y., EST Silent.
WBEZ 1200 ronca City, Okla., CST. 6 a m-10 p.m.
WBCM 1410 Bay City, Mich., EST. 8 a.m.-mid.
WBEN 900 Buffalo, N. Y., $E S T$. 6:45 a.m.-1 a.m.
wbeo 1310 Marquette, Mich., CST. 9:30 a.m.-1:15 p.m.; ;-7 p.m.
WBHS 1200 Huntsville, Ala., CST 8 a.m.-2 p.m. ; 5-9:30 p .m.
W8IG 1440 Greensboro, N. C., EST. 8 a.m.-11 p.m.
WBNX 1350 New York City, EST. 9 a.m.-noon; 3-6 p.m.
WBOQ 860 New lork City
WBOW 1310 Terre Haste, Ind., CST. 7 a.m.-2 p.m.; 4-mid.
WBRC 930 Hirmingham, Ala., CST'. 7 a.m.-11 p.m.
WBRE 1310 Wilkes Barre. Pit.
WBSO 920 Babson Park, Mass 7 a.m.-5 p.m., ES7!
WBT 1080 Charlotte, N. C., EST. 7 a.m.-mid.
WBTM 1370 Danville, Va, EST.
11 a.m.-1 p.m.; 6-6:30; 7-10:30 p.in.

WBZ 990 Boston, Mass., EST
7 a.m.-mid
WBZA 990 Springtield, Miss, EST. 7 a.m.-mid.
wCAC 600 Storrs, Conn., EST.
WCAD $\begin{aligned} & \text { Silent. } \\ & 1220 \\ & \text { Canton, N. Y., EST. }\end{aligned}$
12:30-1:20 p.m
WCAE 1220 Pittsburgh, Pis, EST'. 6:45 : 12 m. mid .
WCAH 1430 Columbus, Ohio, EST $7.45 \mathrm{il} . \mathrm{m}$.-mid.
WCAJ 590 Lineoln, Neb., CST.
10-10:45 a.m. noon-12:30 p.m.
WCAL 1250 Northfield, Minn., CST' 9:45-10:15 a.m.
WCAM 1280 Camden, N. J., ESST. Silent.
wCAO 600 Baltimore, M1., EST. 7 atm.-mid.
WCAP 1280 Asbury Piark, N.J., EST. 9 a.m.-noon ; 2-7:30 $\mathrm{\Gamma}$.m.
wCAT 1200 Rapid City, S. I., CST. 1:30-2:30 p.m.
WCAU 1170 Philadelphia, Pa., ESTT. 8 a.m. $1 \mathrm{i} . \mathrm{m}$ next day.
WCAX 1200 Burlington, Vt., EST Noon-1 p.m.
WCAZ 1070 ('arthage, 111, CST.
1:30 p.m. 2 p.m.
WCBA 1440 Allentown, Pa., $E S T$. 7:30 it.m.-1 p.m.
WCBD 1080 Zion, lll, CST.
7:30-10:30 a.m.; 4 p.m.-4:45 p.1n.

WCBM 1370 Baltimore, M1, $E S T$ 7 a.m.-1:30 p.m.; $5-11$ p.m.
WCBS 1210 Siringfield, Ill, ('ST' 11:15 a.m-3 p.m.; 6:45-8:30 p.m.
wcco 810 Minneapolis, Minn. 6:45 a.m.-12:30 a.m., CST.
WCDA 1350 New York City, EST.
6 p.m-mid.
WCFL 970 ('hiciggo. Ill., CST. 6 atm.-mid.
WCGU 1400 Brooklyn, N. Y., $E S^{\prime}{ }^{7}$, 3:4ă p.m.-6; 10:30 p.m.-2 a.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, III, CST
11 3.m.-1100n; 3-8 p.m. ; 10 p.m.mid.
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.in.; 8-11 p.m.
WCRW 1210 Chicago, Ill, (ST.
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 p.m.; 2:30-11:15 p.m.

WDAE 1220 Tampa, Flar, EST.
8 a.m-mid.
wdaf 610 Kansas City, Mo., CST. 6:26 a.m.-mid.
WDAG 1410 Amarillo, Texas, $C S T$.
8-10 a.m.; $12: 30-3 ; \quad 4: 30-6$; 7:30-9; 10-mid.
WDAH 1310 Hi Paso, Texas.
WDAS 1370 lhiładeiphia, Pa., EST . 9 at.m.-10:30 p.m.
wday 940 Fargo, N. D., CST. 6 a.m.-11 p.m.
WDBJ 930 Roanoke, Va, $E S T$. 8 it.m.-mid.
wDBO 580 Orlando, Fla., EST.
$7 \mathrm{a} . \mathrm{m}$-mid.
WDEL 1120 Wilmington, Del, EST 9 a.1n. $-10 \mathrm{p} . \mathrm{m}$.
WDEV 550 Waterbury, Vt., E'ST. 9:30-11 a.m. ; noon-2 p.m.
WDGY 1180 Minneapolis, Minn.
6:30 a.m. -8:15 p.m., CST.
WDOD 1280 Chattanooga, Tenm 7:30 a.m.-11 p.m., CST
WDRC 1330 Hariford, Conn., LiST. 8 a.mi-midd.
wDSU 1250 New Orleans, La., CST. 7 a.m.-11:45 p.m.
WDZ 1070 Tuscola, Ill., CST. 7 a.m. $-430 \mathrm{p} . \mathrm{m}$.
weaf 660 New York City, $k$ 'ST . 6:45 a m. -1 a.m. next day.
WEAN 780 1rovidence, R. I., EST 7:30 a m. -1 a.m. next day.
WEAO 570 Columbus, Ohio, EST 1 p.m-mid.
WEBC 1290 Superior, Wis., CST. 7 a.m.-11 p.m.
WEBQ 1210 Harrisburg, IH., CST. 6-9 a.m.; noon-1 p.m. ; 7:309 p.m.
WEBR 1310 Buffalo, N Y, EST. 7 a.m.-2 am. next day.
WEDC 1210 Chicugo. IIl.
WEEI 590 Boston, Muss., EST. 6:45 a me-mid.
WEEU 830 Re:rding, Pa-, EST. 8 с..m.-8 p.m.
WEHC 1350 Emory, Va, EST. (f-8 a.m.; 11 a.m.-2 p.nı.; 4-i
WEHS 1420 Cicero, []., CST. 4-6 p.m.
Well 1420 Battle Creek, Mich.
WENC 1420 Americus, Ga., $E S T$. 7 a.m.-2 p.m.; 4 p.m.-sunset.
WENR 870 Chicago. IIl., (iST. 10:15-11:45 a.m. ; 3:30-7 p.mı; mid. $-1: 30 \mathrm{~s} . \mathrm{m}$.
WERE 1420 Erie. Pa., EST

WESG 1040 Elmira, N. Y. Variable.
WEVD 1300 New York City, EST'. 8-9 a.m.; 1(hnoon; 3-9; 10. 11 p.m.
WEW 760 St Louis, Mo., CST. 8 a.m.-11 a.m.
WEXL 1310 Royal Oak, Mich., EST'. 8 a.m.-11 p.m.
WFAA $\mathbf{8 0 0}$ Dallas, Texas, CST. 6:45-8:30 a.m.: $10: 30-1 ; 3-5$; 5:30-6; 9-11:30 p.m.
WFAB 1300 New York City, EST. 9-10 a.m. ; noon-3; 9-10; 11-rnid.
WFAM 1200 South Bend, Ind., CST. 7:30 a.m.-3 p.m. $5: 30-8$ p.m.
WFAS 1210 White Plains, N. Y. 10 a.m.-noon; 3-5; 7-10 p.m.
WFBC 1200 Greenville, S.C.
WFBE 1200 Cincinnati, Ohio, EST . 7 a.m.-11 p.m.
WFBG 1310 iltoona, Pa. 10:30 a.m.-2:30 p.m.; 6:15$9: 15 \mathrm{p} . \mathrm{m}$.
WFBL 1360 Syracuse, N. Y., ESTT. 7:30 a.m.-mid.
WFBM 1230 Indianapolis, Ind., CST: 7:30-10:15 a m.m.; noon-3 p.m.; 5:30 p.m.-mid.
WFBR 1270 Baltimore, Md., EST. 7 a.m.-mid.
WFDF 1310 Flint, Mich., EST. 7 a.m. 11 p.m.
WFDV 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. $11 \mathrm{p} . \mathrm{m}$.
WFI 560 Philalelphia, Pa., EST. 6:45-9 а.m.; 9:45-11 a m. ; 1-2 p.m. ; 3-4:30 p.m.; 6-mid.

WFIW 940 Hopkinsville, Ky, CST. 6 a.m. -3 p.m. ; 5 p.m.-mid.
WFLA 620 Clearwater, Fla., EST' 7:15 a.m.-mid.
WFOX 1400 Brooklyn, N. Y., EST. 1:30-3:45 p.m.; 9-10:30 p.m.
WGAL 1310 Lancaster, Pa., EST 10 a.m.-noon; 1:30-11 p.m.
WGAR 1450 Cleveland, Ohio, EST . 6 a.m.-3 a.m.
WgBB 1210 Freeport, N. Y., EST . Silent.
WGBF 630 Evansville, Ind., CST. 6:30 a.m.-3:30 p.m.; 4-7; 9-11:30 p.m.

WGBI 880 Scranton, Pa., EST . 9:30 a.m.-12:30 p.m.; 1:30-4:30 p.m.; 5:30-2 a.m.

WGCM 1210 Gulfport, Miss, CST. 8 a.m.-2 р.m.; 3-9 p.m.
WGCP 1250 Newark, N.J., EST. Silent.
WGES 1360 Chicago, III., CST 8 a.m.-12:30 p.m.; 6:1.5-8:30; 11 p.m.-2 a.m.
WGH 1310 Newport News, Va. 7 a.m. -2 p.m.: $5-11$ p.m., $E S T$.
WGL 1370 Fort Wayne, Ind, CST. 6:15 a.m.-9:30 p.m.
WGLC 1370 Hudson Falls, N. Y., EST
WGN 720 Chieago, Il!., CST.
7:30 a m. -2 a.m.
Wgny 1210 Chester, N. Y., ESTT.
WGR 550 Buffalo, N. Y., EST. 7:30 a.m.-mid.
WGST 890 Atlanta, Ga., CST'. $7 \mathrm{a} . \mathrm{m} .-11 \mathrm{p} . \mathrm{m}$.
WGY 790 Schenectuly, N.Y., EST' 6:45 a.m.-1 a.m. next day.

Wha 940 Madison, Wis., CST. 10 a.m. -2 p m.
WHAD 1120 Milwaukee, Wis, CST. 9:30-10:15 a.m.; 8:30-9:30 p.m.
WHAM 1150 Rochester, N. Y., EST. 7:45 a.m.1 a.m.
WHAS 820 Louisville, Ky., CST . 7 a.m-mid.
what 1310 Philadelphia, Pa, EST. 9 a.mo-11:30; 1-4; 9-mid.
whaz 1300 Troy, N. Y., EST. silent.
WhB 860 Kansas City, Mo, CST 6 a.m.-sunset.
WHBC 1200 Canton, Ohio, ESST. 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, Ill., CST. $10 \mathrm{a} . \mathrm{m} .4$ p.m.; 5 -mid.
WHBL 1410 Shethoygan, Wis., CST 7-10 a.m. ; 12:30-3 p.m. ; 6-8 p.m.
WHBQ 1370 Memphis, Tenn., CST.
7:55 a.m.-10:30 p.m.
WHBU 1210 Anderson, Inl., CST. 7 a.m. 1 p.m.; 3-9 p.m.
whby 1200 Green Bay, Wis., CST . $7 \mathrm{a} . \mathrm{m} .-10 \mathrm{p} . \mathrm{m}$.
WHDF 1370 Calumet, Mich., CST Silent till May 1
whDH 830 Boston, Mass., EST . 8 a.m.-12:45 p.m.; 2:45-7:15.
WHDL 1420 Tupper Lake, N. $\mathbf{Y}, E S T$. 7:45 a.m.-1 p.m.: 3-7:45 p.m.
सHEB 740 Porismouth, N. H., EST $10 \mathrm{a} . \mathrm{m}$-sunset
WHEC 1430 Rochester, N. Y., EST 8 arm.mid.
WHEF 1500 Koseiusko, Miss.
WHET 1210 Troy, Ala, CST' 6-8 a.m.; $11 \mathrm{a} . \mathrm{m} .-5 \mathrm{p} . \mathrm{m}$.
WHFC 1420 Cicero, 111, CST. 7a.m.-1:30 p.m.; 6 p.m.-1 a.m
whis 1410 Bluefield, W. Va., $E S T$ 8-9 a.m.; noon-2 p.m.; 6-8 p.m.
แHK 1390 Cleveland, Ohio, ESTT. 7 a m.-mid.
WHN 1010 New York City, EST 1:30 p.m. 4 p.m.
wHO 1000 Des Moines, Iowa.
WHOM 1450 Jersey City, N. J., ESST. 8-10 a.m.; 3-6 p.m.; 9-mid
WHP 1430 Harrisburg, Pa., EST . 8:31-10:30 a.m.; 11:30 a.m.1 a.m.
WIAS 1310 Ottumwa, Iowa, CST. 7:30 a.m.-1:30 p.m.; 4-9 p.m.
WIBA 1280 Marlison, Wis., CST. 6:30 a.m.-11:30 p.m.
WIBG 930 Glenside, Iat, ESTT. Daybreak to sunset.
Wibm 1370 Jackson, Mich., $\operatorname{EST}$ '. 7:30 i.m. - 8:15 p.ru.
WIBO 560 Chicitmo, Ill., CST. 6:30 a.m-mid.
wIBU 1210 Poynette, Wis., CST' 9 a.m.-9 p.m.
wiBw 580 Topeka, Kans., CST. 6 at.m.-mid.
WIBX 1200 Utica, N. Y.
WICC 600 Bridgeport, Conn., EST 7:30 $\mathrm{t} . \mathrm{m}$.-mid.
WIL 1200 St. Louis, Mo., CS'T'. 7 a.m.-mid.
WILL 899 Urbana, Itt, CST. $10 \mathrm{a} . \mathrm{m} .-12: 15 \mathrm{p}$.m.
WILM 1420 Wilmington, Del., EST 7:30 it.mı-2 p.m. ; 4:30-10 p.m.

WINS 1180 New York City, EST .
$7 \mathrm{a} . \mathrm{m} .-10: 15 \mathrm{p.m}$.
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.-2 p.m.; 5:30-11 p.m.
WISN 1120 Milwaukee, Wis, CST.
9:30 a.m.; 10:15 a.m.-8:30 p.m.; 9:30-mid
WJAC 1310 Johnstown, Pa., EST
8:30-10:30 a.m.; 4:30-6:15 p.m.; 9:15 p.m.-mid.
WJAG 1060 Norfolk, Neb., CST. 6 a.m.-sunset.
WJAR 890 Providence, R. I., EST.
8 ia.rn.-mid.
WJAS 1290 Pittshurgh, Pa., EST.
7:30 a.m. 11 1:30 p.m.
WJAX 900 Jacksonville, Fla., EST. 7 a.m.-mid.
WJaY 610 Cleveland Ohio, EST.
6 a.m.sunset.
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 p.m. $-7 \mathrm{p} . \mathrm{m}$.
WJBK 1370 Detroit, Mich., EST. $7 \mathrm{a} . \mathrm{m} .-1 \mathrm{am}$.
WJBL 1200 Decatur, III., CST
6:30-8 a.m.; 9-10 p.m.; 12:30-3; 6:30-11 p.m.
WJBO 1420 New Orleans, Ia
WJBU 1210 Lewisburg, I'a., EST.
Noon- $6 \mathrm{p} . \mathrm{m}$.
WJBW 1200 New Orleans, La., CST . 8 a.m.-noon; 48 p.m.
wJBY 1210 Gadsden, 1 Ia., CST.
6 a.m.-12:10 next day.
WJDX 1270 Jackson, Miss. CST.
6:15-10a.m.; 11:30 a.m.-10 p.m.
WJEJ 1210 Hagerstown, Md.
7 a.m.-5 p.m.
WJEQ 1370 Williamsport, Pa.
WJJD 1130 Cbicago, Ill, CST.
6 a.m. -8:30 p.m.
WJKS 1360 Gary, Ind., CST
12:30-6:15 p.m.; 8-11 p.m
wJMs 1420 Ironwond, 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. ETS.
$7: 30 \mathrm{a} . \mathrm{m} .-1 \mathrm{a} . \mathrm{m}$. next day.
WJTL 1370 Atlanta, (ka., CST.
6: 45 a m.-mid.
WJW 1210 Akron, Ohio, ESTT. 8 a.m. $-10 \mathrm{p} . \mathrm{m}$.
WJZ 760 New lork City, EST .
7:30 a.m.-1 a.m. next day.
WKAQ 1240 San Juan, P. R., AST
2:30-4:30 p.m.; 7:30-10:30 p.m.
WKAR 1040 E. Lansing, Mich., EST .
WKAV 1310 Laconia, N. H., EST. $9 \mathrm{a} . \mathrm{m} .1 \mathrm{p} . \mathrm{m}$; $3-8 \mathrm{p} . \mathrm{m}$.
WKBB 1310 Joliet, Ill., CSI'.
8-11 a.m.; noon-3 p.m.; 8-10 p.m.

WKBC 1310 Birmingham, Ala.
WKBF 1400 Indianapolis, Ind, CST'
6:30 a.m.-1:15 p.m.; 4:15-9; 11 -mid.
WKBH 1380 LaCrosse, Wis, ('ST. 7:30 a m. $-10 \mathrm{p} . \mathrm{m}$
WKBI 1420 Cicero, IIL., CST 1:30-4 p.m.

WKBN
570 Youngstown, Ohio, EST. 7 a.m.-1 p.m.
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 Jadington, Mich., CST. 9 at.m.-9:30 p.m.
WKEU 1500 JaGrange, Ga
WKFI 1210 Greenville, Miss., CST. 7 a.m.-2 p.m. ; 4-9 p.m.
WKJG 1200 Lancaster, Pa., EST. 11 a.m.-3 p.m.; 6 -8 p.m.
WKRC 550 Cincinnati, Ohio, EST. 6:45 a m.mad.
WKY 900 Oklahoma City, Okla. 6:30 a.m.-mid., CSTT.
WKZO 590 Kalamazoo, Mich. EST. 6:30 a.m-8:15 p.m.
WLAC 1470 Nashville, Tenn., CST. 7 a.m. -11 p.m.
WLAP 1200 Louisville, ky., CST. 6:30 a.m.-11 p.m.
WLB 1250 Minneapolis, Minn. 8 p.m. -9 p.m., CST
WLBC 1310 Muncie, Ind., CST. 7 a.m.-6 p.m
WLbF 1420 Kamsns City, Kans. 7 a m-11 p.m., CST.
WLBL 900 Stevens Point, Wis. 8 a.ru.-3 p.m.. CST
WLBW 1260 Erie, Pa., EST.
wLBZ 8 a.m.-1 a.m. next day.
WLBZ 620 Bangor, Maine, $E S T$. 8:30 a.m.-mil.
WLEY 1370 Lexington, Mass., EST . Noon-3 p.mı; 6-9 p.m.
WLIT 560 Philadelphia, Pa., EST. 9-9:45 a.m.; 11 a.m.-1 p.m.; 2-3 p.m. $4: 30-6 \mathrm{p.m}$.

WLOE 1500 Boston, Mass., EST. 10 a.m. $-1: 30$ p.m.; $4: 30-9: 30$
p.m.
10. Chileago, lin, CST. 6-10:15 a.m.; $11: 45$ a.m. $-3: 30$ p.m.; 7 p.m.-1 am.

WLTH 1400 Brooklyn, N. Y., EST. 11 a.m.-1:30 p.m. ; 6-7:30 p.m.
WLYA 1370 Lynchburg, Vib., EST. 8 a.m.-11;1-6 p.m
WLW 700 Cincimati, Ohio, EST. 6:30 a.m. -1 a.m. next day.
WLWL 1100 New York City. 6-8 p.m., EST.
WMAC 570 Syracuse, N. Y.
WMAL 630 Washington, D.C., LST 8 a.m.-mid.
WMAQ 670 (hicago, Ill., CST. 7 a.m.-1 a.m. next day
WMAS 1420 Springfield, Mass., EST. 7:45 a.m.-mid
WMAZ 1180 Macon, Gi., EST. 7 a.m.-9:30 p.m
WMBC 1420 Detroit, Mich., EST 7:30 a.m.-mid.
WMBD 1440 Peoria, Ill, CST. 6-9:30 a.m. ; 1-2:30 p.m.; 8-mid.
WMBG 1210 Richmond, Va., EST. 7:30 a.m.-1:30 p.m.; j-11 p.m.
WMBH 1420 Joplin, Mo., CST
Noon-2 p.m.; 6-7 p.m.
WMBI 1080 Chicago, I!., CST. 7-7:30 a.m.; 10:30-1100n; 12:301:30; 2:30-4 p.m.
WMBO 1310 Auburn, N. Y., EST. 9 a.m. -9 p.m.
WMBQ 1500 Brooklyn, N. Y., EST 9-11 in.m.

WMBR 1370 Tampa, Fla., EST 6:45 a.m. -10 p.m
WMC 780 Memphis, Tenn., CST. 7 a.m. -11 pm.
WMCA 570 New York City, EST 8-11 д.m.; noon-6 p.m.; 8:30 pm,-2 a.m.
WMIL 1500 Brooklyn, N. Y., EST.
3 p.m. -9 p.m.
WMMN 890 Fairmont, W. Va, EST. 7 a.m. -9 p.m.
WMPC 1500 Lapeer, Mich., EST. Silent.
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. Silent.
WNAX 570 Yankton, S. D., CST. 6 th.m.-mid.
WNBF 1500 Binghamton, N.Y., EST. 7 a.m. -10 p.m.
WNBH 1310 New Bedford, Mass., EST.
9 a.m.-1:10 p.m.; 3-11 p.m.
WNBO 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
WNBZ 1290 Saranac Lake, N. Y
WNJ 1450 Newark, N. J., EST
WNOX 560 knoxville, Tenn, CST. 6:45 $\mathrm{d} . \mathrm{m} .-11 \mathrm{p} . \mathrm{m}$.
WNYC 570 New York City, EST 11 a.m-noon; 6-8:30 p.m.
WOAI 1190 San Antonio, Tex., CST. 6:30-9:15 a.m.; 11:15-3 p.m.; 4:45-10:45 p.m.
WOAX 1280 Trenton, N. J., EST.
Noon-2 p.m. ; 7:30-mid.
WOBU 580 Charleston, W. Va., EST. 9a.m.-noon; 2-4 p.m.;8:30 p.m.mild.
WOC 1000 Davenport, Iowa, CST. 7 a.m.-11 p.m.
WOCL 1210 Jamestown, N. I., EST'. Noors-mid.
WODA 1250 Paterson, N. J
WODX 1410 Mobile, Ala., CST 9 a.m.-4 p.m.;9-11 p.m.
WOI 640 Ames, Iowa, CST. 6:30 a.m. -2:30 p.m.
WOKO 1430 Albany, N. Y., $E S T$. 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.ru.-9 p.in.
WDOD 1270 Gd. Rapids, Mich., EST. 7 a m-mid
WOPI 1500 Brisiol, Tenn, $E S T$. 7 a.m.-2 p.m.; 4-11 p.m.
woq 1300 Kitusas City, Ma., CST. 6-7 i.m.; 8:35-9:05 a.m.; 1111:30 a.m.; 2-3 p.m.; 10-11 1.m.

WOR 710 Newark, N. J., LST. 6:45 a.m.-mid.
WORC 1200 Woreester, Mass., LST. 8 a.m.-mid.
WORK 1000 York, Pa., EST 7:55 a.m.-sunset.

WDS 630 Jefferson City, Mo.
9 a.m.-1:10 p.m. CST.
WOV 1130 New York City, EST
8 a.m. 6 p.m.
wow 590 Omaha, Yeb., CST
6:15-10 a.m.; $10: 45$ a.m.-2:30 a.m.

WOWO 1160 Fort Wayne, Ind., CST.
7:30 a.m.-7:45 p.m.; 9:15 p.m.mid.
WPAD 1420 Paducah, Ky., CST
7-9.30 a.m.; 11 a.m.-2 p.m.i 4 -mid.
WPAP 1010 New York City, EST.
4 p.1n.-8 p.m.
WPAW 1210 Providence, K. ${ }^{5}$ I., EST 9 a.m.-1:45 p.mı; 3 p.m.-mid.
WPCC 560 Chicago, 111.
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.; 6-11 p.m.
WPG 1100 Atlantic City, N.J., EST
$8: 15$ a.m.-6 p.m. 8 \%.m.-1 a.m.
WPHR 1200 Petersburg, Vil, $E S T$.
7-11 a.m. ; noor-5 p.m.;6-9_p.m
WPOR 780 Norfolk, Va.
WPRO 1210 Providence, R. I., EST
9 a.m.-1:45 p.m.; 3 p.m.-mid.
WPTF 680 Raleigh, N. C., EST.
6:45 a.m.-9:15 p.m.
WQAM 560 Miami, Fla., EST'. 7 :am-mid.
WQAN 880 sicranton, Pa., EST.
12:30-1:30 p.m ; 4:30-5:30 p.m.
wQAO 1010 New York City, EST Silent.
WQBC 1360 Vicksburg, Miss., CST. 7:30 a.m.-2:30 p.m. ; 5-11 p.m.
WQDM 1370 St. Albans, Vt., EST.
8-9 a.m.; 11 a.m. 2 p.m.
WQDX 1210 Thomasville, Ga.
WRAK 1370 Hilliamsport, Pa., LST. 8:30 a.m.-mid.
WRAM 1370 Wilmington, N. C., EST. 7:30 a.m.-3 p.m. ; 6:30-11 p.m.
WRAW 1310 Reading, P'a., EST 7:30-9:30 a.m.
WRAX 1020 Philadelphia, Pi., EST. 7 a.m.sunset.
WRBL 1200 Columbus, Ga., CST. 7 it.m. -9 p.m.
WRBX 1410 Roanoke, Va., EST. 9 a.m.-noon; 3-6 p.m ; 8 p.m.-1.
WRC 950 Washington, D.C., EST $6: 45 \mathrm{a} . \mathrm{m} .-1 \mathrm{a} . \mathrm{m}$. next day.
WRDO 1370 Augusta, Maine, EST. 7-9:30 a.m.; 10:30 a.m.-1:30 p.m.; 3:30-10. m.

WRDW 1500 Augusta, Ga., EST
8 a.m-2 p.m.; 5-11 p.m.
WREC 600 Memphis, Tenn
WREN 1220 Lawrence, Kins., CST. 7 a.m.-mid.
WRHM 1250 Minneapolis, Minn. 6:15-9:45a.m.; 10:35 a.m.-1 a.m. CST.
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.
WRR 1200 Dallus, Texas, CST. 6:30 a.m.-11 p.m.
WRUF 830 Gairesville, Fla., EST 8 a.m. -8 p.m.

WRVA 1110 Richmond, Va., EST. 7 a.m.-mid.
WSAI 1330 Cincinnati, Ohio, EST . 8 a.m.-11 p.m
wSAJ 1310 Grove City, Pa.
WSAN 1440 Allentown, Pa., EST. 5 p.m.-mid.
WSAR 1450 Fall River, Mass., EST. 8.a.m. $3: 30 \mathrm{p} . \mathrm{m} . ; 5-10$ p.m.

WSAZ 580 Huntington, W. Va. EST,
6-9 a.m.; noon-2 p.m.; 4-8:30
WSB 740 Atlanta, Ga., CST.
6:25 a.m. 11 p.m.
WSBC 1210 Chicago, Ill., CST 10-11:30 a.m.; 1:30-3:30; 5-6; 8-9; 11 -mid.
WSBT 1230 South Bend, Ind., CST. 6-7:30 a.m.; 3-5:30 p.m.
WSEN 1210 Columbus, Ohio, EST 8 a.m.-11 p.m.
WSFA 1410 Monigomery, Ala., CST'. 6:30 a.m.-9 p.m.
WSIX 1210 Springfeld, Tenn., CST. 6 a.m.-3 p.m.; 6-9 p.m.
WSJS 1310 Winston-Salem, N. C. 8 a.min-mid., $E$ ST .
WSM 650 Nashville, Temn., CST. 7 a.m.-mid.
WSMB 1320 New Orleans, La, CSTT.
WSMK 1380 Dayion, Ohio, EST
WSOC 7 a.m.- 8 p.m.; 10 p.m.-mid. 1210 Gastonia, N. C., $E S T$ $8 \mathrm{a} . \mathrm{m} .10 \mathrm{p} . \mathrm{m}$.
WSPA ${ }^{1420}$ Spartanburg, S. C. EST . 7:30 a.m.-11 p.m.
WSPD 1340 Tolerfo, Ohio, EST. 7:30 a m.mide'
WSUI 880 Jowa City, Iowa, CST
WSUN $\quad 920$ a.m. ${ }^{96-7} \mathrm{p} . \mathrm{m}$.
wsvs $\quad \begin{aligned} & 7: 1570 \\ & \text { a.m.-mid. } \\ & \text { Buffalo, N. Y., EST. }\end{aligned}$ 8:30 a.m.-10 it.m. ; 2-3 p.m.
WSYB 1500 Rutland Vt., EST.
WSYR 10 a.m.-1 p.m.; $5-9$ p.m.
WSYR 570 Syracuse, N. Y., EST.
7 a.m.-3 p.m. $4-11$ p.m.
WTAD 1440 Quincy, Ill., CST. 9:30 a.m-1 p.m.; $2: 30-8$ p.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.
WTAQ 1330 Eau Claire, 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, Texas. Silent.
wtax 1210 Springfield, Ill. CST. 7a.m.-11:15, 3-6:45; 8:30-mid.
WTBO 1420 Cumberland, Md., EST. 7 а.m.-1:30 p.m.; 2:30-8 p.m.
WTEL 1310 Philadelphia, Pa., EST'. 7-9 a.m.; 11-1 p.m.; 4-9 p.m.
WTFI 1450 Athens, Ga, ESTT. 8 a.m. -4 p.m.; 6-10 $1 . \mathrm{m}$.
WTIC 1060 Hartford, Conn., EST . 7 a.m. $-\frac{1}{}$ p.m.
WTJS 1310 Jaekson, Tenn., CSTT. 7 t.m.-1 p.m.; 3-10:30 p.m.
WTMJ 620 Milwaukee, Wis., CST. 6:45 a. m- $12: 30$ d. m .
WTOC 1260 Savannah, Ga., EST. 7 a.m.-mid.

WTRC 1310 Elkhart, Ind., CST'.
7:30 a.m.-7:30 p.m.
WWAE 1200 Hammond, Ind., CSTT. 7 a.m. 8:30; 11-1 p.m.; 4-11:30 p.m.

WWJ ${ }_{920}^{\text {p. Detroit, Mich., EST. }}$
7:30 a m.-mid.
WWL 850 New Orleans, La., CST
8 a.m. $8: 30 \mathrm{pm}$.
WWNC 570 Ashevilic, N, C., CST. 7 atm.-mid.
WWRL 1500 Woodside, N. Y., EST .
8-9 a.m.; 11 a.m.-noon; 2-3 p.m.; mid.- 3 ll m .
WWSW 1500 Pittsburgh, Pa., EST.
8 a.m.-1:30 p.m.; 3-mid.
wwva 1160 Wheeling, W. Va., EST.
7:30 a.m.-mid.
WXYZ 1240 Detroit, Mich., EST.
7:30 a.m.-mid.
XeA 1000 Guadalajara, Mex, CST.
11 a.m.-noon; 2-3 p.m.; 5-11.
XEAN 750 Juarez, Mex., LiST.
9 a.rm. -2 p.m.; 5-11 p.m.
Xeaw 965 Reynosa, Mex.
XER 1030 Mexico City, Mex., CST.
8 a.m.-mid.
XEC 1000 Toluca, Mes
XED 1155 Guadalajara, Mex
XEF 735 Villa Acuna, Mex.
24 hours daily
XEFA 1250 Mexico City, Mex
XEFB 1315 Monterrey, Mex., CST.
11 a.m.-2 1).m.; (6-10 p.m.
XEFC 1050 Merida, Mex.
XEFD 1020 Tijuana, Mex.
XEFE 1000 Laredo, Mex.
XEFH 1360 Mexico City, Mex.
XEFI 1000 Chihuahua, Mex.
XEFJ 1000 Monterrey, Mex.
XEFO 940 Mexico City, Mex., CST. 2-3 p.m.; 7-11 p.in.
XEFS 1000 Queretaro, Mex., CST .
7-11:30 p.m.
XEFV 1370 Juarez. Mex.
XEFW 1240 Tampieo, Mex
XEFZ 1500 Coyoacan, Mex., CST. 8-11 p.m.
XEG 1075 Mexico City, Mex
XEH 1132 Monterrey, Mex., CST
XEI 9 a.m.-1:30 p.m.; 6-10 p.m.
XEI 1310 Morelia, Mex., CST.
XEJ $\quad 1000$ Juarez Mex (ST
1000 Juarez, Mex., CST.
11 a.m. -4 p.m.; fi-11 p.m.
XEK 990 Mexico City, Mex.
XEL 1000 Saltillo, Mex., CST .
11 a.m.-1 p.m.; 6-9 p.m.
XEN 711 Mexico City, CST
10 atm.-noon; 2-4 p.m.; 7 -mid
XENT 1115 Neuyo Laredo, Mex.
XEP 780 Afexico City, Mex.
XEPN 585 Piedras Negras, Mex.
XER 735 Villa Acuna, Mex.
24 hours daily.
XES 1055 Tampico, Mex., CST.
9-10:30 a.m.; noon-2 p.m.; 5-6 6:30-10 p.m.
XET 690 Monterrey, Mex., CST
9 a.m.-2 p.m.; b-1 0 p.m.
XeTA 1140 Mexico City, Mex.
XETB 1380 Torreon, Mex.
XETC 1000 Jalapa, Mex.
XETF 630 Veracruz, Mex., CST.
7-8 a.m.; noon-2 p.m.; 7 p.m. mid.
XETH 840 Puebla, Mex.
XETM 845 Matamoros, Mes

XeTR 610 Mexico City, Mex
XETU 890 Pachuca, Mex.
XETW 830 Mexico City, Mex
XEU 1010 Veracruz, Mex., CST
7-8 a.m.; $10-11$ a.m.; noon-3 p.m.; 6-mid.

XEW $\quad 910$ Mexico City, Mex., CST
XEX 1210 Mexico City, Mex.
XEY 546.8 Mexida, Mex
XFB 840 Jalapa, Mex.
XFC 805 Aguascalientes, Mex.
XFG 638.3 Mexico City, Mer.
XFI 818.1 Mexico City, Mex.
XFO 940 Mexico City, Mex.
XFX 860 Mexico City, Mex.
YV1BC 960 Caracas, Venz.
11 a.m.-1:30 p.m.; 5:15-10:30 p.m.

10-AB 1200 Moose Jaw, Sask., MST. 5:30-8:30 p.m.
10-AK 1200 Stratford, Ont., EST.
6-8 p.m.
10AT 1158 Trail, B. C., PST.
9 a.m.-2 p.m.; 5-10 p.m.
10-BI 1200 Prince Albert, Sask. Noon-1 p.m. ; 6-8 p.m. ; 10 -mid. MST
10-8p 1199 Wingham, Ont., EST:
9:30-11 p.m.
10-BQ 1200 Brantford, Ont., EST: 6-7 p.m.
10-BU 1200 Canora, Sask.

## ADDITIONAL DX CALENDAR

Friday Night, Mar. 3rd 3:00-9:00 KP1'C, 1210 Pasadena, Calif.
Saturday Night, Feb. 25
4:00-6:00 KIEV, 850 Glendale, Calif.
Sunday Night, Feb. 26
12:00-2:00 EARA, 1071 Canary Islands
"How to Build a Filtering Device" and conquer power-line noises will be the subject of the Technical Editor's article in the April Radex. This. problem is the basis of more inquiries from our readers than any other. Don't miss Mr. Dashiell's next article.

# POLICE BROADCASTING STATIONS 

| Call | Megs. | Mtr | City |
| :---: | :---: | :---: | :---: |
| WPDO | 2.458 | 121.97 | Akron, Ohio. |
| WPED | 1.712 | 175.13 | Arlington, Mass. |
| WPDY | 2.414 | 124.20 | Atlanta, Ga. |
| WPDN | 2.458 | 121.97 | Auburn, N. Y. |
| KGPS | 2.414 | 124.20 | Rakersfield, Calif. |
| WPEQ | 1.570 | 191.08 | Baton Rouge, La. |
| KGPJ | 1.712 | 175.13 | Beaumont, Texas |
| KSW | 2.422 | 123.79 | Berkelcy, Calif. |
| WEY | 1.558 | 192.43 | Boston. Mass. |
| WPEJ | 1.712 | 175.13 | Brookline, Mass. |
| WPEE | 2.450 | 122.40 | Brooklyn, N. Y. |
| WRDU | 1.596 | 187.85 | Brooklyn, N. Y. |
| WPEF | 2.450 | 122.40 | Bronx, N. Y. |
| WMJ | 2.422 | 123.79 | Buffalo, N. Y. |
| KGOZ | 2.470 | 121.40 | Cedar Rapids, Iowa |
| KGIF | 2.450 | 122.40 | Chanute, Kans. |
| WPDV | 2.458 | 121.97 | Charlotte, N. C. |
| WPEY | 2.470 | 121.40 | Chattanooga, Tenn. |
| WPDB | 1.712 | 175.13 | Chicago, Ill. |
| WPDC | 1.712 | 175.13 | Chicago, III. |
| WPDD | 1.712 | 175.13 | Chicago, Ill. |
| WKDU | 1.712 | 175.13 | Cincinnati, Ohio |
| WRDH | 2.458 | 121.97 | Cleveland, Ohio |
| WPDI | 2.430 | 123.45 | Columbus, Otio |
| KVP | 1.712 | 175.13 | Dallas, Texas |
| KGPN | 2.470 | 121.40 | Davenport, Iowa |
| WPDM | 2.430 | 123.45 | Dayton, Dhio |
| KGPX | 2.442 | 122.77 | Denver, Colo. |
| KG1G | 2.470 | 121.40 | Des Moines. Iowa |
| WCK | 2.414 | 121.20 | Detrot, Mich. |
| WKDT | 1.596 | 187.85 | Detroit, Mich. |
| WPDX | 2.414 | 124.20 | Detroit, Mich. |
| WRDS | 1.574 | 190.48 | East Lansing, Mich. |
| WPDF | 2.442 | 122.77 | Flint, Mich. |
| WPDZ | 2.470 | 121.40 | Fort Wayne, Ind. |
| KGPR | 1.712 | 175.13 | Fort Worth, Texas |
| WMP | 1.574 | 190.48 | Framingham, Mass. |
| KGIA | 2.414 | 124.20 | Fresno, Calif. |
| WPEB | 2.442 | 122.77 | Grand Rapids, Mich. |
| WRDR | 2.414 | 124.20 | Grosse Pt., Mich. |
| WMO | 2.414 | 124.20 | Highland Park, Mich |
| KGPG | 2.450 | 122.40 | Honolulu, Hawai |
| KGZB | 1.712 | 175.13 | Houston, Texas |
| WMDZ | 2.4.42 | 122.77 | Indianapolis, Ind. |
| KGPE | 2.422 | 123.79 | Kansas City, Mo. |
| KGZH | 2.442 | 122.77 | Klamath Falls, Ore. |
| WPDT | 2.470 | 121.40 | Fokomo, Ind. |

By Cities

| Call | Megs. | Mtr | City |
| :---: | :---: | :---: | :---: |
| WPDL | 2.442 | 122.77 | Lansing, Mich. |
| WPET | 1.712 | 175.13 | Lexington, Ky. |
| KGPL | 1.712 | 175.13 | Los Angeles. Calif. |
| WPDE | 2.442 | 122.77 | Louisville, Ky. |
| WPEC | 2.470 | 121.40 | Memphis, Tenn. |
| WPEL | 1.570 | 191.08 | Middletroro, Mass. |
| WPDK | 2.450 | 122.40 | Milwaukee, Wis. |
| KGPB | 2.416 | 124.09 | Minneapolis, Minn. |
| WPFA | 1.712 | 175.13 | Newton, Mass. |
| WPEK | 2.430 | 123.45 | New Orleans, La. |
| WCF | 1.596 | 187.85 | New York, N. Y. |
| WPEG | 2.450 | 122.40 | New York, N. Y. |
| WPEW | 1.570 | 191.08 | Northampton, Mass. |
| KGPH | 2.450 | 122.40 | Oklahoma City, Okla. |
| KGP1 | 2.470 | 121.40 | Omaha, Neb: |
| KGJX | 1.712 | 175.13 | Pasadena, Calif. |
| WPDJ | 2.414 | 124.20 | Passaic, N. J. |
| WPDP | 2.470 | 121.40 | Philadelphia, Pa. |
| WPDU | 1.712 | 175.13 | Pittsburgh, Pa. |
| KGPP | 2.442 | 122.77 | Portland, Ore. |
| WPEI | 1.712 | 175.13 | Providence, R.I. |
| WPDH | 2.442 | 122.77 | Richmond, Ind. |
| WPDR | 2.458 | 121.97 | Rochester, N. Y. |
| WPES | 2.442 | 122.77 | Saginaw, Mich. |
| KGPC | 1.712 | 175.13 | St. Isouis, Mo. |
| WPDS | 2.146 | 124.09 | St. Paul, Minn. |
| KGPW | 2.470 | 121.40 | Salt Lake City |
| KGZE | 2.506 | 119.64 | San Antonio, Texas |
| KGZD | 2.430 | 123.45 | San Diego, Calif. |
| KGPD | 1.558 | 192.43 | San Francisco, Calif. |
| KGPD | 2.470 | 121.40 | San Francisco, Calif. |
| KGPM | 2.470 | 121.40 | San Jose, Calif. |
| KGPA | 2.414 | 124.20 | Seattle, Wash. |
| KGPY | 1.574 | 190.48 | Shreveport, La. |
| KGPK | 2.470 | 121.40 | Sioux City, Iowa |
| WPEH | 1.712 | 175.13 | Somerville, Mass. |
| WPEA | 2.458 | 121.97 | Syracuse, N. Y. |
| WRDQ | 2.470 | 121.40 | Toledo, Ohio |
| KGIC | 2.422 | 123.79 | Topeka, Kans. |
| WPDA | 2.414 | 124.20 | Tulare, Calif. |
| KGPO | 2.450 | 122.40 | Tulsa, Okla. |
| KGPG | 2.422 | 123.79 | Vallejo, Calif. |
| WPDW | 2.422 | 123.79 | Washington, D. C. |
| KGPZ | 2.450 | 122.40 | Wichita, Kans. |
| KGZI | 1.712 | 175.13 | Wichita Falls, Texas |
| WPEM | 2.470 | 121.40 | Woonsocket, R. I. |

By Call Letters

| Call | Megs. | Mtr | City |
| :---: | :---: | :---: | :---: |
| KGJX | 1.712 | 175.13 | Pasade |
| KGOZ | 2.470 | 121.40 | Cedar Rapids, Iowa |
| KGPA | 2.414 | 124.20 | Seattle, Wash. |
| KGPB | 2.416 | 124.09 | Minneapolis, Minn. |
| KGPC | 1.712 | 175.13 | St. Loulis, M |
| KGPD | 1.558 | 192.43 | San Francisco, Calif. |
| KGPD | 2.470 | 121.40 | San Francsico, Calif. |
| KGPE | 2.422 | 123.79 | Kansas City, Mo. |
| KGPG | 2.422 | 123.79 | Vallejo, Calif |
| KGPH | 2.450 | 122.40 | Oklahoma City, Okla. |
| K GPI | 2.470 | 121.40 | Omaha, Neb |
| K GPJ | 1.712 | 175.13 | Beaumont, Texas |
| KGPK | 2.470 | 121.40 | Sioux City, Iowa |
| KGPL | 1.712 | 175.13 | Los Angeles, Calif. |
| KGPM | 2.470 | 121.40 | San Jose, Calif. |
| KGPN | 2.470 | 121.40 | Davenport, Iowa |
| KGPO | 2.450 | 122.40 | Tulsa, Okla. |
| KGPP | 2.442 | 122.77 | Portland, Ore. |
| KGPQ | 2.450 | 122.40 | Honolulu, Hawaii |
| KGPR | 1.712 | 175.13 | Fort Worth, Texas |
| KGPS | 2.414 | 124.20 | Bakersfield, Calif. |
| KGPW | 2.470 | 121.40 | Salt Lake City, Utah |
| KGPX | 2.442 | 122.77 | Denver, Colo. |
| KGPY | 1.574 | 190.48 | Shreveport, La. |
| KGPZ | 2.450 | 122.40 | Wichita, hans. |
| KGZA | 2.414 | 124.20 | Fresno. Calif. |
| KGZ8 | 1.712 | 175.13 | Houston, Texas |
| KGZC | 2.422 | 123.79 | Topeka, Kans. |


| Call | Megs. | Mtr | City |
| :---: | :---: | :---: | :---: |
| KgZD | 2.430 | 123.45 | San Diego. Calif. |
| KGZE | 2.506 | 119.64 | San Antonio, Texas |
| KGZF | 2.450 | 122.40 | Chanute, Kans. |
| KGZG | 2.470 | 121.40 | Des Moines, Iowa |
| KGZH | 2.442 | 122.77 | Klamath F |
| KGZI | 1.712 | 175.13 | Wichita Falls, Texas |
| KSW | 2.422 | 123.79 | Berkeley, Calif. |
| KVP | 1.712 | 175.13 | Dallas, Texas |
| WCF | 1.596 | 187.85 | New York. N. Y. |
| WCK | 2.414 | 124.20 | Detroit, Mich. |
| WEY | 1.558 | 192.43 | Boston, Mass. |
| WKDT | 1.596 | 187.85 | Detroit, Mich. |
| WKDU | 1.712 | 175.13 | Cincinnatj, Ohio |
| WMDZ | 2.442 | 122.77 | Indianapolis, Ind. |
| WMJ | 2.422 | 123.79 | Buffalo, N . |
| WMO | 2.414 | 124.20 | Highland Park, Mich. |
| WMP | 1.574 | 190.48 | Framingham, Mass. |
| WPDA | 2.414 | 124.20 | Tulare, Calif. |
| WPDB | 1.712 | 175.13 | Chieago, Ill. |
| WPDC | 1.712 | 175.13 | Chicago, Ill. |
| WPDD | 1.712 | 175.13 | Chicago, Ill. |
| WPDE | 2.442 | 122.77 | Louisvile, Ky. |
| WPDF | 2.442 | 122.77 | Flint, Mich. |
| WPDH | 2.442 | 122.77 | Richmond, Ind. |
| WPDI | 2.430 | 123.45 | Columbus, Ohio |
| WPDJ | 2.414 | 124.20 | Passaic. N. J. |
| WPDK | 2.450 | 122.40 | Milwankee, Wis. |
| WPDL | 2.442 | 122.77 | Jansing, Mich. |


| Call | Megs. | Mtr | City |
| :--- | ---: | :--- | :--- | :--- |
| WPDM | 2.430 | 123.45 | Dayton, Ohio |
| WPDN | 2.458 | 121.97 | Auburn, N. Y. |
| WPDO | 2.458 | 121.97 | Akron, Ohio |
| WPDP | 2.470 | 121.40 | Philadelphia, Pa. |
| WPDR | 2.458 | 121.97 | Rochester, N. Y. |
| WPDS | 2.416 | 124.09 | St. Pal, Minn. |
| WPDT | 2.470 | 121.40 | Kokomo, Ind. |
| WPDU | 1.712 | 175.13 | Pittsburgh, Pa. |
| WPDV | 2.458 | 121.97 | Charlote, N. C. |
| WPDW | 2.422 | 123.79 | Washington, D. C. |
| WPDX | 2.414 | 124.20 | Detroit, Mich. |
| WPDY | 2.414 | 124.20 | Atlanta, Ga. |
| WPDZ | 2.470 | 121.40 | Fort Wayne, Ind. |
| WPEA | 2.458 | 121.97 | Syracuse, N. Y. |
| WPEB | 2.442 | 122.77 | Grand Rapids, Mich |
| WPEC | 2.470 | 121.40 | Memphis, Tenn. |
| WPED | 1.712 | 175.13 | Arlington, Mass. |
| WPEE | 2.450 | 122.40 | Brooklyn, N. Y. |
| WPEF | 2.450 | 122.40 | Bronx, N. Y. |


| Call | Megs. | Mtr | City |
| :---: | :---: | :---: | :---: |
| WPEG | 2.450 | 122.40 | ew York, N. Y. |
| WPEH | 1.712 | 175.13 | Somerville, Mass. |
| WPEI | 1.712 | 175.13 | Providence, R. I. |
| WPEJ | 1.712 | 175.13 | Brookline, Mass. |
| WPEK | 2.430 | 123.45 | New Orleans, La. |
| WPEL | 1.570 | 191.08 | Middleboro, Mass. |
| WPEM | 2.470 | 121.40 | Woonsocket. R. I. |
| WPEQ | 1.570 | 191.08 | Baton Rouge, La |
| WPES | 2.442 | 122.77 | Saginaw, Mich. |
| WPET | 1.712 | 175.13 | Lexington, Ky. |
| WPEW | 1.570 | 191.08 | Northampton, Mass |
| WPEY | 2.470 | 121.40 | Chattanooga, Tenn. |
| WPFA | 1.712 | 175.13 | Newton, Mass. |
| WRDH | 2.458 | 121.97 | Cleveland, Ohio |
| WRDQ | 2.470 | 121.40 | Toledo, Ohio |
| WROR | 2.414 | 124.20 | Grosse P'ointe, Mich. |
| WRDS | 1.574 | 190.48 | E. Lansing, Mich. |
| WRDU | 1.596 | 187.85 | Brooklyn, N. Y. |

## By Frequencies

|  | BY FREQUENCIES megs. 19243 meters | $\begin{gathered} 2.414 \\ K G P A \end{gathered}$ | megs. 124.20 meters |  | megs. 122.40 meters |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| KGPD | San Franciseo, Calif. | KGPS | Bakersfiel , Calif. | KGPD | Tulsa, Oklia. |
| WEY | Boston, Mass. | KGZA | Fresno, Calif. | KGPQ | Honolulu. Hawaii |
| 1.570 | megs. 191.08 meters | -HCK | Detroit, Mich. | KGPZ | Wichita, Kans. |
| WPEL | Middlehoro, Mass. | WMD | Highland Park, Mich. | KG1F | Chanute, Kans. |
| WPEQ | Baton Rouge, L3. | WPDA | Tulare, Calif. | WPPDK | Milwaukee, Wis. |
| WPEW | Northampton, Mass. | + P PDJ | Passuic, N. J. | WPEE | Brooklyn, N. Y. |
| 1.574 | megs. 190.48 meters | WPDX | Detroit, Mich, | WPEF | Brons, N . |
| KGPY | Shreveport, La. | WPDY | Atlinta, Ga. | WPEG | New York. N. Y. |
| WMP | Framingham, Mass. | WRDR | Grosse Pointe, Mich. | 2458 | megs. 121.97 meters |
| WRDS | E. Lansing. Mich. | 2.416 | megs. 124.09 meters | WPDN | Auburn, N. Y. |
| 1.596 | megs. 187.85 meters | KGPB | Minneapolis, Minn. | WPDD | Akron, Ohio |
| WCF | New York, N. Y. | WPDS | St. Paul, Minn. | WPDR | Rochester, N. Y. |
| WKDT | Detroit, Mich. | 2.422 | megs. 123.79 meters | WPDV | Charlotte, N. C, |
| WRDU | Brooklyn, N. Y. | KGPE | Iansas City, Mo. | WPEA | Syracuse, N. Y. |
| 1.712 | megs. 175.13 meters | KGPG | Valiejo, Calif. | WRDH | Cleveland, Ohio |
| KGJX | Pasadena, Calif. | KGZC | Toneka, Kins. | 2.470 | megs. 121.40 meters |
| KGPC | St. Louis, Mo. | KSW | Berkeley, Calif. | KGOZ | Cedar Rapids, Iowa |
| KGPJ | Beaumont, Texas | WMJ | Bulficlo, N. Y. | KGPD | San Francisco, Calif. |
| KGPL | Los Angeles, Calif. | WPDW | Washington, D. C. | KGPI | Omaha, Neb. |
| KGPR | Fort Worth, Texas | 2.430 | megs. 123.45 meters | KGPK | Sious City, Iowa |
| KGZB | Houston, Texas | KGZO | San Diego, Calif. | KGPM | San Jose, Calif. |
| KGZI | Wichita Falls, Texas | WPDI | Columbus, Ohio | KGPN | Davenport, Iowa |
| KVP | Dallas, Texis | - 40 PDM | Dayton. Ohio | KGPW | Silt Lake City, Utah |
| - 4 KDU | Cincinnati, Ohio | WPEK | New Orlerns, Lat | KGZG | Des Moines, Lowa |
| -WPDE | Chicago, Ill. | 2.442 | megs. 122.77 meters | WPDP | Philadelphia, Pa. |
| -WPDC | Chicago, Ill. | KGPP | Fortland, Ore. | WPDT | Kokomo, Ind. |
| WPDD | Chicago, Ill. | KGPX | Denver, Colo. | WPDZ | Fort Wayne, Ind. |
| WPDU | Pittsturgh, Pa. | KGZH | Khamath Fills, Ore. | WPEC | Memphis, Tenn. |
| WPED | Arlington, Mass. | WMDI | Indiınapolis, Ind. | WPEM | Woonsocket, R. I. |
| WPEH | Somerville, Mass. | WHPDE | Louisville, Ky. | WPEY | Chattanooga, 'Tenn. |
| WPEI | I'rovidence, R. I. | WPDF | Flint. Mich. | -WRDQ | Toledo, Ohio |
| WPEJ | Brookline, Mass. | W'P DH | Richmond, Ind. | 2.506 | megs. 119,64 meters |
| WPET | Ifexington, Ky. | WPDL | Lansing, Mich. | KGIE | San Antono, Texas |
| , WPFA | Newton, Mass. | WPEB | Grand Rapids, Mich. |  |  |
| \&Y1人 | montreal | WPES | Saginaw, Mich. |  |  |

## Time on the Air of European Broadcasters

IN THE January issue we gave a quite complete list of the European broadcasting stations arranged by frequencies. In this number we are presenting, through the courtesy of E. H. Bullard, Drummondville, Quebec, and Earl R. Roberts of Cambridge, Ohio, members of the Atlantic Radio Club, an abridged list of the principal broadcasters of Europe with their time on the air. This time has been converted into Eastern Standard.

The stations on this list will consti-
tute excellent targets for the coming month but it must be remembered that European stations are the "thousand-to-one-shots" on radio. The reception must necessarily be daylight as London time is five hours in advance of Eastern and most of the channels are pretty well loaded with stations in North America. We hope, however, that notwithstanding these inherent difficulties of European reception, some of our readers may be able to increase their logs with the following list.

| Keys. | City | Country | POWER | Sunday |  | Week Days |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | A.M. | P.M. | A.M. | P.M. |
| 563 | Munich | Germany | 60,000 | 4:00 | 4:45 | 12:45 | 6:00 |
| 581 | Vienna | Austria | 15,000 | 1:35 | 6:00 | 3:20 | 5:00 |
| 590 | Brussels | Belgium | 15,000 | 7:00 | 6:00 | As Sunday |  |
| 599 | Florence | Italy | 20,000 | 3.45 | 5:30 | As Sunday |  |
| 614 | Prague | Czechoslovakia | 120,000 | 12:15 | 5:30 | As Sunday |  |
| 625 | Manchester | England | 50,000 | 7:30 | 5:00 | 5:15 | 6:30 |
| 635 | Langenberg | Germany | 60,000 | 1:00 | 6:00 | As Sunday |  |
| 644 | Lyons | France | 1,500 | 3:00 | 5:30 | As Sunday |  |
| 653 | Beromunster | Switzerland | 60,000 | 4:00 | 6:00 | 6:30 | 5:00 |
| 680 | Rorne | Itaily | 50,000 | 4:15 | 5:00 | 2:15 | 5:00 |
| 689 | Stockholin | Sweden | 55,000 | 4:00 | 5:00 | 1:20 | 5:00 |
| 697 | Belgrade | Yugoslovia | 2,800 | 5:00 | 5:00 | As Sunday |  |
| 707 | Madrid | Spain | 2,000 | 5 P.m. | m., dail | Iday |  |
| 715 | Berlin | Germany | 1,500 | 12:15 | 6:30 | As Sunday |  |
| 725 | Dublin | Ireland | 1,200 | $3: 30$ | 6:00 | 8:30 | 5:30 |
| 734 | Katowice | Poiand | 16,000 | 4:00 | 5:30 | As Sunday |  |
| 743 | Sottens | Switzerland | 25,000 | 3:30 | 4:15 | 6:30 | 4:15 |
| 752 | Midland Regional | England | 25,000 | $7: 30$ | 5:30 | 5:15 | 6:30 |
| 761 | Bucharest | Rumania | 12,000 | 4:15 | 4:00 | 6:00 | 4:00 |
| 770 | Leipzig | Germany | 150,000 | 12:15 | 6:00 | As Sunday |  |
| 779 | Toulouse | France | 8,000 | 7:15 | 7:00 | As Sunday |  |
| 797 | Scottish Regional | Scotland | 50,000 | 7:30 | 5:30 | 5:15 | 6:30 |
| 806 | Hamburg | Germany | 1,500 | 12:30 | 5:30 | 12:01 | 5:30 |
| 815 | Helsinki | Finland | 10,000 | 1:40 | 3:00 | 5:00 | 3:00 |
| 825 | Algiers | North Africa | 13,000 | 6:30 | 6:00 | 7:00 | 6:00 |
| 832 | Stuttgart | Germany | 60,000 | 12:01 | 6:00 | As Sunday |  |
| 843 | London | England | 50,000 | 7:30 | 6:00 | 5:15 | 7:00 |
| 852 | Grez | Austria | 7,000 | 1:35 | 6:00 | 3:20 | 5:00 |
| 860 | Barcelona | Spain | 8,000 | $2: 15$ | 5:06 | 2:15 | 6:30 |
| 869 | Strasbourg | France | 11,500 | 5:45 | 7:00 | 5:15 | 7:00 |
| 878 | Brno | Czechoslovakia | 35,000 | 1:30 | 5:30 | As Sunday |  |
| 887 | Brussels | Belgium | 15,000 | 7:00 | 6:00 | As Sunday |  |
| 905 | Milan | Italy | 60,000 | 3:40 | 5:00 | 2:15 | 5:00 |
| 914 | Paris | France | 60,000 | 5:00 | 6:00 | 7:00 | 6:00 |
| 923 | Breslau | Germany | 60,000 | 12:30 | 6:00 | 12:15 | 5:00 |
| 932 | Goteborg | Sweden | 10,060 | 4:00 | 5:00 | 1:30 | 5:00 |
| 941 | Naples | Itilly | 1,500 | 4:15 | 5:00 | 2:15 | 5:00 |
| 959 | Genoa | Italy | 10,000 | 3:40 | 5:00 | 2:15 | 5:00 |
| 986 | Bordeaux | France | 13,000 | 7:00 | 4:00 | As Sunday |  |
| 995 | Manchester | England | 50,000 | 5:30 | 5:30 | 5:15 | 7:00 |
| 1013 | Hilversum | Hotland | 20,000 | 3:15 | 6:45 | 2:45 | 6:45 |
| 1031 | Viipuri | Fiuland | 13,200 | 1:40 | 3:00 | 5:00 | 3:00 |
| 1040 | Scottish National | Scotland | 50,000 | 5:30 | 5:30 | 5:15 | 7:00 |
| 1076 | Bratislava | Czechoslovakia | 14,000 | 1:30 | 5:30 | 4:00 | 5:30 |
| 1085 | Heilsberg | Germany | 60,000 | 12:30 | 6:00 | 12:01 | 5:00 |
| 1096 | Turin | Italy | 7,000 | 3:40 | 5:00 | 2:15 | 5:00 |
| 1112 | Bari | Italy | 20,000 | 4:25 | 5:00 | 7:00 | 3:00 |
| 1137 | Moravska-Ostrava | Czechoslovakia | 11,000 | 12:01 | 5:30 | 12:15 | 5:30 |
| 1147 | London | England | 50,000 | 5:30 | 5:30 | 5:15 | 7:00 |
| 1157 | Frankfurt-au-main | Germany | 17,000 | 12:35 | 6:00 | 12:01 | 6:00 |
| 1166 | Horly | Sweden | 10,000 | 4:00 | 5:00 | 1:30 | 5:00 |
| 1184 | Geliwitz | Germany | 5.000 | 12:30 | 6:00 | As Sunday |  |
| 1211 | Trieste | Italy | 10.000 | 3:40 | 5:00 | 2:15 | 5:00 |
| 1256 | Nurnberg | Germany | 2,000 | 4:00 | 4:45 | 12:45 | 6:00 |
| 1337 | Cork | Ireland | 1,000 | 3:35 | 6:00 | 8:00 | 5:30 |
| 1345 | Fe Camp | France | 10,000 | 7:00 | 10:00 | As Sunday |  |

# With the SHORT WAVES on SUNDAY 

## Arranged by FRANK E. SWITALSKI (Time in Eastern Standard)

| AM |  |  |
| :---: | :---: | :---: |
| 12.01-2.00 | PK3AN ${ }^{\text {² }}$ Surabay | 54.00 |
| 1.00-3.00 | VK2ME Sydney, Australia | 31.28 |
| 3.00- 5.00 | Johannesburg, S. A | 43.50 |
| 4.40-5.00 | PK3AN Surabaya, Java | 54.00 |
| 5.00-5.30 | HVJ Vatican City, Italy | 50.26 |
| 5.00-6.00 | PK3AN Surabaya, Java | 54.00 |
|  | JB Johannesburg, S. A | 49.20 |
|  | VK2ME Sydney, Australia | 31.28 |
|  | RV59 Moscow, U. S. S. R | 50.00 |
| 6.00-7.00 | PK3AN Surabaya, Java | 54.00 |
|  | JB Johannesburg. S. A | 49.20 |
|  | VK2ME Sydney, Australia | 31.28 |


| 7.00-8.00 | ZPG | Kuala Lampur, | 50 |
| :---: | :---: | :---: | :---: |
|  | PK3AN | Surabaya, Java | 54.00 |
|  | VK2ME | Sydney, Australia | 31.28 |
| 7.30-8.00 | CNR | Rabat, Morocco | 23.38 |
| 8.00-9.00 | VK2ME | Sydney, Australia | 31.28 |
|  |  | Pontoise, France | 19.68 |
|  | DIH | Nauen, Germany | 15.03 |
|  | IPG | Kualit Iampur, Malay | 50.00 |
|  | CNR | Rabat. Morocco | 23.38 |
| $9.00-10.00$ |  | Pontoise. Trance. | 19.68 |
| 10.00-11.00 |  | Johannesburg, S. A | 43.50 |
|  |  | Pontoise, France | 19.68 |
| 10.30-11.00 | CT3AQ | Funchal, Madeira Is | 26.83 |



## One Hundred Best Short Wave Stations

## By Frequencies and Wave Lengths

Submitted by our readers as being most regularly received. Times are given in Eastern Standard. First column gives frequency in megacycles (for kilocycles read the decimal point as a comma) and the second column, wave-lengths in meters.

For complete lists of short-wave stations see the following issues of this magazine:
September: Foreign stations arranged by countries.
October: Complete list by frequencies and waves.
November: American stations by states.
December: Canadian stations by provinces and Complete list by call Ietters. Broadcast B. Phone P.

| 3.998 | 75.00 | HCJB Quito, Ecuador, 7:30-9:45 a.m. |
| :---: | :---: | :---: |
| 4.174 | 71.82 | British Sbips |
| 4.174 | 71.82 | German Shipa |
| 4.273 | 70.65 | RV15 Khabarovsk, USSR 3 a.m.-9 a.m. B |
| 4.28 | 70.00 | Italian Ships |
| 4.792 | 62.56 | VE9BY London, Ontario, Sat. midn.-1 a.m. |
| 4.975 | 60.27 | $\underset{\text { iarly }}{\mathrm{GBC}}$ Rugby, England. Phones ships irregu- |
| 5.045 | 59.42 | VRT-ZFA Hamilton, Bermuda. Phones WNB-GMBJ nights |
| 144 | 58.3 | DIQ Nauen, Germany $\quad$ B |
| 766 | 52.00 | XAM Merida, Yucatan. Tests XDA 10 a.m. 8p.m. irreg. |
| 5.879 | 51.00 | XDA Mexico City. Tests XAM $10 \mathrm{a} . \mathrm{m}$. 8 p.m. irreg. |
| 5.925 | 50.60 | HKO Medellin, Colombea, Tues.-Tbur.Sat. 8-10 p.m.-Sun. 6-8 p.m. |
| 5.968 | 50.26 | HVJ Vatican City, 2-2:15 p.m.; Sun. 5-5:30 |
| 96 | 50.00 | HKD Barranquilla, Col., 8-10 p.m. B |
| 6.005 | 49.93 | VE9DR Drummondville, Que., 7 p.m.mid. |
| 6.036 | 49.67 | W4XB Miami, Fla. Reported 5-11 p.m. B |
| 6.050 |  | GSA Daventry, England. To Canada 8-10 |
| 6.057 | 49.50 | CMCI Havana. Cubr. 9-11 p.m. B |
| 6.060 | 49.48 | VQ7LO Nairobi, Kenya, 11 a.m. $3: 30$ p.m. |


| 6.060 | 49.48 | W8XAL Cineinnati, O. Relays WLW 6-10; 30 a.m.:1:30-3:30 p.m.: 7 n.m.-1:30 a.m. B |
| :---: | :---: | :---: |
| 6.070 | 49.39 | VE9CS Vancouver. B. C., Fri. 12:30-1:45 |
|  |  | ; noon to mid. $\quad$ B |
| 6.076 | 49.34 | W9XAA Chicago, 111., Sun. 11 a.m. 9 9 p.m. B |
| 6.090 | 49.23 | VE9BJ St. John, N. B., 5 p.m, and $11 \mathrm{p} . \mathrm{m}$. |
| 6.0 | 49.18 | W9XF Chicago, Ill, 4:30-8 p.m.; 9:30 p.m.- |
|  |  |  |
| 6.096 | 49.17 | W3XAL Boundbrook. N. J., Sat. 4:30 p.m.- |
| 6.119 | 49.00 | YV1BC Caracas, Venz. Relays 960 kcs . |
|  |  | 10:30 a.m.-1 p.m.; 5:15-10 p.m. B |
| 6.125 | 48.95 | YV11BM0 Maracaibo, Venz., 8-11 p.m. B |
| 6.140 | 48.83 | W8XK Pittaburgh, Pa. Relays KDKA 4-11 |
|  |  | n.m |
| 6.335 | 47.35 | VE9AP Drummondville. Que. |
| 6.386 | 46.96 | W3XI, Boundbrook, N. J. Experimental B |
| 26 | 46.65 | VE9BY London, Ontario, Werl. 8:30-9:30 |
| 6.611 | 45.3 | TGW Guatamala City, Tues.-Thur.-Fri. |
|  |  | 10:30 p.m-mid. B |
| 6.618 | 45.31 | PRADO Riobamba. Ecuador. Thur. 9-11 |
|  |  | $\stackrel{\text { p.m. }}{\text { IA }}$ ( Coltano, Italy. Testing irregularly ${ }^{\text {a }}$ P |
| 6.648 | 45.10 | IAC, Coltano, Italy. Testing irregularly P |
| 6.675 | 44.91 | DGK Namen, Germany. Heard 9 p.m. with |
| 6.888 | 43.54 | KEQ Kahuku, Hawail. Phones California |
|  |  | nights |


|  | 42.00 | HJ4ABB Manizales, Colombia, Sat. IU p.m.-mid. |
| :---: | :---: | :---: |
| 12 | 41.03 | CM5IRY Matanzas, Cuba, Sat. 10:45-11:30 |
|  |  |  |
| 7.518 | 39.89 | KDK-KKKH Kahuku, Hawaii, 9 p.m. and |
|  |  |  |
| 610 | 39.40 |  |
| 90 | 38.49 |  |
| 8.180 | 36.65 |  |
|  |  |  |
| 8.328 | 36.00 | DAN |
| 8.328 | 36.00 | German Ships |
| 566 | 35.00 | Italian ships |
| 645 | 34.68 | VE9BY J,ondon Ontario |
| 8,831 | 33.95 | British ohips |
| 8.950 | 33.50 | TGX Guatamal |
| 012 | 33.27 | KE.I. Bolinas Calif. Tests irregularly |
| 9.276 | 32.32 | CNR Rabat, Morocco, Sum 3 p.m.-6p. |
| 480 | 31.63 | PLW Bandoeng, Java Phones Australia $3-8$ a m irreg. |
| 9.492 | 31.58 | PRBA Riode Janeiro, Brazil, 6-6:15 p.m. |
| 503 | 31.5 | VK3ME Melbourne, Australia, Wed. 5-6:30 |
| 9.510 | 31 | GSB Daventry, England. To Canada 8-10 |
|  |  |  |
| 520 | 31.49 | OXY Skamleback, Denmark, 2-6:30 p.m. B |
| 9.530 | 31.46 | W2XAF Schenectady, N. Y., 5:15-11 p.m.; Sat -Sun 4-11 p.m. |
| 9.552 | 31.38 | D.IA Zecoen, Germany, 2 p.m-6:30 p.m. B |
| 9.560 | 31.36 | W1XAZ Springfield Masq., 4 p.m.-12:30 |
|  |  | a.m. B |
| 9.570 | 31 | SR1 Poznan, Poland, Tues. 6 a.m.-8 a.m. B |
| 9.580 | 31 | HBL, Geneva, Switzerland. Sun. 5-5:45 p.m. |
| 9.585 | 31.28 | GSC Daven |
| 9.585 | 31.28 | VK2ME Sydney, Australia. Sun. 1-2 a.m.; 5-9 a.m.;9:30-11 a.m. |
| 9.592 | 31.25 | CTiAA Lisbon, Portugal, Tues.-Fri., 5-7 |
|  |  | p.m. ${ }^{\text {m }}$, B |
| 9.670 | 31.00 | TI4NRH Heredia. Costa Rica, week days 10-11 p.m. |
| 9.862 | 40 | EAQ Madrid. Spain, 5:30-7 p.m. B |
| 9.862 | 30.40 | JIAA Kemikawa-Cho, Japan, 5-7:45 a.m. B |
| 9.895 | 30.30 | LSN Buenos Aires, Argetina, 6 p.m. and 6 a.m. |
| . 928 | 30.20 |  |
|  |  |  |
| 10,060 | 29.80 | WNB days <br> Wamilon, Bermuda, Phones |
| 10.090 | 29 | OPM Leopoldville, Congo. Phones ORK |
|  |  | $9-11$ a.m., ${ }^{\text {a }}$ |
| 10.163 | 29.50 | German Ships |
| 10.212 | 29.35 | PSH Kio de Janeiro. Brazil. Tests W2XBII evenings $\mathbf{P}$ |
| 10 | 29.26 | DIQ Nauen, German |
| 10.285 | 29.15 | DJQ Koenigswusterhausen |
| 10.340 | 28.98 | ORK Brussels, Belgium. Phones OPM 2-4, |
| 10.830 | 27. | KWV Dixon, Calif. Phones Hawaii irregu- |
|  |  |  |
| 11 | 26 | CT3AQ Funchal, Madeira, Tues.-Thurs. 5-6:30 p.m.; Sun. 10:30-noon |
| 1.530 | 26.00 | XAM Merida, Yucatan |
| 11.644 |  | PPQ Rio de Janeiro. Brazil. Heard testing 6p.m. |
| 11.680 | 25. | IVQ Maracay, Venzuela. Testa Germany |
|  |  | 5-7 p.m. |
| 11.710 | 25.80 | DGT Koenigawusterbausen |
| 11.710 | 25.60 | VE9JR Winnipeg, Manitoba, Tues. 6:308:30 p.m.; Fri. to 9 |
| 11.710 | 25.60 | Pontoise, France, 4-7 p.m. $\quad$ B |
| 11.750 | 25.51 | GSD Daventry, England. To Oceania 4-30: B |
| 60 | 25.50 | XDA Mexico City. Tests XAM 1 p.m. ${ }^{\text {and }}$ |
|  |  | I2Ro $\mathrm{mome} \mathrm{Italy} 11 \mathrm{am}-12.30 \mathrm{pm}$. |
| 800 | 25.40 | I2RO Rome, Italy, 11 a.m.-12:30 p.m.; 2.30-5:30 p.m. |

11.865 25.27 GSE Daventry, England, To India 9:3011:30 a.m.
$11.872 \quad 25.25$ W8XK I'jitaburgh, Pa. Relays KDKA 4-10 p.m.
11.89825 .20 Pontoise, France, 11:30 a.m.-2:30 p.m. B
12.000 24.48 F/SSAMgon. Indo-Clina, 9-10am. $\quad$.
$12.592 \quad 23.81$ DAN Norden, Germany. Talks to ships $\mathbf{P}$
12.78023 .46 GBC Rugby, England. Phones ships irregu-
12.820 23.38 CNR Rabat. Morocco, Sun. 7:30 a.m.9a.in.
13.035 23.00 German Ships P
13.074 22.93 J1AA Kemikawa-Cho, Japan. Phones, cxperimental
$13.219 \quad 22.68$ British Ships P P P
$\begin{array}{llll}13.278 & 22.58 & \text { YVQ Maracay, Venezuela } \\ 13.296 & 22.55 & \text { CGA Drummondville, Que., } 9 \text { a.m. }-2 \text { n.m. } P\end{array}$
13.500 22.09 GBB Rugby, England. Talks Canada daytimes.
13.81621 .70 GUZ C'airo. Fgypt, 7 a.m. and $3: 30$ p.m. $\quad P$
14.45020 .75 GBW Rugby. Figland, 6 a m. and $6 \mathrm{pm} . \mathrm{m}$
14.485 20.fin RXC Panama City. Afternoons
14.55020 .60 Hi3.J Geneva, Switzerland
14.68220 .42 J'SS Rio de Janeiro, Brazil, 5-6 p.m.
$14.760 \quad 20.32$ H.JB Bogota, Colombia 11 it.m. -5 p.m.
14.796 20.27 WMB Miami, Fla., 1-5 p.m
15.06610 .90 TI4NLKH Heredis. Costa Rica, Sat.-Sun 11-noon
$15.120 \quad 19.83$ HV.J Vatican City, 5-5:15a.m. B
$15.140 \quad 10.81$ GSF Daventry, Englamd B
$15.190 \quad 19.73$ DJB Zeesen, Germany, 8 a.m.-noon B
15.20410 .72 W8XX Pittalurgh. Pa. Relays KDKA
$15.234 \quad 19.68$ Pontoise, France. 8 a.m.-11 a.m. B
$15.320 \quad 10.57$ W2XAD Sclyenectady N. Y. Daily $1-3$ p.m.; Sat.-Sun. to 4
$15.410 \quad 19.46$ KWO Dixon. Calif. Phoues Hawaii 2-7 d.m.
15.76019 .02 J1AA Kemikawa-Cho, Japan. Phones experimental
$16.150 \quad 18.56$ GBX Rugby, England, 4 p.m. and 11 p.m. P
16.601 18.06 DAN Norden, Germany
17.080 17.55 GBC Rugby, England. Talks with ships
17.77016 .90 GSG Daventry, England. To India $9: 30$ 11:30 a.m. B
$17.772 \quad 16.87$ W3XAL Boundbrook, N.J. 8 a.m.-4 p.m. B
$\begin{array}{llll}17.830 & 16.82 & \text { PCV Kootwijk, Holland, 6-9 a.m. } & \text { P } \\ 18.170 & 16.50 & \text { PMC Bandoeng. vava, } 3: 30-9 \mathrm{a}, \mathrm{m} & \mathbf{P}\end{array}$
$18.296 \quad 16.39$ YVQ Maracay, Venezuela. Heard about $10 \mathrm{a} . \mathrm{m}$.
18.400 16.29 PCK Kootwijk. Holland. Phones Java about 7 a.m.
$18.444 \quad 16.25$ HJY Bogota. Colombia. 11 a.m. and 4 p.m.
18.670 16.06 OCI Lima, Perı, 2 p.m. P
18.820 15.93 PLE Bandoeng, Java, Tues.-Fri. 5:40-10:40 a.m.

P
18.958 15.82 I.SR Buenos Aires, Arg., 11 a.m. and 4 p.m.
$19.270 \quad 15.57$ PPU Rio de Janeiro. Brazil. 10:30 a.m. and 3:30 p.m.
$19.282 \quad 15.55 \quad$ FTM St. Assise, France, 10 a.m.-2 p.m. P
19.678 15.24 CEC, Santiago, Chile, 11 a.m. and 4 p.m. P
19.684 15.23 EAQ Madrid, Spain. Phones P
$19.895 \quad 15.07 \quad$ LSG Buenos Aires, Argentina. 10.30 a.m.-
20.02814 .97 DHO Nauen, Germany. Phones LSG

| 20.820 | 14.40 |
| :---: | :---: |
| LSY Buenos Aires, Argentina. Heard | 10 |
| a.m. to 2 p.m. |  |

$21.020 \quad 14.27$ LSN, Buenos Aires, Argentina, 8 a.m. and 4 p.m.
21.054 14.24 WKA Lawrenceville, N. J., 8 a.m-4 p.m. P
21.069 14.23 PSA Rio de Janeiro, Brazil. 8a.m. P
$21.400 \quad 14.01$ WKK Lawrenceville. N. J., 8 a.m. -4 p.m. P
$21470 \quad 13.96$ GSHI Daventry, England

Index of S. W. Stations by Call Letters appeared in the February number and

## Last Minute DX NOTES

The Transcontinential Radio DX Club will reward the DXer who turns in the most complete and accurate report from the greatest distance of the program of KPCB the first Monday of each month, with a year's membership in the Club. The next DX program of KPCB will be on Monday morning, March 6th, from 3 to $5 \mathrm{a} . \mathrm{m}$. EST.

The first DX program of XES, Tampico, Tamps., brought them hundreds of letters from nearly every state in the U. S., from many Canadian provinces and from Cuba. Starting February 1st, XES is putting on a courtesy program the first and third Saturday morning of every month from 4 to 5 EST.

The first DX program of CMJK brought them 90 reports. They will have another each Saturday night during March starting at 3 a . m. (Sunday morning). That of March 4th will be dedicated to the readers of Radex and we hope they will listen for this program especially.

All those who need Vermont for their roster of the states, take notice: WNBX, Springfield, will give us a special DX program on Saturday morning, March 18th, from 4 to 5 EST. This station says its regular early morning program starting at 7:30 is reaching into the Middle West nicely. They would like reports on these morning programs as well as on the DX special.

Here's a chance to tune in a hard-to-get station on 1500 kes.-KPQ, Wenatchee, Wash., Sunday morning, February 26 th from 3 to 4 EST. They dedicated a new transmitter on January 20th.

Karl J. Halpern of Brooklyn, U. S. representative of the New Zealand Radio Club has arranged with some of the Eastern stations for DX programs especially for listeners on the under-side of the world. Among
these are the following: In February, WMCA, WLTH, WEAF and WOR; in March, WJZ, WPCH, WFOX, WABC, WLWL, WINS, WOV and WBBC.

The Transcontinental Radio DX Club is arranging a "DX Parade" for Saturday morning, March 11th. The list of stations invited to participate is too large to print here. Actual acceptances have not been received in time to include in our DX Calendar but it is probable enough of them will be on the air to make the hours from 1 to 6 a. m. EST, Saturday morning, March 11 th, repay any listener for his loss of sleep. This club invites all listeners to tune in any Saturday morning from midnight to six $\mathrm{a} . \mathrm{m}$. for specials.

## Our Readers' Letters

(Continued from page 27)
stat of most any capacity across the aerial and ground post has a very marked difference in cutting out interfering stations," informs Wm. H. Gray, 1533 E. Van Buren St., Phoenix, Ariz. "I have a store about two miles from KTAR, Phoenix, which comes in on my dial at 82, while KFI, Los Angeles, comes in at 80. Now by adjusting my rheostat I can play KFI with plenty of volume, with no trace of interference from KTAR."
"Owners of Pentode sets," cautions Mrs. L. R. Ledbetter, 1109 Grammar St., Vicksburg, Miss., "should see that those tubes are giving a good reading. I improved tone greatly by changing to better 47 's."
"Officer Kearney" was located for Louis Strand, 3500 Herndon St., Chicago, by so many readers of this magazine that he was unable to reply to them. Miss Lilian M. Bethel of Massillon, Ohio, for one, gave Mr. Strand the complete story with a cast of the characters on the Wheatenaville program, one of them being Officer Tim Kearney.

# The World of SHORT WAVES 

(Continued from page 10)
perhaps for all time.
Mr. J. A. Shanks, Box 2, Rt. 2, Russellville, Tenn., tells us that he has been DXing for about two years but his real distance reception didn't begin until he obtained a Pilot Universal Super Wasp, a six-tube set tuning from 15 to 650 meters. He writes: "Am very much pleased with the results I have had with it. I have verifications from the following stations: VK2ME, VK3ME, Pontoise, 2RO, EAQ, HKA, CMCI, VE9DR, VE9GW, GBW and others."

And now, a letter from one who has heard all the continents but is not quite satisfied with short waves. J. W. Brauner says, "Your Short Wave Department is very interesting. Using a Lincoln all-wave for SW DXing I have heard all continents, but for some reason SW's do not interest me like 'BCL' does. One reason is the lack of identifiable announcements. Christmas morning I had a fellow on about 27 meters sending greetings to all the islands of the Pacific and telling how the people were enjoying the day on the beach at Sydney (presumably Australia). I may have had VK2ME. On the other hand, it may have been a telephone commercial in USA relaying Sydney, no call or other identification being heard in over an hour's listening, during every moment of which the speech was perfectly clear and loud. This is an example of why SW does not interest me. Too much 'relaying' and rebroadcasting."

Thomas Johnson, Box 1041, Seamen's P. O., 25 South St., New York City, comments particularly on the nice QSL card used by VE9GW and reports reception of KEE, Bolinas, Calif. He writes from the S S. Rochester bound for Providence, as follows: "I have been reading Radex for a few years and going to sea I always have it. I have a 2 -tube short
and long wave home-made set using 230 tubes and Hammarlund coils tuning from 15 to 110 meters. On this set I have heard nearly all the police stations in the country."
"I have received many more stations on my Philco 90 ," comments William Hawkins, P. O. Box 1471, Abilene, Texas. "Decembmer 15 I got an Atwater-Kent short wave converter 95 , which has worked very nicely. With the combination I have heard 450 stations in nine countries. Only 100 stations are s. w. VK2ME comes in very nicely. YV1BC comes in almost perfect."
"On the short waves the best ones I have received," contributes Robert Base, 4105 Alton Road, Baltimore, Md., "are VK3ME, VK2ME, CT1AA, GSA, I2RO, Pontoise, EAQ, PRADO, PRBA, Rabat, DJB, LSX, CMCI, and others."

By the way, how many of us knew that Caracas is only a nick-name? The complete name of this beautiful Venezuelan city is Santiago de León de Caracas. The Spanish pronunciation is Cah-rah-cus with the accent on the second syllable.

Several new stations have been reported about which we have not as yet received any definite details. One of these was heard on 47.5 meters ( 6312 kes.) announcing as W8XQ at Akron, Ohio. The others are all Spanish-speaking stations and are heard on 36.5, 40.5 and 48.8 meters, or 8159,7402 and 6143 kes. respectively. The first of these is heard on Wednesdays from 7:30 to 9:00 p. m., and is located at Bogota, Colombia; we believe the call is HJ3ABG. The 40.5 meter station was heard on a Sunday from 7 to 8 p. m. and the 48.8 meter stranger works daily, being heard as late as 11 p. m.

It is with regret that we delete VE9GW from our lists this month. We have learned that this station left the air on January 15 th for an undetermined length of time. VE9GW was always one of our best liked stations.

## $\rightarrow \square$ A RADIO PIROGRAM <br> RADIO PROGRAMS "SLATE"

|  | MOND.AY |  |  | IUESD. Y $^{\text {P }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | Prosram | Call | Dial | Prcgram | Coll | Diod |
| 15,00) |  |  |  |  |  |  |
| 6:15 |  |  |  |  |  |  |
| (i) \% |  |  |  |  |  |  |
| B. 45 |  |  |  |  |  |  |
| 7 (n) |  |  |  |  |  |  |
| 78 |  |  |  |  |  |  |
| 7, |  |  |  |  |  |  |
| 7.4 |  |  |  |  |  |  |
| St (t) |  |  |  |  |  |  |
| 3:15 |  |  |  |  |  |  |
| R: 50 |  |  |  |  |  |  |
| $\times .5$ |  |  |  |  |  |  |
| 9, ind |  |  |  |  |  |  |
| $\cdots 15$ |  |  |  |  |  |  |
| 930 |  |  |  |  |  |  |
| 4 9 |  |  |  |  |  |  |
| 1300 |  |  |  |  |  |  |
| 10:25 |  |  |  |  |  |  |
| (10:30) |  |  |  |  |  |  |
| 115 |  |  |  |  |  |  |
| 12:141 |  |  |  |  |  |  |
| 11.15 |  |  |  |  |  |  |
| 11.80 |  |  |  |  |  |  |
| 11:47 |  |  |  |  |  |  |
| 12-6) |  |  |  |  |  |  |

Actual size $5 \times 7$ inches

For those favorite programs which are so frequently overlooked.

Spaces for each 15-minute period for Sunday afternoon and every evening of the week.

Four pages; printed on fine Bristol board so entries may be erased and kept up-to-date.

After you have used it you will wonder how you ever got along without it.

Price, 10 cents each, two for 15 c , four for a quarter.

## TMERADEXMAP DF TME WDTRLD wilh Time Comverting Dial

Just turn the dial to the time in your own zone and instantly the time is shown for every other zone in the world-quite the most ingenious device for converting time ever published.

Shows clearly which times are yesterday, today or tomorrow. Indicates graphically where the periods of twilight, darkness and dawn lie. No adding or subtracting.

On the double inside pages is a large and accurate map of the world showing the principal cities of every nation and the zones in which they are located.

Gives the call letters assigned to each country in the world.
Price 25 cents each postpaid to any part of the world.

## TIEE RADEX PIRESS INC.

## Make me PROVE it is Easy

 to Learn at Home in Spare Time to fill a GOOD JOB in Radio
[^0]:    E－6：45 p．m．，C－5：45，M－4：45，P－3：45 C－Just Plain Bill
    CKOK WAAB W．ABC WC． 10 WCAU WHK W．SV N＂KBW

    ## R－Rhythm String Quartet

    WBEN WCAE WCSH WVAF WFBR WFI W．IAR WRG WSA1 HTAG WTAM WTIC WW．J

[^1]:    E－9：00 p．m．，C－8：00，M－7：00，P－6：00 C－Chesterfield Program
    CKOK KBD KERN KFBK KPPY KFRO KGB KHJ KLRA KLZ KMBC KN．J KMOK KOH KOIN KOL KOMA KRLD KSI，KTRII KTSA KVI k゙WG WABC WADC WBRC WBT WCAH H（＇AO WCAU WCCO WDAE WDBJ WDBO WDRC WDSU WEAN WFBL WFBM WGN WGS＇WHAS WHEC WHK WISN WJAS WJSV WKBW WKRC WLAC WIBZ WMBG WMT WNAC WOKO WORC WOWO WPG WUAM WREC WSPD WTAR WTOC

[^2]:    E－7：45 p．m．，C－6：45，M－5：45，P－4：45 C－Street Singer
    CFRB CKOK hMBC FMOX KRI， KSCJ KSL KTRHE KVOR WABC WADC WBCM WBIG WBRC WBT WCAO WCAU WCCO WDAE WDBO

[^3]:    E－8：15 p．m．，C－7：15，M－6：15，P－5：15 C－Magic Voice，See Tucsday
    B－Boston Symphony Orchestra
    CFCF＇（KOHE KDhi Nill KSO KWCR KWK WR，L WB\％WHZA WCKY WGAR WhAM WJR WJZ WREN

[^4]:    E-12:30 p.m., C-11:30, M-10:30, P-9:30 R - Musical Arts Quartet
    KDYL KPRC KSTP KTBS WBEN WDAF WEAF WEBC WFBR WFLA WGY WIAR WKY WOAI WRC W'I'AM W'VJ

[^5]:    E-3:30 p.m., C-2:30, M-1:30, P-12:30 R - Dr. S. Parkes Cadman
    KDYL KPSD KFYR KGHL KGO hGW KHQ KOA KOMO KIRC KSD KSTP KTAR KTHS KVOO UBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WGY WHO WIBA WJAR WKY WLIT WOAI WOC WOW WRC WSAI WTAM WWJ B-Manhattan Merry-Go-Round KDKA KOIL KWCR KWK KYW WBAL WBZ WBZA WHAM WJZ WREN

[^6]:    E-7:15 p.m., C-6:15, M-5:15, P-4:15 C Walter Smith and Concert'Band
    CKOK KFI KLZ KMBC KRLD KSCJ KSL KTRH hVOR WABC WADC WBCM WBIG WBleC WBT WCAO WCCO WDAE WDBO WDOD WDRC WDSU WEAN WFAN WFBM WFEA WGR WHEC WIBW WICC WIP WJSV WKBN WKBW WIBW WLBZ WNAC WNAX WOKO WQAM WSBT WSFA WSUS WSPD WTAR WTOC WWYA
    R - Wheatenaville, See Monday

[^7]:    E-10:15 p.m., C-9:15, M-8:15, P-7:15 B-Vincent Loper; Pratt-Sherman KDK : KDYL KFI KGO KGW KHQ KOA KOIL KOMO KPRC KSTP KTHS KHK WBAL WBAP WBZ WBZA WGAR WIBA WJDX WJR WbZ Whl WLW WMAQ WOAI WREN WSB USH1 WSMB WTMJ

[^8]:    E-12:00 p.m., C-11:00, M-10:00, P-9:00 C Ben Pollack and Orchestra
    CKOK KFAB IKLZ KMOX KSCI K'TRII KVOR WABC WBRC WBT WCAU WCCO WDAE WDOD WEAN WGR WIBW WICC WISN WJSV WLBW WMBD WNAC WNAX WOKO WPG WSBT WSPD
    B - William Stoess and Orchestra
    KTY1R KGHL KGO KGW KHQ KOA KOIL KOMO KPRC KS"I KTBS KWCR KWK WBZ WBZA WDAI WLBC WENR WPLA WGAR WHAM WlBA WIOD WIS WJR WJZ WKY WLW WMC WREN WSB WSM WSMB WWNC

    ## R-Joe Furst and Orchestra

    WC.LE WEAF WFBR WGY WJAR WOW WTAM WTIC

[^9]:    P Has construction permit only.
    Great Iakes network.
    National "Red" network.
    Sunday only.
    Don Lice System.
    Dixie network.
    Maritime Broadcasting network.
    W Curtis-Indiana network.
    $X$ Has permit to increase power.
    Y Has permit to change location.
    Z Has permit to change frequency.
    a-b-c. Small letters show stations using same transmitter.
    1-2-3. Figures denote stations sharing time.
    No information.

[^10]:    Jose Silvera
    Mandan Radio Assn. John B. Cooley

[^11]:    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.
    Kansas City, Mo.

