THE MARCH 1933

# RADEX INDEX

THE ALL-WAVE RADIO MAGAZINE



**25**°

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

## MARCH 1, 1933



# RAD IO EX

Reg. U. S. Patent Office

FRED CLAYTON BUTLER

Editor and Publisher



PAGE TAYLOR Short Wave Editor

NUMBER 67

## B. FRANCIS DASHIELL Technical Editor

NINTH YEAR

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ADDRESS ALL CORRESPONDENCE TO CLEVELAND OFFICE

MARCH DX CALENDAR

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. proper sequence.

	SUNDAY NIGHT	4:00-6:00	WINS 1180 New York City
	March 5th	4:00-6:00	WINS, 1180, New York City WLWL, 1100, New York City 10-BP, 1199, Wingham, Ont.
3:00-5:00	KPCB, 650, Seattle, Wash.	4:30-6:00	10-BP, 1199, Wingham, Ont.
0.00 0.00		2100 0100	March 31st
2:00-4:00	WBSO, 920, Needham, Mass.	4:00-5:00	KGAR, 1370 Tueson Ariz
2:30-5:00	10-BI, 1200, Prince Albert, Sask.	4:00-6:00	WBBC, 1400, Brooklyn, N. Y.
	March 5th, 12th, 19th, 26th	4:00-6:00	KGAR, 1370, Tucson, Ariz. WBBC, 1400, Brooklyn, N. Y. WOV, 1130, New York City
12:00-1:00	WBSO, 920, Needham, Mass. 10-BI, 1200, Prince Albert, Sask.  March 5th, 12th, 19th, 26th WSAZ, 580, Huntington, W. Va. KSOO, 1110, Sloux Falls, S. Dak. WGES, 1360, Chicago, Ill.		March 3rd, 17th
12:30-1:00	KSOO, 1110, Sioux Falls, S. Dak.	1:00-5:00	KASA, 1210, Elk City, Okla.
1:00-3:00	WGES, 1360, Chicago, Ill.	4:00-5:00	XES, 1055, Tampico, Mex.
	MONDAY NIGHT	2100 0100	March 3rd, 10th, 17th, 24th, 31st
	March 6th, 20th	12:30-1:30	WCAJ, 590, Lincoln, Nebr.
4:30-5:15	WEAO, 570, Columbus, Ohio	1:00-2:00	CFCN, 985, Calgary, Alta.
5:00-6:00	WAWZ, 1350, Zarephath, N. J.	1:00-2:00	WENC, 1420, Americus, Ga.
	March 6th, 13th, 20th, 27th	1:00-3:00	CKCL, 580, Torento, Ont.
12:00-2:30	WMIL, 1500, Brooklyn, N. Y.	1:30-3:30	CKCL, 580, Torento, Ont. KGEK, 1200, Yuma, Colo, CMJH, 1150, Ciego de Avila, Cuba
1:00-4:00	WSU1, 880, Iowa City, Iowa	4:30-5:00	CMJH, 1150, Ciego de Avila, Cuba
1:00-5:00	WABZ, 1200, New Orleans, La.		SATURDAY NIGHT
2:00-4:00	KOY, 1390, Phoenix, Ariz.	•	Feb. 25th
5:15-5:30	WEAO, 570, Columbus, Ohio WAWZ, 1350, Zarephath, N. J. March 6th, 13th, 20th, 27th WMIL, 1500, Brooklyn, N. Y. WSUI, 880, Iowa City, Iowa WABZ, 1200, New Orleans, La. KOY, 1390, Phoenix, Ariz. WHP, 1430, Harrisburg, Pa.	3:00-4:00	KPQ, 1500, Wenatchee, Wash.
	I DESDAT MIGHT	0.00	March 4th
0.00.00	Feb. 28th	12:00-2:00	CMCH, 1395, Havana, Cuba
3:00-6:00	WOPI, 1500, Bristol, Tenn. KGAR, 1370, Tucson, Ariz. March 7th	12:00-4:00	WRBX, 1410, Roanoke, Va.
4:00-5:00	KGAR, 1370, Tucson, Ariz.	1:00-3:00	WILL, 890, Urbana, Ill.
0.00.0.00	WING 1400 Incomed Mich	1:30-2:30	CHGS, 1120, Summerside, P. E. I.
2:00-3:00	WJMS, 1420, Ironwood, Mich.	2:00-3:00	CHML, 880, Hamilton, Ont.
2:00-4:00	March 14th		March 4th, 18th
4:00-5:00	WHET, 1210, Troy, Ala. KFBI, 1050, Abilene, Kans.	1:00-5:00	WJEJ, 1210, Hagerstown, Md.
4.00-0.00	March 28th	2:30-4:30	10-AB, 1200, Moose Jaw, Sask,
2:30-3:30	WCLO 1200 Janesville Wis.	3:00-6:00	<ol> <li>AB, 1200, Moose Jaw, Sask.</li> <li>AT, 1155, Trail, B. C.</li> </ol>
2.00-0.00	WCLO, 1200, Janesville, Wis. March 7th, 14th, 21st, 28th		March 11th
12:00-1:00	XEH, 1132, Monterrey, Mex.	3:00-6:00	KGIR, 1360, Butte, Mont.
3:00-4:00	CEJC, 1120, Kamloops, B, C,	5:00-6:00	KGIR, 1360, Butte, Mont. WOL, 1310, Washington, D. C.
3:00-4:00	XEH, 1132, Monterrey, Mex. CFJC, 1120, Kamloops, B. C. KFGQ, 1310, Boone, Iowa		March 11th, 25th
	WEDNESDAY NIGHT	1:00-3:00	KUSD, 890, Vermilion, S. Dak.
	Manak 1at		March 18th
2:00-3:00	CHWK, 665, Chilliwack, B. C.  KXO, 1500, El Centro, Calif.  March 1st, 8th, 15th, 22nd, 29th  KFUO, 550, St. Louis, Mo.  WHBL, 1410, Sheboygan, Wis.  KFXJ, 1310, Grand Junction, Colo.  CKWX, 730, Vancouver, B. C.  KGFF, 1420, Shawnee, Okla.	2:00-3:00	WTOC, 1260, Savannah, Ga.
2:30-4:30	KXO, 1500, El Centro, Calif.		March 25th
	March 1st, 8th, 15th, 22nd, 29th	12:00-4:00	WIBW, 580, Topeka, Kans. WFAS, 1210, White Plains, N. Y. WWNC, 570, Asheville, N. C.
11:30-1:00	KFUO, 550, St. Louis, Mo.	2:00-2:30	WFAS, 1210, White Plains, N. Y.
12:00-1:00	WHBL, 1410, Sheboygan, Wis.	4:00-5:00	WWNC, 570, Asheville, N. C.
2:00-3:00	KFXJ, 1310, Grand Junction, Colo.	10.00 1.00	March 4th, 11th, 18th, 25th
2:30-4:30	CKWA, 730, Vancouver, B. C.	12:00-1:00 12:00-1:30	WJBK, 1370, Detroit, Mich. WWVA, 1160, Wheeling, W. Va.
2:30-4:30	KGFF, 1420, Snawnee, Okia.	12:00-1:00	WVA, 11430, Columbus, Ohio WCAH, 1430, Columbus, Ohio CMCD, 1140, Havana, Cuba WWRI, 1500, Woodside, N. Y. WTFI, 1450, Athens, Ga. WBBZ, 1200, Ponca City, Okla.
		12:00-2:00	CMCD 1140 Havana Cuba
11:30-3:00	WMBC, 1420, Detroit, Mich.	12:00-3:00	WWRL, 1500, Woodside, N. Y.
11:30-3:00	March 9th	12:00-5:00	WTFL 1450, Athens, Ga.
3:00-5:00	WHBF, 1210, Rock Island, Ill.	12:30-3:00	WBBZ, 1200, Ponca City, Okla.
0.00-0.00	March 30th	1:00-1:30	WKY, 900, Oklahoma City
4:00-5:00	KPOF, 880. Denver, Colo.	1:00-2:00	CMCY, 1325, Havana, Cuba
	KPOF, 880, Denver, Colo. March 2nd, 9th, 16th, 23rd, 30th	1:00-2:00	KQV, 1380, Pittsburgh, Pa.
12:00-2:30	WMIL, 1500, Brooklyn, N. Y.	1:00-2:00	WKY, 900, Oklahoma City CMCY, 1325, Havana, Cuba KQV, 1380, Pittsburgh, Pa. WGBF, 630, Evansville, Ind.
2:00-3:00	CFAC, 690, Calgary, Alta. CKOV, 1200, Kelowna, B. C.	1:00-3:00	KRLD, 1040, Dallas, Tex.
3:00-4:00	CKOV, 1200, Kelowna, B. C.	1:00-3:00	WGES, 1360, Chicago, Ill.
	FRIDAY NIGHT	1:00-3:00	WOW, 590, Omaha, Nebr.
	Feb. 24th	1:00-4:00	KGU, 750, Honolulu, H. T.
3:00-4:00	WCSC, 1360, Charleston, S. C. WOR, 710, Newark, N. J.	1:15-2:30	WOMT, 1210, Manitowoc, Wis.
4:00-6:00	WOR, 710, Newark, N. J.	1:30-3:00	KMAC, 1370, San Antonio, Tex.
3:30	March 3rd	2:00-3:00	CMGE, 1375, Cardenas, Cuba
2:00-4:00	10-BQ, 1200, Brantford, Ont. WJZ, 760, New York City	2:00-3:00	WWAE 1900 Hammond Ind
4:00-6:00	WJZ, 760, New York City	2:00-4:00 2:00-5:00	WMMM 200 Fairment W Va
	March 10th		CEWY 720 Vancourer B C
2:00-5:00	CKPC, 880, Preston, Ont. WFOX, 1400, Brooklyn, N. Y. WPCH, 810, New York City	2:30-4:30 3:00-4:00	CECT 630 Victoria R C
4:00-6:00	WFOX, 1400, Brooklyn, N. Y.	3:00-4:00	CKOV 1900 Koloma B C
4:00-6:00	W.F.O.H., 810, New 10rk City	3:00-4:00	CMJK 790 Camagnay Cuba
4.00 5.00	March 17th	3:00-4:00	KDR 1500 Sente Barbara Col
4:00-5:00	WNBX, 1260, Springfield, Vt. WABC, 860, New York City WJBU, 1210, Lewisburg, Pa.	3:00-4:00	WGBF, 630, Evansville, Ind. KRLD, 1040, Dallas, Tex. WGES, 1360, Chicago, Ill. WOW, 590, Omaha, Nebr. KGU, 750, Honolulu, H. T. WOMT, 1210, Manitowoc, Wis. KMAC, 1370, San Antonio, Tex. CMGE, 1375, Cardenas, Cuba KFEL, 920, Denver, Colo. WWAE, 1200, Hammond, Ind. WMMN, 890, Fairmont, W. Va. CKWX, 730, Vancouver, B. C. CKOV, 1200, Kelowna, B. C. CKOV, 1200, Kelowna, B. C. CMJK, 790, Camaguey, Cuba KDB, 1500, Santa Barbara, Cal. KFXM, 1210, San Bernardino, Cal. KGER, 1360, Long Beach, Calif.
4:00-6:00	WARD 1910 Lowishurg Do	3:00-4:00	KGER 1360 Long Beach Calif
5:00-6:00	March 24th	3:00-4:00	KGER, 1360, Long Beach, Calif. KGCX, 1310, Wolf Point, Mont. KVOA, 1260, Tucson, Ariz.
2.00 4.00	KDLR, 1210, Devils Lake, N. D.	4:00-6:00	KVOA 1260 Tueson Ariz.
3:00-4:00	KIDIR, 1210, Devils Lake, N. D.	2.00-0.00	12. 0.2, 1200, 1 000011, 12111

## In FRONT of the MICROPHONE

• • • *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. 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 con-Leonard was taken to cert hall. 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. "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 v. 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 original Rhythm Boys. Leonard and Bing struck up a propersonal friendship fessional and 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. 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 pro-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

## Seeks a Showdown

E 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 two-tube 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 to believe it." ignorant enough "These fellows are crooks and their verifications fraudulent." 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, W-SIX, 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 4BH, 4QG 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 4BH twice but couldn't hold them at all. In the case of 4BH and 4QG, 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? 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 announcement. 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 9th, three weeks before the test above described, Mr. Lilley wrote to us of the reception of 4BH and sent us a copy of his report of reception. We asked him to be sure to send us the verification from 4BH 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 p.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 p.m. The popular tune entitled "Cabin in the Cotton."

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

9:10 to 9:11 p. m. Announcement the details of which I missed due to a fade.

9:11 to 9:14 p. m. The popular English dance tune "Day by Day."

Reception of your station, 4BH, 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 4BH, 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 9th October, reporting on your reception of Station 4BH. 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 John. Monday and Thursday, CBS at 9:15 p. m. EST.

tails mentioned by you are correct. We have pleasure in inclosing verification card.

Thanking you for your interest.
Yours truly,

BROADCASTERS (AUST.) PTY. LTD.

(Signed) W. R. Pym, Manager.

The New Zealand Radio Call Book shows the power of 4BH to be 200 watts aerial and to be able to make so complete a report of reception—two 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. Dashiell 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

● ● 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."

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 DX seasons on these bands for many years, and with the coming of spring and summer will come much better recep-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 kcs.) 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 kcs.

## 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 WI-EX, 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 when 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 blues singer, former University of Missouri co-ed, started to be a newspaper-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 kcs., 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 p. 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 stations 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, VRT-ZFB, LSX, XAM, VE9JR, VIY, 12RO, 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-Carl-

sonTelephone 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 touch 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 record-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 this 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 The volume is conmovement.

trolled 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 Stromberg-Carlson 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

HAVE 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 vi-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. 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 ICA headphone adapters at times. Can this be done in my set without damaging the tubes or wiring?

I.C.A. headphone adapter plugs are furnished in both four and five prong 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 NBC 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. 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 80hour standard storage battery will operate the eliminator approximately 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 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. 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 -35s, one -24, two -47s 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 -47s and -80 by new tubes it is not entirely advisable, because older sets designed for the



Bruno Walter, one of the world's outstanding conductors, directs New York Philharmonic-Symphony Orchestra on the CBS Sundays from 3 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 -27s over to 56s to some advantage without wiring changes. Of course, you can change over to 57s and 58s, 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 57s in place of the -24s in my RCA Radiola model 82. Is the change practicable?

While 57s could be used in place of the -24s, 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 57s draw only 1 ampere as against the 1.75 amperes consumed by the -24s.

### 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 Marseilles 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 new 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 -71A 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 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 Nearly all large radio supply houses carry such apparatus. Try the fol-Radolek Co., 601 W. Ranlowing: dolph 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 58s for the -51s. 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 -51s to 58s in your case, although there are adapters available to convert the 5-prong bases of the -51s 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 -24s, 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 Burlow and Columbia Symphony Orchestra Wednesdays and Fridays at 11:00 p. m. EST.

## Was The CRICKET GAME from PARIS?

T 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

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

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. 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. 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 DX 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

HEN 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 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.

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———kcs. 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
 2.
3.
              de piano
        ,,
              de violin
              de organa
              de marimba
    de acordeon
Solo vocal (Senor)
 6.
7.
 8.
9.
               (Dama)
    Coro
10. Musica clasica
11.
            popular
      ,,
12.
             nacional
13.
            de baile
14. Fox trot
15.
    Marcha
    Vals
16.
17. Habla
    Anuncios de la Estacion
19.
    Volumen-debil
20.
            -mediano
21.
      ,,
            -fuerte
22. Calidad de tono-mala
23.
            de tono-buena
24. Condiciones atmosfericas-buenas
25.
                            -malas
26. Musica Americana
27. Musica Espanol
28. Guitarr
29. Duo
                 Trio
30. La Vez
```

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.

(English translation)

Chief Engineer, Radio Station (Call)

My dear Sir:

I have just had the great pleasure of hearing your station (Call) on —kcs. 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
 3.
 4. Organ
 5. Marimba
 6. Accordion "77. Vocal solo (man)
                 (woman)
     " chorus
10. Classical music
11. Popular "
12. Native
13.
    Dance music
Fox trot
15.
    March
    Waltz
16.
17. Talking
Station announcement
19. Faint volume
20. Good volume
21. Great volume
22. Tone quality poor
23.
                 good
24. Atmospheric conditions good
    Atmospheric conditions bad
26. American music
27. Spanish music
    Guitar
29. Duet
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

TE 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. 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 verifications-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 It is probably true that distance. 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 frequencv 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 collec-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 p. 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 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. 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. 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 kcys. 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 keys. 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. CST. 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, Vancouver, 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 every week during the Sunday Matinee of the Air—CBS 2:30-3:00 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 7½ 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-the-wool 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

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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 Place, Kansas City, Mo., "I think it should be included in your log, just like YV1BC 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 month 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 kcs. where WLS comes in on the dial. CFCO was formerly on 1210 but has recently moved 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 vol-"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 kcys, 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. Mc-Cracken 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 RCA-Victor 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 17th, 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 kcys.

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-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 kcs., 500 watts; JOCG, Asahigawa, 655 kcs., 300 watts; JODG, Hamamatsu. 635 kcs., 300 watts; JOFG, Fukui, 990 kcs., 500 watts; JOXK, Tokushima, 980 kcs., 500 watts; JFKB, Tainan, Formosa, 720 kcs., 1000 watts; JQAK, Dairen, 760 kcs., 500 watts; JFBK, Tainan, Formosa, 720 kcs., 1000 watts; and ZILY, Hoten, Mukden, Manchuria, 900 kcs., 1500 watts.

From the tip sheet of the New England Radio Club: "The information 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. 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 kcys. 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., Massillon, 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 kcs.?" asks Douglas Wauchope, 501 S. Candler St., Decatur, Ga. "The report that we are operating on 635 kcs. 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 kcs. 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 kcs., 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

## • • • Thrills and Disappointments

ITH 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. 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 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 keys., with really fair volume. I have plenty for verification-organ, concert orchestra, opera singers, talks in German, etc. 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 Rve. 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 sta-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 on 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). 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 500watters 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 EST). VOGY are still on 910 keys. I'm using a Phileo 7tube battery-operated superhet., model 35."

## Three Receive 2KO

T. Colegrove, Frankfort, Mich., writes: "I just received a verification from 2KO 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, 17th and 19th 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 2KO 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 All-Wave. 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 5CK, 2YR and 2CO, 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 any-

thing 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 23rd 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 kcs., 2 A.M. on Tuesdays.

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

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

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

Hamburg, Germany, 923 kcs., 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 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 A.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. 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 kcys., 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 on 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. "Trans-Pacific 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. 4BH, 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 foreign stations so far, but I have logged and verified 10-AB, 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 29th 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 A. M. EST."

## Logs Every Channel

"I have had 338 stations with at least one station on every one of the channels." regular savs 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 Columbia and Saskatchewan; also seven Mexican stations, two in Cuba and one in Porto Rico. As vet 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 Llovd Harrison, 130 So. Hague Ave., Columbus, Ohio. "Using a 9-tube Mc-Millan, 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

### OWNERS

		OWNERS		
560	WNOX	Knoxville, Tenn., to WNOX, Inc.		
580	WIBW	Topeka, Kans., to Topeka Broadcasting Assn., Inc.		
640	WAIU	Columbus, Ohio, to Associated Radio- casting Corp.		
1010	WPAP-			
	WQAO- WRNY	New York City to Marous Leaw Book		
	AA TOTALT	New York City to Marcus Loew Book- ing Agency		
1120	CFJC	Kamloops, B. C., to Review Publishing Co., Ltd.		
1170	WCAU	Philadelphia, Pa., to WCAU Broad- casting Co.		
1200	WJW	Akron, Ohio, to WJW, Inc.		
1210	WSBC	Chicago, Ill., to WSBC, Inc.		
1370	$egin{array}{c}  ext{WJEQ-} \  ext{WRAK} \end{array}$	Williamsnort Do to WDAY Inc		
1420	WMAS	Williamsport, Pa., to WRAK, Inc. Springfield, Mass., to WMAS, Inc.		
1420	WTBO	Cumberland, Md., to Associated Broad-		
		casting Corp.		
		POWER		
550	KFDY	Brookings, S. Dak., 500 to 1000		
570	WEAO	Columbus, Ohio, 750 to 1000		
$\frac{1200}{1370}$	WFBC WJBK	Greenville, S. C., 50 to 100		
1910	MADIZ	Detroit, Mich., 50 to 100		
		DELETED		
570	TGW	Guatamala City		
1310	WKBS	Galesburg, Ill.		
1400	WCMA	Culver, Ind.		
		REINSTATED		
1420	WERE	Erie, Pa.		
1450	WNJ	Newark, N. J.		
		CHAINS		
570	WSYR	Syracuse, N. Y., R. to B		
630	WMAL	Syracuse, N. Y., R to B Washington, D. C., New B		
		FREQUENCIES		
585	XEPN	Piedras Negras, Mex., from 885		
1195	VONF	St. John's, Newfoundland, from 1115		
		CALLS		
1310	WAML	Laurel, Miss. from WTSL		
NEW				

La Grange, Ga.

1500 WKEU

### WHAT'S ON THE AIR TONIGHT?

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

COLUMBIA (C)......WABC NATIONAL, Red (R)......WEAF NATIONAL, Blue (B).......WIZ

Call	Dial										
					ł						

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 time 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 Annie CKGW KDKA WBAL WBZA WCKY WGAR WHAM WIS WJAX WJR WJZ WRVA WWNC

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C — Elizabeth Barthell C — Elizabeth Barthell
CFRB CKOK KFAB KFH KLZ
KMOX KSCJ KSL KTRH KVOR
WAAB WABC WADC WBCM WBIG
WBRC WBT WDAE WDBJ WDOD
WDRC WDSU WFAN WFBL WFEA
WGR WGST WHEC WIP WISN
WJAS WKBH WKBN WLBW WLBZ
WMAX WNOX WODX WOKO WORC
WOAM WDFG WSDT WSFA WSTS

WQAM WREC WSBT WSFA WSJS
WSPD WTAQ WTOC

R — Waldorf-Astoria Orchestra

CKGW KFYR KGO KOA KPRC KSD KTBS WBEN WCAE WCKY WCSH WDAF WEAF WENR WFBR WFI WHO WIBA WIOD WJAR WKY WMC WOAI WOC WRC WSB WSMB WTAG WWNC

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

C-Reis and Dunit CFRB CKOK KFAB KFH KLZ KMBC KSCJ KSL KTRH KVOR WAAB WADC WBCM WBIG WBRC WBT WCAO WDAE WDBO WDDO 

B — Del Lampe and Orchestra KOIL KSO KWCR KWK WJZ WMAQ WREN WSYR WBAL

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C — Vaughn De Leath CFRB CKOK KTRH WAAB WABC

WADC WBCM WBIG WBRC WBT WDBO WDOD WDSU WEAN WFEA WGR WJSV WKBN WLBW WLBZ

WORO WORC WQAM WSFA WSJS
WSPD WTAR WTOC
R — Al Bernard, Minstrei Man
KFSD KGO KOA WBEN WDAF
WEAF WFBR WIOD WIS WMAQ WMC WRC WSB WSMB

E-6:45 p.m., C-5:45, M-4:45, P-3:45 C — Just Plain Bill CKOK WAAB WABC WCAO WCAU WHK WJSV WKBW

R - Rhythm String Quartet WBEN WCAE WCSH WEAF WFBR WFI WJAR WRC WSAI WTAG WTAM WTIC WWJ

B - Lowell Thomas

CKGW KDKA WBAL WBZ WBZA WGAR WHAM WJR WJZ WLW

WHAM WIJE WIW
B— Little Orphan Annie
KFYR KOIL KPRC KSO KSTP
KTBS KWCR KWK WBAP WDAY
WEBC WENR WKY WOAI WREN

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

C-Myr and Marge
CKOK KRLD WABC WADC WCAO
WCAU WDRC WEAN WFBL WGR
WHK WJAS WJSV WKRC WNAC
WOKO WSBT WSPD WWVA

B — Amos 'n' Andy
CKGW KDKA WBAL WBZ WBZA
WCKY WFLA WGAR WHAM WIOD
WJAX WJR WJZ WLW WPTF WRC WRVA WWNC

R — Gruen and Hall, Piano Duo KDYL KFI KFSD KFYR KGO KOA KSTP KTBS KVOO KYW WCSH WDAF WEAF WEBC WFBR WGY WHO WIBA WKY WOC WOW WSAI WSM WTAM

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Buck Rogers—Year 2433 CKOK KMOX WABC WBBM WCAU WCCO WGR WHAS WHK

WCCO WGR WHAS WHAS

R— Wheatenaville Ray Knight
WDAF WEAF WEEI WGY WHO
WJAR WLIT WMAQ WOC WOW
WRC WTAM WWJ

B— Tastyeast Jesters
KDKA WBAL 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 WBAL WBZ WBZA WHAM WIS WJZ WMAL WMC WPTF WRVA WSAZ WSMB WWNC R — Van and Don, Comedy Team WCSH WDAF WEAF WENR WFBR

WGY WJAR WOW WSAI WTAG C — Dolph Martin's Orchestra

WABC WCAO WCAU WDRC WEAN
WFBL WFEA WGR WHEC WHE WFBL WFEA WGR WHEC WHP WJAS WJSV WLBZ WNAC WOKO WORC

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Boake Carter, News Flashes CKOK KMBC KMOX WABC WBBM WBT WCAO WCAU WCCO WGR WHAS WHK WJSV WNAC

R — The Goldbergs KEYR KPRC WBEN WCAE WCSH WEAF WEEI WFAA WFBR WGY WJAR WKY WLIT WOAI WRC WTAG WTAM WWJ

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

C — Whispering Jack Smith CKOK KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WFBM WGN WGR WHAS WHK WJAS WJSV WKRC WNAC WOKO WSPD

R - Soconyland Sketches WBEN WCSH WEAF WEEL WGY WJAR WTAG WTIC B — Clicquot Club Eskimos

KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR WHAM WJZ WLS WREN

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

C — Singhi Sam
CKOK KMBC KMOX WABC WADC
WCAU WCCO WDRC WEAN WFBL
WFBM WGN WGR WHK WJAS
WJSV WKRC WNAC WOKO WSPD

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Fu Manchu Mystery CFRB CKOK KMBC KMOX KRLD WABC WADC WBT WCAO WCAU WDRC WEAN WFBM WGN WGR WHAS WHK WJAS WJSV WKRC WNAC WOKO WOWO WSPD B.— Voice of Firestpan

 Voice of Firestone M — Youce of Firestone
CFCF CKGW KPRC KSD KTBS
KVOO WBEN WCAE WCSH WEAF
WEEI WFAA on 8:45 WFBR WFLA
WGY WHO WIOD WIS WJAR WJDX
WKY WLIT WLW WMAQ WMC
WOAI WOC WOW WRC WSB WSM WSMB WTAG WTAM WTIC WWJ WWNC

B — Don Carney Dog Chats KDKA KWK WBAL WBZ WBZA WGAR WJR WJZ WLS WREN

E-8:45 p.m., C-7:45, M-6:45, P-5:45 B — Phillips Lord in Country Doctor KDKA KOIL KWCR KWK WBAL WBZ WBZA WGAR WJR WJZ WLS WREN

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

CKOK KBD KERN KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOH KOIN KOL KOMA KRLD KSL KTRH KTSA KVI KWG WABC WADC WBRC WBT WCAH
WABC WADC WBRC WBT WCAH
WCAO WCAU WCCO WDAE WDBJ
WDBO WDRC WDSU WEAN WFBL
WFBM WGN WGST WHAS WHEC
WHK WISN WJAS WJSV WKBW
WKRC WLAC WLBZ WMBG WMT
WNAC WOKO WORC WOWO WPG
WCAAM WREC WEDD WTAD WTOO WQAM WREC WSPD WTAR WTOC

#### MONDAY—(Continued)

R—A. & P. Gypsies
KSD WBEN WCAE WCSH WDAF
WEAF WEEI WGY WHO WJAF
WLIT WMAQ WOC WOW WRC
WSAI WTAG WTAM WTIC WWJ B - Sinclair Minstrels B—Sinclair Ministreis
KDKA KFYR KOIL KPRC KSO
KSTP KTBS KTHS KVOO KWCR
KWK WAPI WBAL WBZ WBZA
WDAY WEBC WFAA WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX WJR WJZ WKY WLW WMC
WOAI WREN WRVA WSB WSM
WSMB WTMJ WWNC

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

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C — Mysteries in Paris 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 KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTAR KTHS
WBEN WCAE WCSH WDAF WDAY
WEAF WEBC WEEI WFAA WFBR
WFLA WGY WHO WIBA WIOD
WJAR WJAX WJDX WKY WLIT
WMAQ WMC WOAI WOC WRC
WRVA WSAI WSB WSM WSMB
WTAG WTAM WTMJ WWJ WWNO
B — Jack Frost's Melody Moments
KDKA WBAL WENR WGAR WHAM
WJR WJZ WLW

WJR WJZ WLW

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

C — Columbia Revue CFRB CKOK KLRA KLZ KMBC WAAB WABC WADC WBBM WBCM
WBIG WBRC WBT WCAH WCAO WBIG WBRC WBT WCAH WCAO WCAU WCCO WDAE WDBJ WDOD WDRC WDSU WFBL WFBM WFEA WGST WHAS WHEC WHK WHP WJAS WJSV WKBH WKBN WKBW WLBZ WMBD WMT WNAX WNOX WODX WOKO WORC WPG WQAM WREC WJS WSPD WTOC R. The Stripers Harman Trie

B — The Sizzlers, Harmony Trio KDKA KDYL KFSD KGHL KGIR KOA KOIL KSO KWCR KWK WBAL WCKY WGAR WJR WJZ WMAQ WCKY WGAE 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

GFB CKOK KLRA KLZ KMBC KMOX KSCJ KTRH KTSA KVOR WAAB WABC WADC WBCM WBIG WBRC WBT WCAH WCAO WCCO WDAE WDBJ WDOD WDRC WDSU

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

B — Alice Joy and Old Stager CFCF KOIL KSO KWCR KWK WBAL WCKY WGAR WHAM WJR WJZ WREN WSYR

R - National Radio Forum KECA KGA KPO KSD KTAR KTBS WBEN WCSH WDAF WEAF WEEI
WENR WFBR WFLA WIBA WIOD
WIS WJAR WJDX WKY WOAI
WRC WRVA WSAI WTAG WTAM
WWJ WWNC

E-10:45 p.m., C-9:45, M-8:45, P-7:45 C — Myrt and Marge KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOIL KSL KVI 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 Symphony
CFRB CKOK KFAB KFH KLZ
KMBC KSCJ KSL KTRH KVOR
WAAB WABC WADC WBCM WBRC
WBT WCAO WDOD WDRC WDSU
WEAN WFAN WFBM WHK WIBW
WICC WIP WISN WJAS WJSD
WKBN WKBW WLBBW WLDZ WMBD
WNAX WODX WOKO WORC WQAM
WSBT WSIS WSPD WTAR WTOC
R — Ted Weems and Orchestra

R—Ted Weems and Orchestra
KFYR KGO KOA KSD WBEN WCAE
WCKY WDAF WEAF WEBC WFBR
WGY WHO WIBA WJAR WOC WRC WTAG WTAM WWJ

WTAG WIAM WWJ

B— Amos 'n' Andy
KDYL KFI KFSD KGO KGW KHQ
KOA KOIL KOMO KPRC KSTP
KTHS KWK WBAP WDAF WENR
WJDX WKY WMAQ WMC WOAI
WREN WSB WSM WTMJ

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C—Guy Lombardo and Orchestra C-Guy Lombardo and Orchestra
CFRB CKOK KFAB KFH KLZ
KMBC KMOX KSCJ KSL KTRH
KVOR WAAB WABC WADC WBCM
WBRC WBT WCAO WCAU WCCO
WDOD WDRC WDSU WEAN WFBM
WHK WIBW WICC WISN WJSV
WKBN WKBW WLBW WLBZ WMBD
WNAC WODX WOKO WORC WPG
WQAM WSBT WSJS WSPD WTAR WTOC

R — Jack Denny and Orchestra WEAF WFBR WJAR WRC WTAG WTIC

R - Voice of Firestone R — Voice of Firestone
KDYL KFI KFSD KFYR KGHL
KGTR KGO KGU KGW KHQ KOA
KOMO KSTP KTAR WDAY WEBC WIBA WTMJ

E-12:00 p.m., C-11:00, M-10:00, P-9:00
C — Abe Lyman and Orchestra
CKOK KFAB KLZ KMBC KMOX
KRLD KSCJ KSL KTRH KVOR
WABC WBT WCAU WCCO
WDOD WDSU WIBW WICC 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

R — The Goldbergs KDYL KECA KEX KGA KJR KOA KPO

#### TUESDAY

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— H. V. Kaltenborn CKOK KFH KSCJ KSL KTRH KVOR WAAB WABC WADC WBBM WBCM WBIG WBRC WBT WCAO WDAE WDBO WDOD WDRC WDSU WEAN WFEA WHEC WICC WISN WJAS R - Waldorf-Astoria, See 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 WFBR WFI WIS WMAQ WMC WOAI WPTE WSB WSMB WTAG

E-6:45 p.m., C-5:45, M-4:45, P-3:45 R.— Back of the News WBEN WEAF WFBR WFI WIS WJAR WPTF WRC WSM WTAG WWJ

B — Lowell Thomas, See Monday
B — Orphan Annie, See Monday
C — Just Plain Bill, See Monday

E-7:00 p.m., C-6:00, M-5:00, P-4:00
R — James Melton, Tenor
KDYL 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, See Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Buck Rogers, See Monday R — Wheatenaville, See Monday

B — Radio in Education KDKA KDYL KECA KEX KFSD KFYR KGA KGIR KJR KOA KOIL KPO KTBS KVOO KWCR WBZ WBZA WENR WFLA WIBA WIS WJDX WJZ WMC WOAI WPTF WREN WSB WSM WSMB WWNC

E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — Keller, Sargent and Ross CKOK 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 KYW WBZ 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

C.— Easy Aces
CKOK KMBC KMOX WABC WADC
WCAO WCAU WCCO WEAN WFBL
WFBM WGN WGR WHAS WHK
WJAS WJSV WKRC WNAC WOKO WSPD

R — Blackstone, Sanderson-Crumit KSD KSTP KYW WBEN WCAE WCSH WDAF WEAF WEBC WEEI WFI WGY WHO WJAR WOC WOW

TUESDAY—(Continued)

WRC WSAI WTAG WTAM WWJ B — Eno Crime Club

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

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Magic Voice CKOK KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WFBM WGN WGR WHAS WHK WJAS WJSV WKRC WNAC WOKO

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 WFBL WFBM WGN WGR WHAS
WHEC WHK WISN WJAS WJSV
WKBH WKRC WOKO WOWO WSPD

R — Wayne King and Orchestra KSD KSTP WBEN WCAE WCKY WCSH WEAF WEBC WEEI WFBR WFI WGY WHO WIBA WJAR WMAQ WOC WOW WRC WSAI WTAG WTAM WTMJ WWJ

B — Horlick-Health Talks KDKA KOIL KWCR KWK WBAL WBZ WBZA WGAR WHAM WJZ WLS WLW WREN

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C — Abe Lyman and Orchestra CKOK KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WFBM WGN WGR WHAS WHK MJAS WJSV WKRC WNAC WOKO MOWO WSPD B — Phillips Lord, See Monday

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Chesterfield, See Monday R — Ben Bernie and Orchestra

H—Ben Bernie and Urchestra KFYR KOA KPRC KSTP WBAP WBEN WCAE WCKY WCSH WDAY WDAY WEAF WEEI WFBR WFI WGY WHO WJAR WKY WLS WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WWJ

WIAM WWJ B — Household Musical Memories KDKA KSO KWK WBAL WBZ WBZA WHAM WJR WJZ WMAQ WREN

E-9:15 p.m., C-8:15, M-7:15, P-8:15 C — Threads of Happiness CKOK KDB KERN KFBK KFH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOMA

KRLD KSL KTRH KTSA KVI KWG WABC WADC WBRC WBT WCAO WABC WADC WBRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WEAN WFBL WFBM WGR WGST WHAS WHEC WHK WJAS WJSW WKBW WKRC WLAC WNAC WOKO WOWO WQAM WREC WSPD WTAR WTOC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R — Ed Wynn-Don Voorhees CFCF KDYL KFI KFSD KFYR

KGHL KGIR KGO KGW KHQ KOA KGHL KGIR KGO KGW KHQ KOA
KOMO KPRC KSD KSTP KTAR
KTBS KTHS KVOO WBAP WBEN
WCAE WCSH WDAF WDAY WEAF
WEBC WEEI WFBR WFI WFLA
WGY WHO WIBA WIOD WIS WJAR
WJAX WJDX WKY WLW WMAQ
WMAC WOAI WOC WOW WRC
WRVA WSB WSM WSMB WTAG
WTAM WMI WWMC WTAM WTMJ WWJ WWNC

C - California Melodies

C—California Melodies
CFRB CKOK KFH KLZ 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 WTOC

B — Willard Robinson and Orchestra KDKA KSO KWK WBAL WBZ WBZA WCKY WENR WJR WJZ WREN WSYR

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C — Five Star Theatre

KLRA WABC WBIG WBT WCAO WCAU WDBJ WDOD WDRC WDSU WEAN WFBL WFEA WHP WICC WJAS WJSV WKBW WLAC WMBG WNAC WNOX WOBU WOKO WORC WREC WSJS WTAR

R - Lucky Strike Hour K-LUCKY STIRE HOUR KDYL KFI KFSD KFYR KGO KGU KGW KHQ KOA KOMO KPRC KSD KSTP KTAR KTBS KTHS WAPI WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WENR WDAY WEAF WEBC WEEI WENR WEBD WEFT WEFT WCAY WHO WGY WHO WFBR WFI WFLA WGY WIBA WIOD WIS WJAR WJDX WKY WLW WMC WOAI WOC WRC WRVA WSB WSM WSMB WTAG WTAM WTMJ WWJ WWNC

B — Sigmund Spaeth, Tune Detective CFCF KDKA KOIL KSO KWCR KWK WBAL 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 — Homay Bailey, Soprano
KSO KWCR KWK WBAL WCKY
WGAR WHAM WJR WJZ WMAQ WREN

E-10:45 p.m., C-9:45, M-8:45, P-7:45 C—Charles Carlile, Tenor CFRB CKOK KFAB WAAB WABC WADC WBCM WDRC WFAN WFBL WFEA WHEC WHK WIP WJAS WJSV WKBN WKBW WLBZ WOKO WORC WPG WSBT WSPD

B - Professor Jack McLallen CKGW KDKA KOIL KSO KWCR KWK WBAL WCKY WGAR WHAM WJR WJZ WMAQ WREN WSYR C - Myrt and Marge, See Monday

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C — Howard Barlow, See Monday B — Amos 'n' Andy, See Monday
B — Jack Fulton, Tenor
CKGW WBAL WFLA WGAR WHAM
WIS WJZ WSYR WWNC

E-11:15 p.m., C-10:15, M-9:15, P-8:15 B— Heart Songs, Women's Octet
CFCF CKGW KFYR KGIR KPRC
KSTP KTBS KWK WBAL WCKY
WENR WFLA WGAR WHAM WIBA
WIS WJR WJZ WMC WRC WREN
WSM WSYR WWNC

B — Octavus Roy Cohen Mystery KDYL KECA KEX KFYR KGA KJR KOA KPO KPRC KSTP KTBS WDAY WEBC WFAA WIBA WJDX WKY WMC WOAI WSB WSMB WTMJ

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

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

H — Ine Goldbergs, See Monday
B — Cab Calloway and Orchestra
KDKA KOIL KPRC KSO KTBS
KWCR KWK WAPI WBZ WBZA
WFLA WGAR WIOD WJR WJZ WKY
WMC WREN WSB WSM WSMB WWNC

C — Joe Haymes and Orchestra

CKOK KFAB KLZ KMBC KSCJ KSL CRUK RFAB RLZ RMBC RSCJ RSL KTRH KVOR WABC WBRC WBT WCAH WCAU WDAE WDOD WDSU WFBL WGST WHAS WHK WHP WISN WIAS WJSV WKBW WLBW WMBD WMT WNAX WNOX WOKO WPG WREC WSBT WSPD WTOC

E-12:30 a.m., C-11:30, M-10:30, P-9:30 R — Sam Robbins and Orchestra WAPI WCAE WEAF WFBR WFI WFLA WIOD WJAR WMAQ WMC WRC WSB WSM WSMB WTAM WWNC

R — Ben Bernie and Orchestra KFI KFSD KGO KHQ KOMO KSD

#### WEDNESDAY

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 — Vaughn DeLeath
CFRB CKOK KFH KMOX KSCJ
KSL KTRH KVOR WAAB WABC
WADC WBBM WBCM WBIG WBT
WCAO WDAE WDBO WDDO WDRC
WDSU WFAN WFFA WHEC WIP
WISN WJAS WJSV WKBH WKBN
WKBW WLBW WLBZ WNAX WDDX
WACC WOAD WSPA WOKO WORC WQAM 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 C — Dick. Mansfield and Orchestra CFRB CKOK KFAB KFH KLZ KSCJ KSL KTRH KVOR WAAB WADC WBCM WBIG WBRC WBT WCAO WDAE WDBJ WDOD WDRC WDSU WGR WGST WHAS WHEC WHP WIP WISN WJAS WJSV WKBH WLBW WIBZ WMT WNAX WNOX WODX WOKO WORC WQAM WREC WSBT WSFA WSJS WSPD WTAQ

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

E-6:45 p.m., C-5:45, M-4:45, P-3:45 R — Andy Sannella KECA KEX KFSD KGA KJR KPO KSD WBEN WCAE WCSH WEAF

WFBR WFI WHO WIS WJAR 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 Annie, See Monday

E-7:00 p.m., C-8:00, M-5:00, P-4:00 C — Myrt and Marge, See Monday B — Amos 'n' Andy, See Monday R — Mischa Weisbord, Violist KDYL, KFYR KGO KHQ KOMO KSTP KTBS KYW WDAF WDAY WEAF WEBC WFBR WGY WHO WIBA WJAR WMC WOC WOW WRC WSAI WSB WSM WTAG

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Buck Rogers, See Monday R — Wheatenaville, See Monday B — Carson Robison, Barbasol KDKA KOIL KWK WBAL WBZ WBZA WENR WJZ

E-7:30 p. m., C-6:30, M-5:30, P-4:30 B — Five Star Theatre, See Monday C — Dolph Martin, See Monday

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Boake Carter, See 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 WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WJAR WLIT WLS WOW WRC WSAI WTAG WTAM WTIC 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 Tuesday R — The Shadow, Mystery Drama WBEN WCSH WEAF WEEI WFBR WGY WJAR WLIT WRC WTAG WTIC

B — Harriet Lee and Leaders KDKA KWCR KWK WBAL WFLA WIS WJAX WJZ WREN WWNC

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C — Abe Lyman, See Tuesday B — Phillips Lord, See Monday

E-9:00 p.m., C-8:00, M-7:00, P-6:00
C— Chesterfield, See Monday
R— Symphony Concert
KDYL KPI KPSD KFYR KGO KHQ
KOA KOMO KSD KTAR KTBS
KVOO WBEN WCAE WCSH WDAF
WEAF WFBR WFLA WHO WIBA
WIOD WIS WJAR WKY WLIT
WMC WOAI WOC WOW WRC WSB
WSM WTAG WTAM WWJ WWNC
B— Sherlock Holmes
CFCF CKGW KDKA KOIL KWCR

CFCF CKGW KDKA KOIL KWCR 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 CHOMA KRLD KSCJ KSL KTRH KTSA KVI KWG WABC WACO WADC WBIG WBRC WBT WCAO WCAU WCCO WDBJ WDOD WDRC WDSU WEAN WEBL WFBM WGN WGST WHAS WHK WIBW WISN WJAS WJSV WKBH WKBW WKRC WIAC 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 CKOK KMBC KMOX KOMA KRLD KTRH KTSA WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WHK WJAS WJSV WKBW WKRC WNAC WOKO WOWO

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 KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMO KGI KMAN KMOX KOIN KOL KOMO KMJ KMOX KUIN KWG KSL KTAT KTRH KTSA KVI KWG WADC WADC WBRC WBT 

WREC WRR WSPD

R — Corn Cob Pipe Club

KDYL KFI KGHL KGIR KGO KGW

KHQ KOA KOMO KSD WBEN

WCAE WCSH WDAF WEAF WEEI

WENR WFBR WGY WHO WJAR

WLIT WLW WOC WOW WRC WRVA

WIT WLW WOC WOW WRC WRVA
WTAG WTAM WTIC WWJ
B — D. W. Griffith's Hollywood
KDKA KOIL KPRC KWK WBAL
WBZ WBZA WFAA WGAR WJR WJZ
WKY WMAQ WMC WREN WSB WSMB

E-10:15 p.m., C-9:15, M-8:15, P-7:15 B — Alice Joy, Contralto
KFYR KSO KTBS KWCR WBAL
WBZ 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 KDYL KFYR KGA KGHL KGIR KOA KPRC KSD KSTP KTBS KTHS WDAY WEAF WEBC WFAA
WFBR WHO WIBA WKY WMAQ
WOAI WOC WOW WRVA WTMJ
C — Edwin C. Hill, See Monday

E-10:45 p.m., C-9:45, M-8:45, P-7:45
C — Fray and Braggiotti, Piano
CFRB CKOK WAAB WABC WADC
WBCM WCAU WDRC WFBL WFEA
WHEC WHK WJAS WJSV WKBW
WLBW WLBZ WOKO WORC WOWO WSBT WSPD

C - Myrt and Marge, See Monday

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 WRC WTAM

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 WBAL WBZ WBZA 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 KFAB KLZ KMBC KSCJ
KTRH KVOR WABC WBRC WBT
WCAH WCAU WCCO WDAE WDOD
WDSU WEAN WFBL WGST WHAS
WHK WHP WICC WISN WJAS
WJSV 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 WENR
WFLA WGAR WIBA WIOD WJZ
WREN WWNC

E-12:15 p.m., C-11:15, M-10:15, P-9:15 B — Sherlock Holmes KDYL KFI 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 Annie, See Monday

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C — H. V. Kaltenborn, See Tuesday R — Waldorf-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 KTRH KVOR
WAAB WADC WBIG WBRC WBT
WOAU WDAE WDOD WDRC WDSU
WGR WHEC WISN WJAS WJSV
WKBH WLBW WLBZ WNAX WOKO
WORC WQAM WSBT WSJS WSPD
WTAQ WTAR WTOC

E-6:30 p.m., C-5:30, M-4:30, P-3:30
R — Donald Novis, Tenor
KECA KEX KFSD KFYR KGA KJR
KOA KPO KSD KTBS KTHS WAPI
WBEN WDAF WDAY WEAF WIBA
WIS WJAR WMAQ WMC WOAI
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, See 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 R - 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 R — The Goldbergs, 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 WBAP
WBEN WCAE WCKY WCSH WDAP
WDAY WEAF WEBC WEEL WFBR
WFI WFLA WGY WHO WIOD WJAR
WIAY WIDY WKY WMAO WMC WIAX WJDX WKY WMAQ WMC WJAX WJDX WKY WMAQ WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ 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 WFBL WFBM WGN WGR WHAS WHK WJAS WJSV WKRC WNAC WOKO

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Kate Smith, See Tuesday B — Rin Tin Tin Thriller

KDKA KOIL KWK WBZ WBZA WGAR WHAM WJZ WLS WLW

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

E-9:00 p.m., C-8:00, M-7:00, P-6:00 R — Maxwell House Showboat KDYL KFI KFSD KGO KGW KHQ KDYL KFI KFSD KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTAR KTBS WAPI WBEN WCAE WCKY WCSH WDAF WEAF WEEI WFBR WFI WFLA WGY WHO WIOD WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMR WTAG WTAM WTMI WWI WSMB WTAG WTAM WTMJ WWJ WWNC

C - Chesterfield, See Monday

B — Death Valley Days

KDKA KOIL 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 KFH
KFPY KFRC KGB KHJ KLRA KLZ KPPY 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 KFSD KOIL KSO KWCR
KWK WBAL WBZ WBZA WENR
WGAR WHAM 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, See Tuesday

R — Lucky Strike. See 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 C—Boswell Sisters
CFRB CKOK KLRA KLZ KMBC
KSCJ KTRH KTSA KVOR WAAB
WABC WADC WBBM WBCM WBIG
WBRC WBT WCAH WCAO WCAU
WCCO WDAE WDBJ WDOD WDRC
WDBU WEAN WFBL WFBM WFEA
WGST WHAS WHEC WHK WHP
WICC WISN WJAS WJSV WKBH
WKBN WKBW WLBW WLBZ WMBD
WMT WNAX WNOX WODX WKO
WORC WOWO WPG WQAM WREC
WSJS WSPD WTOC
B—Iloma Bailey, See Tuesday B - Ilomay Bailey, See 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 Tucsday C - Morton Downey CKOK WAAB WABC WADC WBCM WCAU WDRC WEAN WFBL WFEA WHEC WHK WICC WJAS WJSV 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
KSD WCAE WCKY WEAF WFBR
WRC WSAI WTAG WWJ 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 CFCF CKGW KDYL KEX KFSD KFYR KGA KJR KOA KOIL KPO KSO KWCR KWK WBAL WBZ WBZA WEBC WFLA WGAR WHAM WIBA WIS WJAX WJR WJZ WMC WRC WREN WSB WSMB WWNC 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 Monday C — Eddie Duchin, See Wednesday

#### FRIDAY

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-3:60 C — Vaughn DeLeath, See Wednesday R — Waldorf-Astoria, See Monday

E-6:15 p.m., C-5:15, M-4:15, P-3:15 B — Del Lampe, See 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 Monday B — Amos 'n' Andy, See Monday R— Donald Novis, Tenor KDYL KFYR KGO KOA KOMO KSTP KTBS KYW WAPI WCSH WDAF WDAY WEAF WEBC WEEL WPBR WGY WIBA WJAR WMC WOW WRC WSAI WSB WSM WTAM 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, See Monday

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

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Trade and Mark

C— Trade and Mark
CKOK KLZ KMBC KMOX KSL
WABC WADC WCAO WCAU WCCO
WDRC WEAN WFBL WFBM WGN
WGR WHAS WHK WJSV WKRC
WNAC WOKO WSPD

R - Cities Service Concert M — GIURES SEYVICE CONCERT
CKGW KDYL KOA KPRC KSD
KSTP KTBS KYW WBEN WCAE
WCSH WDAF WEAF WEBC WEEL
WFAA WFBR WGY WHO WJAR
WKY WLIT WOAI WOC WOW WRC
WSAI WTAG WTAM WTIC WTMJ WWJ

W WJ B — Nestle's Program KDKA KOIL KWK WBAL 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 Monday

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C—March of Time CKOK KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KSL KVI KWG WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL 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 B — Howard Thurston, See Thursday

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Chesterfield, See Monday

B — First Nighter, Drama KDKA KDYL KFI KFSD KGO KGW KHQ KOA KOIL KOMO KPRC KSTP KTAR KTBS KWK WAPI WBAL WBZ WBZA WCKY WEBC WGAR WHAM WJR WJZ WKY WLS WOAI WREN WSB WSM WSMB WTMJ

R — Three California Nuts WCSH WEAF WEEL 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 WCAH
WCAO WCCO WDAE WDBJ WDOD
WDRC WDSU WEAN WFBL WFBM
WFEA WGST WHAS WHEC WHP
WIBW WICC WISN WJAS WJSV
WKBH WKBW WLBW WLBZ WNAX
WNOX WODX WORG WORG WNOX WODX WOKO WORC WOAM 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 WJAR WLIT WOC WOW WRC WSAI WTAG WTAM WWJ

#### FRIDAY—(Continued)

C—Edwin C. Hill, Inside Story
CKOK KFH KLRA KMBC KMOX
KOMA KRLD KTHEH KTSA WABC
WADC WBCM WCAH WCAO WCAU
WCCO WDRC WEAN WFBL WFBM
WGN WHAD WHAS WHK WHP
WIBW WJAS WJSV WKBH WKBW
WKRC WLBW WLBZ WMBD WNAC
WOKO WORC WOWO WREC

WORD WORE WOWD WREE WSFD
B— Armour Program
KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KPRC KSO KSTP
KWK WAPI WBAL WBZ WBZA
WEBC WFAA WGAR WHAM WIOD
WIAX WJR WJZ WKY WMAQ
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—Al Joison KDYL KFI KFSD KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTAR KTBS
KTHS KVOO WBEN WOAE WCSH
WDAF WDAY WEAF WEBC WEI
WENR WFAA WFBR WFLA WGY
WHO WIBA WIOD WIS WJAR
WJAX WKY WLIT WLW WMC
WOAI WOC WOW WRC WRVA WSB
WSM WSMB WTAG WTAM WTIC
WTMJ WWJ WWNC
B— Alice Joy KDYL KFI KFSD KFYR KGHL

B — Alice Joy
CFCF CKGW KOIL KSO KWCR
KWK WBAL WCKY WHAM WJZ
WMAQ WREN

C — Columbia Revue, See Monday

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 B — Concert Orchestra KDKA KPRC KSO KWCR WBAL WGAR WHAM WJZ WREN

E-10:45 p.m., C-9:45, M-8:45, P-7:45
C — Myrt and Marge, See Monday
R — Borrah Minevitch, Harmonica
CKGW KSD WBEN WCKY WCSH
WDAF WEAF WEEI WFBR WGY
WJAR WOW WSAI WTAG WTAM
WTIC WWJ
C — Fray and Respiriti See Weelnesden

C — Fray and Braggiotti, See Wednesday

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 WCKY WEAF WFBR WRC WTAG WWJ

B — Amos '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 KLZ
KMBC KSCJ KSL KTRH KVOR
WAAB WABC WADC WBCM WBRC
WBT WCAO WCAU WCCO WDAU
WDBO WDOD WDRC WDSU WEAN
WFBM WHEC WHK WICC WISN
WJSV WLBW WLBZ WMBD WNAX
WOKO WORC WQAM WSBT WSJS
WSPD WTAR WTOC

E-12:00 p.m., C-11:00, M-10:00, P-9:00
C — Ben Pollack and Orchestra
CKOK KFAB KLZ KMBC KRLD
KSCJ KSL KTRH KVOR WABC
WBRC WBT WCAU WCCO WDAE
WDOD WDSU WICC WISN WJSV
WLBW WMBD WNAC WNAX WOKO
MPG WSBT WSPD WTOC

R — The Goldbergs, 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 KFH KSCJ KSL KTRH KVOR WAAB WABC WADC KTRH KVOR WAAB WABC WADC
WBBM WBCM WBIG WBRC WBT
WCAO WCAU WCCO WDAE WDBO
WDOD WDRC WDSU WEAN WFEA
WHEC WICC WISN WJSV WKBH
WLBW WLBZ WNAX WOKO WORC
WQAM WSBT WSFA WSJS WSPD
WTAQ WTAR WTOC WWVA
R — Waldorf-Astoria, See Monday
R — Little Garman Bard

B — Little German Band KDKA KOIL KSO KWCR WBAL WENR WJR WJZ WREN

E-6:30 p.m., C-5:40, M-4:30, P-3:30 B — Laws That Safeguard KDYL KEX KFSD KFYR KGA KGIR KJR KOA KOIL KPO KPRC KSO
KSTP KTAR KTBS KTHS KWCR
KWK WBAL WBZ WBZA WCKY
WEBC WFLA WIBA WIOD WIS
WJAX WJR WJZ WKY WMAQ
WMC WOAI WREN WRVA WSB WSMB WWNC

E-6:45 p.m., C-5:45, M-4:45, P-3:45 B — Fields and Hall WBAL WGAR WHAM WIOD WIS WJR WJZ WMC

B — Orphan Annie, See Monday

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Frederic William Wile C—Frederic William Wile
KMBC KRLD KTRH WABC WADC
WBBM WBCM WBIG WBRC WBT
WCAO WCAU WDAE WDBO WDOD
WDRC WDSU WEAN WFBM WFEA
WGR WHEC WHK WICC WJAS
WJSV WLBW WLBZ WNAC WOKO
WQAM WSFA WSPD WTAR WWVA
B—Anson Weeks and Orchestra
CFCF CKGW KDKA KSO KWK
WBAL WBZ WBZA WCKY
WGAR WHAM WJZ WLW WOAI
WSF WWNC

WSB WWNC

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — William Hall, Baritone CFRB CKOK KTRH WABC WADC WBCM WBIG WBRC WCAO WCAU WDAE WDOD WDRC WDSU WEAN WFBM WFEA WGR WICC WJAS WJSV WLBW WLBZ WNAC WOKO WORC WQAM WSFA WSJS WSPD WTAR WWVA

R — Ozzie Neison and Orchestra
CKGW KGO KOA WBEN WACE
WCKY WDAF WEAF WFBR WFI
WHO WJAR WOC WTAG WWJ

WHO WJAR WOO WHAG WWJ

B— Merie Thorpe Talk

KDYL KECA KEX KFSD KFYR

KGA KJR KOA KOIL KPO KPRC

KSTP KTBS KWCR KWK WBAL

WBZ WBZA WEBC WFLAW WJOD WIS WGAR WHAM WIBA WIOD WIS WJDX WJZ WKY WMC WOAI WREN WSB WSMB WWNC

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

E-f:45 B.M., C-5:45, M-5:45, F-4:45 C- Street Singer CFRB CKOK KMBC KMOX KRLD KSCJ KSL KTRH KVOR WABC WADC WBCM WBIG WBRC WBT WCAO WCAU WCCO WDAE WDBO

WDOD WDRC WDSU WEAN WFBM WFEA WGR WHEC WISN WJAS WJSV WKBH WLBW WLBZ WNAC WOKO WQAM WSFA WSPD WTAQ WTAR WTOC

B - Murder Mystery, See Tuesday

E-8:00 p.m., C-7:00, M-6:00, P-5:00
C — Easy Aces, See Tucsday
R — Archer Gibson, Organist
KEX KGA KJR KOA KPO KPRC
KSD KTBS WBEN WDAF WEAF
WEBC WEEL WFI WHO WIBA WIS
WJAR WMAQ WMC WOAI WOC
WSB WSMB WTAG WTAM WWJ WWNC

WWNC

B — American Taxpayers' League

KDKA KDYL KEX KFSD KFYR

KGA KGHL KGIR KJR KOA KOIL

KPO KPRC KTAR KWK WAPI

WBAL WCKY WDAY WEBC WFLA

WHAM WIBA WIOD WIAX WJDX

WJZ WLS WRC WREN WSM WSMB

WWNC

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

B — Boston Symphony Orchestra
CFCF CKGW KDKA KOIL KSO
KWCR KWK WBAL WBZ WBZA
WCKY WGAR WHAM WJR WJZ
WREN

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

C — Alexander Haas Gypsy Ensemble

CFRB CKOK KFH KLZ KMBC

KSCJ KSL KTRH KTSA KVOR

WABC WADC WBCM WBIG WBRC

WBT WCAO WCCO WDAE WDBO

WDOD WDRC WDSU WEAN WFBM

WFFA WGR WHEC WICC WISN

WJSV WKBH WLBW WLBZ WNAX

WOKO WORC WPG WQAM WSBT

WSFA WSFD WTAQ WTAR WTOC

R — Economic World Today

KDYL KFSD KFYR KGA KFHL

KGJR KJR KOA KPO KPRC KSD

KSTP WAPI WBAP WBEN WCSH

WDAF WDAY WEAF WEBC WEEI

WFBR WFI WFLA WGY WHO WIBA

WIOD WIS WJAR WJDX WKY

WMAQ WMC WOAI WOC WOW

WRC WSAI WSMB WTAG WTAM

WWJ WWNC

E-9:00 p.m., C-8:00, M-7:00 P-6:00 C — Chesterfield, See Monday R — Blue Danube, Waltz Program KDYL KFI KFSD KFYR KGO KGW

KDYL KFI KFSD KFYR KGO KGW
KOA KOMO KPRC KSD KSTF
KTBS WAPI WBAP WBEN WCAE
WCSH WDAF WEAF WEBC WFBR
WFLA WGY WIOD WIS WJAR
WJAX WJDX WKY WMAQ WMC
WOAI WRC WSB WSMB WTAG
WTAM WWJ WWNC

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

C—Boswell Sisters

CFRB CKOK KFH KLRA KLZ

KMBC KMOX KRLD KSCJ KSL

KTRH KTSA KVOR WAAB WABC

WACO WADC WBBM WBCM WBIG

WBRC WBT WCAH WCAO WCCO

WDAE WDBJ WDBO WDOD WDSU

WEAN WFBL WFBM WFFA WGST

WHAS WHEC WIBW WICC WIP

WISN WJAS WJSV WKBH WKBW

WLBW WHBZ WMT WNAX

WODX 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 CKOK KMBC KMOX WAAB WABC WCAO WCAU WCCO WGN WHAS WHK WJAS WKBW WKRC WSPD

WHK WJAS WKBW WKRC WSPD

R — George Olsen and Orchestra

KDYL KFI KFSD KFYR KGO KGW

KHQ KOA KOMO KSD KSTP WBAF

WBEN WCAE WCSH WDAF WDAY

WEAF WEBC WEEI WFBR WFI

WGY WHO WIBA WJAR WKY WLW

WMAQ WOAI WOC WOW WRC

WSAI WSB WTAG WTAM WTMJ

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

C — Morion Downey
CFRB CKOK KFH KLRA KLZ
KMBC KSCJ KSL KTRH KTSA
KVOR WAAB WABC WADC WBBM
WBCM WBIG WBRC WBT WCAH
WCAO WCAU WCCO WDAE WDBJ
WDBO WDOD WDRC WDSU WEAD
WFBL WFBM WFEA WGST WHAS
WHEC WHK WHP WIBW WICC
WIAS WISV WKBH WKBW WLBW
WLBZ WMBD WMT WNAX WNOX
WODX WOKO WORC WOWO WQAM
WREC WSBT WSJS WSPD WTAQ
WTAR WTOC

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

G—Public Affairs Institute
KFH KLZ KSCJ KTRH KTSA KVOR
WAAB WBAC WADC WBBM WBCM
WBIG WBRC WBT WCAO WCAU
WCCO WDAE WDBO WDDO WDRC
WDSU WEAN WFBM WFEA WHEC
WICC WJAS WJSV WKBH WLBW
WLBZ WMBD WNAX WOKO WOWC
WPG WQAM WSBT WSJS WSPD
WTAR WTOC WWVA
R—Sain Singers

B — Salon Singers CFCF CKGW KDKA KOIL KSO KWCR 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 KOIL 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 KLZ KSCJ KSL CFRB CROK KFAB RLZ RSCJ RSL KTRH 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 WORG WG WQAM WSBT WSJS WSPD WTAR WTOC WWVA

B — Buccaneers, Vocal Trio
CFCF 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 KSD WBEN WCAE WCKY WCSH WDAF WEAF WEEL WFBR WFI WGY WHO WJAR WMAQ WOC WRC WSAI WTAG WWJ

E-11:15 p.m., C-10:15, M-9:15, P-8:15 B — Lew White, Organist KOIL KSO KWCR KWK WBAL WBZ WBZA WGAR 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 — Harold Stern and Orchestra CFRB CKOK KFAB KLZ KSCJ KSL KTRH KVOR WAAB WABC WADC
WBCM WBRC WBT WCAO WCCO
WDAE WBDO WDDO WDRC WDSU
WEAN WFAN WFBM WHEC WICC
WIP WJSV WKBH WLBW WLBZ
WNAX WOKO WORC WQAM WSBT
WSJS WSPD WTAR WTOC WWVA

WSD WSFD WIAR WIOC WWAR R— Paul Whiteman and Orchestra KSD WBEN WCAE WCKY WDAF WEAF WEEI WFBR WFI WGY WHO WJAR WMAQ WOC WTAG

E-12:00 p.m., C-11:00, M-10:00, P-9:00 R — Ted Weems and Orchestra

KDYL KFSD KFYR KGA KGHL KJR KOA KPO KPRC KSD KSTP KTAR KTBS WCAE WCKY WDAF WDAY WEAF WFAA WFBR WFI WGY WHO WIBA WIOD WJAR WJAX WMAQ WMC WOAI WOC WRC WSB WSMB WTAG WTAM WWNC

B — Supper Club, Waldorf-Astoria KOIL KSO KWCR KWK KYW WBZ WBZA WGAR WHAM WJR WJZ WRC WREN WSYR

C - Joe Haymes, See Tuesday

E-12:30 a.m., C-11:30, M-10:30, P-9:30 E-12:30 a.m., e-11:30, M-10:30, P-3:30
R — Vincent Lopez and Orchestra
KDYL KEX KFYR KGA KJR KPO
KPRC KSD KSTP KTBS KVOO
WBEN WCAE WCKY WDAF WEAF
WEBC WFBR WFI WFLA WHO
WIBA WIOD WJAR WJAX WKY
WMC WOAI WOC WSB WSBM
WTAG WYAM WWNC WTAG WTAM WWNC

#### SUNDAY

E-11:15 a.m., C-10:15, M-9:15, P-8:15 R — Major Bowes' Family KDYL KEX KFSD KFYR KGA KJR

KOA KPO KPRC KVOO WBAP WDAF WDAY WEAF WFBR WFLA WGY WHO WIOD WJAR WJAX WKY WMC WOC WRC WSM WSMB WTAG WTAM WTMJ WWJ WWNC

E-12:00 p.m., C-11:00, M-10:00, P-9:00 C — Salt Lake Tabernacle Choir

CFRB CKOK KFAB KLZ KSCJ KSL CFRB CKOK KFAB KLZ KSCJ KSL
KTRH KTSA KVOR WABC WADC
WBCM WBIG WBT WCAO WCAU
WCCO WDAE WDBO WDOD WDRC
WDSU WEAN WFEA WGR WHEC
WHK WIBW WISN WJAS WJSV
WKBH WKBN WLBW WLBZ WMBD
WNAC WNAX WODX WOKO WORC
WPG WQAM WSBT WSJS WSPD
WTAQ WTAR WWVA

E-12:15 p.m., G-11:15, M-10:15, P-9:15
B — Roxy's Gang
CFCF CKGW KDKA KDYL KECA
KEX KFSD KFYR KGA KJR KOA KOIL KPO KPRC KSTP KTAR KVOO KWK WAPI WBAL WBZ WBZA WDAY WEBC WFAA WFLA WGAR WHAM WIBA WIOD WIS WJAX WJR WJZ WKY WLW WMAQ WOAI WRC WREN WRVA WSB WSM WSMB WSYR WWNC

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 WJAR WKY WOAI WRC
WTAM WWJ

E-12:45 p.m., C-11:45, M-10:45, P-9:45 C — Street Singer

C — Street Singer
CFRB CKOK KFAB KLZ KMBC
KSCJ KSL KTRH KTSA KVOR
WABC WADC WBCM WBIG WBT
WCAO WCCO WDAE WDBO WDOD
WDSU WGR WHEC WHK WIBW
WISN WJAS WJSV WKBH WKBN
WLBZ WMBD WNAX WODX
WOKO WPG WQAM WSJS WSPD
WTAQ WTAR WTOC WWVA

E-1:00 p.m., C-12:00, M-11:00, P-10:00
C — Freddie Rich's Orchestra
CFRB CKOK KFAB KLZ KMBC
KSCJ KTRH KTSA KVOR WAAB
WABC WADC WBCM WBRC WCAU
WCCO WDAE WDBJ WBRC WCAU
WCCO WDAE WDBJ WGR WGST
WHEC WHK WISN WJAS WKBH
WKBN WLBW WLBZ WMT WNOX
WODX WOKO WPG WQAM WREC
WSFA WSJS 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 KSCJ
KTRH KTSA KVOR WAAB WABC
WADC WBCM WCCO WDAE WDBJ
WDOD WDRC WDSU WFBL WFBM
WGR WGST WHEC WJAS WKBH
WLBW WLBZ WMT WNOX WODX
WOKO WPG WQAM WREC WSJS
WSPD WTAQ WWVA
E—Walter Logan Pog Concert

R— Waiter Logan Pop Concert CFCF CKGW KFYR KPRC KSD KSTP KTBS KVOO WAPI WBEN WCAE WCKY WCSH WDAF WDAY WEAF WEBC WFAA WFBR WFIL WFLA WGY WIBA WIOD WIS WJAR WJAX WKY WOAI WOW WRC WRVA WSAI WSB WSM WSMB WTAG 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 WIBW WJAS WJSV WKBH
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 KERN KFBK KFPY KFRC
KGB KHJ KLZ KMBC KMOX KOIN
KOL KSL KVI KWG WABC WBBM
WBT WCCO WDSU WGR WGST
WHAS WHEC WJAS WSV WKRC
WLAC WNAC WOWO WQAM WRR
R—International Radio Forum
CFCF CKGW KFI KFSD KGO KGW
KHO KOA KOMO KSD KTBS WAPI

KHQ KOA KOMO KSD KTBS WAPI NHQ KOA KOMO KSD KTBS WAFI
WBEN WCAE WCKY WCSH WDAF
WEAF WEEI WFAA WFBR WFLA
WGY WIOD WIS WIAR WJAX
WJDX WMC WOAI WOW WRVA
WSAI WSB WSM WSMB WTAG
WTAM WWJ WWNC

WIAM WWY WWNC

B— Monarch Mystery Tenor
KDKA KDYL KFI KFYR KGO KOA
KOIL KSO KSTP KWCR KWK WBZ
WBZA WCKY WDAY WEBC WGAR
WHAM WIBA WJAK WJAX 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 CKOK KFAB KFH KLZ KMBC KSCJ KSL KTRH KVOR WABC WACO WADC WBBM WBCM

### SUNDAY—(Continued)

WBIG WBT WCAH WCAO WCAU
WDAE WDBJ WDOD WDRC WDSU
WFBM WGR WGST WHEC WHK
WHP WISN WJAS WKBH WKBN
WLBW WLBZ WMBD WMT WNOX
WODX WOKO WORC WQAM WREC
WSBT WSFA WSJS WSPD WTAQ WTOC WWVA

 Clyde Doerr's Saxophone Octet R—CIVE UPOCHT'S SAXOPHONE UCUET
CFCF CKGW KFI KFSD KGO KGW
KHQ KOA KOMO KPRC KSD KTBS
KYW WAPI WBEN WCAE WCKY
WCSH WDAF WEAF WFAA WFBR
WFLA WGY WIOD WIS WJAR
WJAX WJDX WKY WMC WOAI
WOW WRC WRVA WSAI WSB WSMR
WSMR WYAG WTAM WWI WWNC WSMB WTAG WTAM WWJ WWNC

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

R — Moonshine and Honeysuckle
CFCF CKGW WCAE WCKY WCSH
WDAF WEAF WEEI WFBR WGY
WHO WJAR WMAQ WOC
WRC WTAG WTAM WWJ

Yeast Foamers B—Yeast Foamers
KDKA KDYL KFI KFSD KFYR
KGHL KGIR KGO KGW KHQ KOA
KOIL KOMO KPRC KSO KSTP
KTAR KTHS KVOO KWCR KWK
KYW WAPI WBAL WBZ WBZA
WHAM WIBA WIOD WIS WJAX
WJDX WJR WJZ WKY WLW WMC
WOAI WPTF WREN WRVA WSB
WSM WSMB WTMJ WWNC
C—Victor Arden-Harve Rose

WOOM WOOMEN THE WARD WITH THE CONTROL OF THE WOOD WORD WARD WARD WARD WHEC WHK WAS WISV WKRC WNAC WOKO

E-3:00 p.m., C-2:00, M-1:00, P-12:00 C — N. Y. Philharmonic Orchestra

CFRB CKOK KFAB KFH KLZ KMBC CFRED CNOK KFAB KFH KLZ KMBC KRLD KSCJ KSL KTRH KVOR WAAB WABC WADC WBCM WBIG WBRC WBT WCAO WCCO WDAU WDBO WDOD WDRC WDSU WFAN WFBM WFEA WHEC WHK WIBW WICC WIP WISN WALS WISV WKBH
WKBN WKBW WLBW WLBZ WMBD
WODX WOKO WORC WQAM WSBT
WSFA WSIS WSPD WTAQ WTAR
WTOC WWYA

R — Wayne King and Orchestra KDYL KFI KGO KGW KHQ KOA KDYL KFI KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTBS KTHS KVOO KYW WBEN WCAE WCKY WCSH WDAF WEAF WEBO WEEI WFAA WFBR WGY WHO WIBA WJAR WKY WLIT WOAI WOOC WOW WRC WSAI WTAG WTAM WTMJ WWJ

B — Our American Music
KOIL KWCR KWK WBAL WFLA
WGAR WIOD WJAX WJZ WMAQ
WREN WRVA WSB WSM WSMB

E-3:30 p.m., C-2:30, M-1:30, P-12:30
R — Dr. S. Parkes Cadman
KDYL KFSD KFPR KGHL KGO
KGW KHQ KOA KOMO KPRC KSD
KSTP KTAR KTHS KVOO WBEN
WOAE WCSH WDAF WDAY WEAF
WEBE 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

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

Fatter Gougnin
KMOX KSTP KYW WCAO WCAU
WDRC WEAN WFBL WFEA WGAR
WGR WHB WICC WJAS WJR WLBZ
WLW WMT WNAC WNBH WOC WOL WOKO WOR WORD

- Temple of Song CF KDKA KFI KFSD KFYR CFCF KGHL KGO KGW KOA KOLL KSO KSTP KTBS KWCR KWK WBAL WBZ WBZA WCKY WEBC WGAL WHAM WIBA WIOD WIS WJAX 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
KDYL KFI KGO KGW KHQ KOA
KOMO WBEN WCAE WCSH WDAF
WEAF 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 — Squibb's Program WBEN WCAE WCSH WDAF WEAF WEEI WFBR WGY WJAR WMAQ WOW WRC WTAG WTAM WWJ

WOW WRC WTAG WTAM WWJ
B — National Youth Conference
KDYL KFSD KFYR KGHL KGO
KGW KHQ KOA KOIL KOMO KPRC
KSO KSTP KTAR KVOO KWCR
KWK WAPI WBAL WBZ WBZA
WDAY WEBC WENR WHAM WIOD
WIS WJAX WJDX WJZ WMC WOAI
WPTF WREN WRVA WSB WPTF WREN WRVA WSB WSM

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

CKOK 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 WJAR WRC WSAI WTAG WTAM WWJ

B — National Vespers KFSD KFYR KGHL KGO KFSD KFYR KGHL KGO KGW
KHQ KOA KOIL KOMO KPRC KSO
KTAR KTBS KWCR KWK WAPI
WBAL WBAP WBZ WBZA WEBC
WFLA WGAR WIOD WIS WJAX
WJDX WJZ 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 KWCR KWK KYW WBAL WBZ WBZA WGAR WJR WJZ WLW WREN

B — Josef Koestner's Orchestra

KOYL KFI KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KSTP KTAR KTBS KVOO WPRC WBAP WDAF WDAY WEBC WIBA WJDX WKY WMC WOAI WS WSM WSMB WTMJ

R — Swift Garden Program CKGW KSD WBEN WCAE WCSH WDAF WEAF WEEI WFBR WFI

WGY WHO WJAR WMAQ WOC WOW WRC WSAI WTAG WTAM

E-6:00 p.m., C-5:00, M-4:00, P-3:00
R — Catholic Hour
KDYL KEX KFYR KGHL KGIR
KJR KOA KPRC KSD KTAR KTBS
KVOO WAPI WBAP WBEN WCAE
WCKY WCSH WDAF WDAY WEAF
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
WTAM WWNG
B — Josef Koestner's Orchestra

B — Josef Koestner's Orchestra KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WENR WGAR 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 KRLD KSCJ KSL KVOR KLZ KMBC KRLD KSCJ KSL KVOR WAAB
WABC WADC WBBM WBCM WBIG
WBRC WBT WCAO WCAU WCCO
WDAE WDBO WDOD WDRC WDSU
WFBM WFEA WHEC WIBW WICC
WISN WJAS WJSV WKBH WKBN
WWKB WLBW WLBZ WNAX WOKO
WORC WQAM WSBT WSFA WSJS
WSPD WTAR WTOC WWVA WAAB

- Our American Schools R—Our American Schools
KDYL, KECA KEX KPSD KFYR
KGA KOA KPO KPRC KSD KSTP
KTBS KVOO WBAP WBEN WCAE
WCSH WDAY WEAF WEBC WEEI
WENR WFBR WFLA WGY WIBA
WIOD WJAR WKY WIT WMC
WOAI WOW WPTF WRC WRVA
WSAI WSM WSMB WTAG WWJ WWNC

B - Paul Whiteman's Rhythmic Concert CFCF CKGW KOIL KSO KWCR KWK WBAL 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. Klein KFH KLZ, KMBC KRLD KSCJ KSL KTRH KVOR WABC WACO WADC WBCM WBIG WBRC WBT WCAO WCCO WDAE WDBO WDDO WDRC WCO WDAE WDBO WDDO WDRC WDSU WEAN WFAM WFBM WFEA WGR WHEC WIBW WICC WIP WISN WIAS WISV WKBH WKBN 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 KPRC KTBS KYOO WBEN WCAE WCKY WDAF WDAY WEAF WEBC WFBR WFLA WGY WIBA WIOD WIS WJAR WJAX WMAQ WOAI WRC WSMB WTAM WWJ WWNC

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Walter Smith and Concert Band C — Watter Smith and Concert Band
CKOK KFH KLZ KMBC KRLD
KSCJ KSL KTRH KVOR WABC
WADC WBCM WBIG WBRC WBT
WCAO WCCO WDAE WDBO WDOD
WDRC WDSU WEAN WFAN WFBM
WFEA WGR WHEC WIBW WICC
WIP WJSV WKBN WKBW WLBW
WJBZ WNAC WNAX WOKO WQAM
WSBT WSFA WSJS WSPD WTAR WTOC WWVA

R - Wheatenaville, See Monday

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

ŴWJ

B — Great Moments in History B— Great Moments in History
KDKA KDYL KF! KFSD
KFYR
KGO KGW KHQ KOA KOIL KOMO
KPRC KSTP KTAR KVOO KWCR
KWK WBAL WBZ WBZA WDAY
WEBC WFAA WFLA WGAR WHAW
WIBA WIOD WJAX WJDX WJR
WJZ WKY WLS WLW WMC WOAI
WPTF WREN WRVA
WSMB WTMJ WWNC

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Angelo Patri, Your Child CKOK KMBC KMOX WABC WCAO WCAU WCCO WFBL WGN WGR WHK WJAS WJSV WHAS

 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 CFCF CKGW KDYL KFI KFSD CFOF CAGW RDYL RFI KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KATR KVOO WBEN WCAE WCSH WDAF WDAY WEAF WBC WFAA WFBR WFLA WGY WHO WIOD WIS WJAR WJDX WZY WHO WIOD WIS WJAR WJDX WKY WLIT WLW WMAQ WMC WOAI WOC WOW WRC WSB WSM WSMB WTAG WTAM WTIC WTMJ WWNC

C — John Henry-River Giant CKOK KLRA KLZ KMBC KRLD CKOK KLRA KSCJ KSL KTRH KTSA KSCJ KSL KTRH KTSA KVOR
WABC WACO WADC WBBM WBCM
WBRC WBT WCAH WCAO WCCO
WDAE WBJJ WDOD WDRC WDSU
WFBL WFBM WFEA WGR WGST
WHEC WHK WHP WISN WJAS
WKBH WLBW WLBZ WNAX WNOX
WOKO WORC WREC WSFA WSJS
WSDD WWVA WSPD WWVA

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Andre Kostelanetz Presents CKOK KLZ KMBC KMOX KRLD CROK KLZ KMBC KMOX KRLD KSCJ KSL KTRH KTSA KVOR WABC WADC WBBM WBCM WBRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WEAN WFBM WFEA WGR WHEC WHE WIBW WISN WJAS WJSV WKBH WLBW WLBZ WNAC WNAX WOKO WORC WSBT WSFA WSJS WSPD WTAR WTOC WWVA

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 WREN WSYR.

E-8:45 p.m., C-7:45, M-6:45, P-5:45 E-8:45 p.m., C-7:45, M-6:45, P-5:45
C— John Henry—River Giant
CKOK KLRA KLZ KMBC KRLD
KSCJ KSL KTRH KTSA KVOR
WABC WADC WBBM WBCM WBRC
WBT WCAH WCAO WCCO WDAE
WDBJ WDOD WDRC WDSU WFBL
WFBM WFEA WGR WGST WHEC
WHK WHP WISN WJAS WKBH
WKDN WLDW WILDW WOON WHK WHP WISN WIAS WKBH WKBN WLBW WLBZ WNAX WODX WOKO WORC WREC WSFA WSJS WSPD

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Fred Allen's Bath Club CKOK KDB KERN KFBK KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KSCJ KSL KVI KWG WABC WADC WBT WCAH WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WEAN WFBL WFBM WGN WGR WGST WHAS WHEC WHK WISN WJAS WJSV WKRC WLAC WMT WNAC WOKO WORC WOWO WQAM WREC WSPD WTAR

R — General Electric Concert KDYL KFI KFSD KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTAR KTBS KTHS WAPI WBEN WCAE WCSH WDAF WDAY WEAF WEBC WENR WFAA WFBR WFI WFLA WGY WHO WIBA WIS WJAR WJDX WKY WOAI WOC WJAX WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ WWNC

B — Warden Lawes—Sing Sing KDKA KOIL KSO KWCR KWK KYW WBAL WBZ WBZA WGAR WHAM WJR WJZ WLW WREN

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C — Pennzoil Parade C — Pennizon Parade CKOK KLRA KMBC KMOX KOMA KTSA WABC WADC WBRC WBT WCAO WCAU WCCO WDRC WEAN WFBL WGN WGR WGST WHAS WHEC WJAS WJSV WKRC WLAC WLBZ WNAC WCKO WSPD

— Album of Familiar Music KDYL KFI KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTHS WAPI WBEN WCAE WCKY WCSH WEAF WENR WFAA WFBR WFI WAPI WBEN WCAE WCRY WCSH
WEAF WENR WFAA WFBR WFI
WFLA WGY WHO WIOD WJAR
WJAX WJDX WKY WMC WOAL
WOC WOW WRC WRVA WSAI WSB
WSM WSMB WTAG WTAM WTMJ WWJ

B — Walter Winchell KDKA KOIL 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, See Wednesday B — D. W. Griffith, See Wednesday
C — Erbest Hutcheson, Planist
CFRB CKOK KFH KLRA KLZ
KMBC KSCJ KTRH KTSA KVOZ
WAAB WABC WADC WBBM WBCM
WBIG WBT WCAH WCAO WCAU
WCCO WDAE WDBJ WDOD WDRC
WDBU WFBL WFBM WFEA WGR
WGST WHEC WHK WHP WISN
WJAS WKBN WKBW WLBW WLBZ
WMBD WMT WNAX WNOX WODX
WOKO WORC WFG WQAM WREC
WSBT WSS WSPD WTOC
R— David Lawrence

R — David Lawrence KDYL KFI KFSD KFYR KGO KGW KTO KOA KOMO KPRC KSTP
KTBS WBEN WCAE WCKY WCSH
WDAF WDAY WEAF WEBC WEEL
WFBR WFI WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WKY WMC
WOAL WOC WRC WSAI WSM WSM
WTAG WYAM WTAN WITH WITH WTAG WTAM WTIC WWJ WWNC

E-10:15 p.m., C-9:15, M-8:15, P-7:15
B — Vincent Lopez; Pratt-Sherman
KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KPRC KSTP
KTHS KWK WBAL WBAP WBZ
WBZA WGAR WIBA WJDZ WJZ
WJZ WKY WLW WMAQ WOAI WJZ WKY WLW WMAQ WOA WREN WSB WSM WSMB WTMJ

E-10:30 p.m., C-9:30, M-8:30, P-7:30
C—Foreign Legion
CFRB CKOK KFH KIRA KLZ
KMBC KSCJ KTRH KTSA KVOR
WAAB WABC WADC WBBM WBCM
WBIG WBRC WBT WCAH WCAO
WCAU WCCO WDAE WDBJ WDOD
WDRC WDSU WFBL WFBM WFEA
WGR WGST WHEC WHK WHP
WISN 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 KDYL KFSD KFYR CFCF CKGW KDIL AFFD KFIR KGHL KGIR KGO KGW KHQ KOA KPRC KSTP KTAR KTBS KTHS KYW WAPI WBAP WBEN WCAS WCKY WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFI WFLA WGY WHO WIBA WIOD WIS WJAR WJAX' WJAX WJDX WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ WWNC

B — Orange Lantern, Mystery 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 C — The Gauchos
CKOK KFAB KFH KLZ KSCJ KTRH
KVOR WAAB WABC WADC WBCM
WBRC WBT WCAO WDAE WDBO
WDOD WDRC WDSU WEAN WFAN
WFBM WGR WHEC WIBW WICC
WIP WISN WJAS WJSV WKBN
WLBW WLBZ WMBD WNAX WODX
WOKO WPG WQAM WSJS WSPD
WTAR WTOC

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Isham Jones and Orchestra CFISHAM JOHOS AND UPCHESTRA
CFRB KTRH WABC WADC WECM
WBRC WBT WCAO WCAU WCCO
WDAE WDBO WDDOD WDRC WDSU
WEAN WGR WICC WISN WISV
WEBN WLBZ WNAC WOKO WPG
WQAM WSBT WSJS WSPD WTAR WTOC

R — Melodic Serenade R — Melodic Serenade
KDYL KFSD KFYR KGHL KGO
KHQ KPRC KSTP KTAR KTBS
WAPI WBAP WCAE WCSH WDAF
WEAF WEBC WENR WFBR WFLA
WGY WHO WIBA WIS WJAR WMC
WOC WOW WRC WSB WSMB WTAG
WTAM WTIC WWNC
R — Jesse Crawford Organist

B — Jesse Crawford, Organist KDKA KOIL KSO KWCR KYW WBAL WBZ WBZA WCKY WHAM WJZ WREN

E-12:00 p.m., C-11:00, M-10:00, P-9:00 C - Ben Pollack and Orchestra C—BER POIACK AND UTCHOSTA
CKOK KFAB KLZ KMOX KSCJ
KTRH KVOR WABC WBRC WBT
WCAU WCCO WDAE WDOD WEAN
WGR WIBW WICC WISN WJSV
WLBW WMBD WNAC WNAX
WACO WJGB WCORD WANA

WOKO WPG WSBT WSPD William Stoess and Orchestra B — William stoess and Orchestra KFYR KGHL KGO KGW KHQ KOA KOIL KOMO KPRC KSTP KTBS KWCR KWK WBZ WBZA WDAY WEBC WENR WFLA WGAR WHAM WIBA WIOD WIS WJR WJZ WKY WLW WMC WREN WSB WSM WLW WMC WSMB WWNC

R — Joe Furst and Orchestra WCAE WEAF WFBR WGY WJAR WOW WTAM WTIC

### CLASSIFIED INDEX TO CHAIN PROGRAMS

Time in Eastern Standard

#### RANDS

Carborundum Band, 9:30 p.m., 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, 9:00 p.m., Saturday, R. Boston, Symphony, 8:15 p.m., Saturday, B. Concert Orchestra, 10:30 p.m., Friday, B. Gauchos, 11:00 p.m., Sunday, C. General Electric, 9:00 p.m., Sunday, R. Alexander Haas, 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.m., Wed. and 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, ex. Sunday, R. Mischa Weisbord, 7:00 p.m., Wednesday, R.

#### **DANCE BANDS**

Victor Arden, 2:30 p.m., Sunday, C. Ben Bernie, 12 mid. Wed., B; 9:00 p.m. and 12:30 a.m., Tuesday, R. Tuesday, R.
Cab Calloway, 12 mid. Tuesday and Friday, B.
Jack Denny, 11:30 p.m., Mon. and Thurs.; 11:10 p.m.,
Saturday, R.
Eddie Duehin, 12 mid. Wednesday and Thursday, C.
Clyde Doerr, 2:15 p.m., Sunday, R.
Joe Furst, 12 mid., Sunday, 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, 8:00 p.m., Sunday; 8:30 p.m., Tuesday, R.
Del Lampe, 6:15 p.m., Monday and Friday, B.
Guy Lombardo, 11:30 p.m., Mon.; 9:30 p.m., Wed.; 11:00
p.m., Saturday, C. Guy Lombardo, 11:30 p.m., Mon.; 9:30 p.m., Wed.; 11:00 p.m., Saturday, C. Vincent Lopez, 10:15 p.m., Sunday, B; 12:30 a.m., Sat., R. Abe Lyman, 12 mid., Monday; 11:30 p.m., Friday; 8:45 p.m., Tuesday, Wednesday, Thursday, C. Dick Mansfield, 6:15 p.m., Wednesday, C. Colph Martin, 7:30 p.m., Monday, Wednesday, Friday, C. Freddie Martin, 12 mid., Monday, R. Ozzie Nelson, 7:15 p.m., Saturday, R. George Olsen, 9:30 p.m., Saturday, R. George Olsen, 9:30 p.m., Saturday, R. Harold Sten, 11:30 p.m., Sunday, C. William Robison, 9:30 p.m., Tuesday, B. Harold Stern, 11:30 p.m., Saturday, C. William Stoess, 12 mid., Sunday, B. Rudy Vallee, 8:00 p.m., Thursday, R. Fred Waring, 10:00 p.m., Wednesday, C. Anson Weeks, 7:00 p.m., Sat., 8; 11:00 p.m., Fri., R. Ted Weems, 11:00 p.m., Monday; 12 mid., Saturday, R. Paul Whiteman, 6:30 p.m., Sun., B; 9:30 p.m., Mon.; 11:30 p.m., Sat., R. 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., Wednesday, C. Burns and Allen, 9:30 p.m., Wednesday, C. Cuckoo, 10:30 p.m., Saturday, B. Easy Aces, 8:00 p.m., Tuesday, Thursday and Saturday, C. Marx Bros., 7:30 p.m., Monday, B. Jack McLallen, 10:45 p.m., Tuesday and Thursday, B. Baron Munchausen, 10:00 p.m., Thursday, R. Ken Murray, 8:00 p.m., Wednesday, R. Drs. Pratt and Sherman, 10-15 p.m., Sunday, B. Beis and Dunn, 6:15 p.m., Monday and Tuesday. C. Drs. Fratt and Sherman, 10-15 p.m., Sunday, S. Reis and Dunn, 6:15 p.m., Monday and Tuesday, C. Stoopnagle and Budd, 9:30 p.m., Thursday, C. Three California Nuts, 9:00 p.m., Friday, R. Van and Don, 7:30 p.m., Monday and Thursday, R. Vic and Sade, 10:15 p.m., Mon., Tues., Thurs., Fri., B.

Big Ben, 5:15 p.m., Sunday, R. Octavus R. Cohen Mystery, 7:45 and 11:15 p.m., Tues., Thurs., Sat., B.

Death Valley Days, 9:00 p.m., Thursday, B.
Eno Crime Chub, 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 Manchu Mystery, 8:30 p.m., Monday, C.
Goldbergs, 7:45 p.m. and 12 mid., daily, ex. Sat. and Sun., R.
Great Moments in History, 7:30 p.m., Sunday, B.
Griffith's Hollywood, 10:00 p.m., Sun. and Wed., B.
John Henry, 8:00 and 8:45 p.m., Sunday, C.
Sherlock Holmes, 9:00 p.m. and 12:15 a. m., Wednesday, B.
Orange Lantern, 10:45 p.m., Sunday, B.
Phillips Lord, 8:45 p.m., Tuesday and Saturday, C.
March of Time, 8:30 p.m., Friday, C.
March of Time, 8:30 p.m., Friday, C.
March of Time, 8:30 p.m., Friday, C.
Mysteries in Paris, 9:30 p.m., Monday, R.
Myrt and Marge, 7:00 and 10:45 p.m., daily, ex Sat. and Sun., C.
Pages of Romance, 5:30 p.m., Monday, B.
Rin Tin Tin, 8:30 p.m., Thursday, B.
Buck Rogers, 7:15 p.m., daily, ex. Sat. and Sun., C.
Roses and Drums, 5:00 p.m., Sunday, R.
Soconyland Sketches, 8:00 p.m., Monday, R.
Squibb's, 4:30 p.m., Sunday, R.
Squibb's, 4:30 p.m., Sunday, R.
Wheatenaville, 7:15 p.m., daily, ex. Friday and Saturday, R.
Jesse Crawford, 11:30 p.m., Sunday, B.

PIANO AND ORGAN
Fray and Braggiotti, 10:45 p.m., Wednesday and Friday, C. Archer Gibson. 8:00 p.m., Saturday, R. Gruen and Hall, 7:00 p.m., Monday, R. Harding Sisters, 6:30 p.m., Wednesday, R. Ernest Hutcheson, 10:00 p.m., Sunday, C. Vee Lawnhurst, 4:15 p.m., Sunday, R. Chman and Arden, 2:30 p.m., Sun, C.; 9:30 p.m., Sun, R. Lew White, 11:15 p.m., Saturday, B.

**POPULAR PROGRAMS** 

POPULAR PROGRAMS

A. & P. Gypsies, 9:00 p.m., Monday, R.
Album of Familiar Music, 9:30 p.m., Sunday, R.
Armour Program, 9:30 p.m., Friday, B.
Bath Club, 9:00 p.m., Sunday, C.
Bluc Coal Revue, 5:30 p.m., Sunday, C.
Major Bowes' Family, 11:15 a.m., Sunday, R.
California Melodies, 9:30 p.m., Tuesday, C.
Chase and Sanborn, 8:00 p.m., Sunday, R.
Cities Service, 8:00 p.m., Friday, 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.
Firestone, 8:30 and 11:30 p.m., Monday, R.
Firestone, 8:30 and 11:30 p.m., Monday, R.
Firestone, 8:30 and 11:30 p.m., Monday, R.
Five Star Theatre, 10:00 p.m., Tues, and Thurs., C.; 7:30 p.m., Mon, Wed, and Fri., B.
Jack Frost's Melody, 9:30 p.m., Monday, B.
Household Musical Memories, 9:00 p.m., Tuesday, B.
Household Musical Memories, 9:00 p.m., Tuesday, B.
Inside Story, 9:30 p.m., Friday, C. Jack Frost's Melody, 9:30 p.m., Monday, B.
Household Musical Memories, 9:00 p.m., Tuesday, R.
Inside Story, 9:30 p.m., Friday, C.
Lucky Strike, 10:00 p.m., Tuesday and Thursday, R.
Manhattan Merry-Go-Round, 3:30 p.m., Sunday, R.
Maxwell House, 9:00 p.m., Thursday, R.
Maxwell House, 9:00 p.m., Sun.; 10:45 p.m., Fri., R.
Nestle's Program, 8:00 p.m., Friday, B.
Old Gold, 10:00 p.m., Wednesday, C.
Pennzoil Parade, 9:30 p.m., Sunday, C.
Poet's Gold, 2:15 p.m., Sunday, C.
Pood's Program, 9:30 p.m., Friday, R.
Roxy's Gang, 12:15 p.m., Sunday, R.
Roxy's Gang, 12:15 p.m., Sunday, R.
Syndl Vagabonds, 8:00 p.m., Wednesday, R.
Sinclair Minstrels, 9:00 p.m., Monday, B.
Supper Club, 12 mid., Saturday, B.
Swifts' Garden, 5:30 p.m., Sunday, R.
Ed Wynn, 9:30 p.m., Tuesday, R.
Veast Foamers, 2:30 p.m., Sunday, R.

**QUARTETS** 

Mills Brothers, 9:15 p.m., Monday and Thursday, C. Revelers, 4:30 p.m., Sunday, R. Singing Cylinders, 5:30 and 6:30 p.m., Sunday, B.

RELIGIOUS

RELIGIOUS
Dr. S. Parkes Cadama, 3:30 p.m., Sunday, R. Cathedral Hour, 6:30 p.m., Sunday, C. Catholie Hour, 6:00 p.m., Sunday R. Church of the Air, 1:30 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., Tuesday, 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

SINGERS

SINGERS

Homay 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.
Buccaneers, 11:00 p.m., Eaturday, B.
Eddie Cantor, 8:00 p.m., Sunday, R.
Charles Carlile, 10:45 p. m., Tuesday, C.
Richard Crooks, 8:30 and 11:30 p.m., every other Monday, R.

Bing Crosby, 9:00 p.m., Wednesday and Saturday, C. Vaughn 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.

9:30 p.m., Wed., B. Jessica Dragonette, 8:00 p.m., Friday, R. Mary Eastman, 8:15 p.m., Sunday; 9:15 p.m., Friday, C. Ruth Etting, 9:00 p.m., Monday and Thursday, C. Frields and Hall, 6:45 p.m., Saturday, B. Jack Fulton, 11:00 p.m., Tuesday, B. Wilfred Glenn, 10:00 p.m., Thursday, B. Alice Levi 10:30 p.m., May, 10:15 p.m., Wed, 10:00 p.m.

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 p.m., Wednesday, B.
Little Jack Little, 1:15 p.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 p.m., Tuesday, C.
James Melton, 7:30 p.m., Sunday; 7:00 p.m., Tuesday;
11:00 p.m., Thursday, R.
Monarch Mystery Tenor, 2:00 p.m., Sunday, B.
Frank Munn, 9:30 p.m., Sunday, R.
Donald Novis, 9:30 p.m., Wednesday; 6:30 p.m., Thursday;
7:00 p.m., Friday, R.
Carson Robison, 7:15 p.m., Wednesday 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. Saion 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., Tuesday, B.

America's Grub Street, 6:00 p.m., Saturday, C.
American Taxpayers' League, 8:00 p.m., Saturday, B.
Boake Carter, 7:45 p.m., daily, ex. 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.. 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., Sunday, R. David Lawrence, 10:00 p.m., Sunday, B. David Lawrence, 10:00 p.m., Sunday, B. David Lawrence, 10:00 p.m., Sunday, B. Laws That Safeguard, 6:30 p.m., Saturday, B. National Radio Forum, 10:30 p.m., Sunday, 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., Wednesday, R. Sigmund Spaeth, 10:00 p.m., Tuesday, B. Lowell Thomas, 6:45 p.m., daily, ex. Sat. and Sun., B; 5:00 p.m., Sunday, R. Merle Thorpe, 7:15 p.m., Saturday, 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

As Shown in the Index by Frequencies and Diai Numbers

Frequency is given in kilocycles; wavelength in meters. Night power is shown in watts in third column. Daytime power is shown in parenthesis in fourth column in 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

- Verifies reception for return post-Я
- Verifies only occasionally. b Does not verify.
- Verification 10c; letter 25c. Sends Ekko stamp for 10c. Sends Ekko stamp for 5c.
- Sends Ekko stamp for postage. Sends own station stamp for 10c. Sends own station stamp for 5c. Sends own station stamp for post-
- age. k Has no stamps.
  - No information available.
  - Fourth Column Symbols
- These stations are synchronized.

- National "Blue" network. Columbia network.
- D Daytime only.
  Dn Daytime with occasional evening hours.
- Trans-Canada network. Canadian National Railways net-
- All Canadian networks. Н Yankee network Orange and gold network.
- Mexican networks. K Canadian Pacific Ry. network (Dominion).
- Canadian Radio Corp. network. National "Red" and "Blue" networks.

- Has construction permit only.
- Great Lakes network. Ř National "Red" network.
- Sunday only. Don Lee System. Т
- U Dixie network. Maritime Broadcasting network. W Curtis-Indiana network.
- Has permit to increase power. Has permit to change location.
- Has permit to change frequency. a-b-c. Small letters show stations
- using same transmitter. Figures denote stations sharing 1-2-3. time.
  - No information.

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#### FOR KEY TO SYMBOLS SEE PAGE 45

	FOR RET TO STMBOLS SE	E PAGE 45
540 kilocycles	555.2 meters	
CKOK ae 5000 CO XEY z 105 54	G Windsor, Ont. 6.8 Merida, Mex.	Essex Broadcasters, Ltd. Partido Socialista S. E.
550 kilocycles	545.1 meters	
KFDY ac 1000 1 KFUO ac 1000 2( KFYR ah 1000 1) KOAC ak 1000 KSD ak 500 2i WDEV ac 500 D WGR ac 1000 C WKRC ak 1000 C	Waterbury, Vt. Buffalo, N. Y. Cincinnati, Ohio	South Dakota State College Evangelical Lutheran Church Meyer Broadcasting Co. Oregon State Agricultural College Pulitzer Publishing Co. Harry G. Whitehill Buffalo Broadcasting Corp. WKRC, Inc., Hotel Alms
560 kilocycles	535.4 meters	
WLIT ak 500 11	San Francisco, Calif. R Philadelphia, Pa5)a Chicago, Ill. R Philadelphia, Pa. (2) Knoxville, Tenn. a Chicago, Ill.	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 ( KMTR ach 500 KVI ac 500 C WEAO ac 1000 1 WKBN ak 500 16 WMCA ak 500 3 WNAX ac 1000 C WNYC ak 500 3 WSYR ak 250 B' WWNC ac 1000 N	Hollywood, Calif, Tacoma, Wash. Columbus, Ohio Youngstown, Ohio New York, N. Y. (2.5) Yankton, S. D. New York, N. Y. Syracuse, N. Y.	Wichita Falls Broadcasting Co. KMTR Radio Corp. Puget Sound Broadcasting Co. Ohio State University WKBN Broadcasting Corp. Knickerbocker Broadcasting Co., Inc. House of Gurney, Inc. Dept. of Plant & Structures Central N. Y. Brdestg. Corp.,(WMAC) Citizens Broadcasting Co., Inc.
580 kilocycles	516.9 meters	
WIBW ae 1000 C WOBU ak 250 1( WSAZ ak 250 1( WTAG ae 250 R	Edmonton, Alta. Toronto, Ont. FE Edmonton, Alta. BE Havana, Cuba Havana, Cuba TFresno, Calif. Manhattan, Kans. U Orlando, Fla.	Island Radio Broadcasting Co., Ltd. Christian & Missionary Alliance The Dominion Battery Co. University of Alberta G. deSequeira Troncoso y Gil McClatchy Radio Stations (Fresno Bee) State Agricultural College Orlando Broadcasting Co., Inc. Topeka Brodestg Assn., Inc. WOBU, Inc., Ruffner Hotel WSAZ, Inc. Worcester Telegram Pub. Co., Inc. (Yolanda Hotel), Eagle Pass, Texas
590 kilocycles	508.2 meters	J.
	Kalamazoo, Mich.	Free Press Printing Co., Ltd. Louis Wasmer, Inc. Nebraska Wesleyan University Edison Electric Illuminating Co. WKZO, Inc., Burdick Hotel Woodmen of the World

INDEX BI FREQUENCIES AN	D DIAL NUMBERS	
600 kilocycles 499.7 meters		KCYS.
CNRO ak 500 F Ottawa, Ont.	Canadian National Railways	680
KFSD ah 1000 N San Diego, Calif. WCAC ak 250 2 Storrs, Conn. WCAO ae 250 C Baltimore, Md.	Airfan Radio Corp. Connecticut Agricultural College	MTRS.
WCAO se 250 C Baltimore Md.	Connecticut Agricultural College Monumental Radio Co. Bridgeport Bdctg. Station, Inc.	440.9
WMT ak 500 C Waterloo, Iowa	Waterloo Broadcasting Co.	
WREC z 500 C(1) Memphis, Tenn.	WREC, Inc.	DIAL
610 kilocycles 491.5 meters		
KFRC ae 1000 C San Francisco, Calif. WDAF ae 1000 R Kansas City, Mo. WIP ak 500 C Philadelphia, Pa.	Don Lee Broadcasting System Kansas City Star Co.	ŀ
WIP ak 500 C Philadelphia, Pa.	Pennsylvania Bdctg. Co. (WFAN)	i
WJAY ae 500 D Cleveland, Ohio XETR z 1000 Mexico City, Mexico	Cleveland Radio Broadcasting Corp. Cia. Difusora Mexicana S. A.	i
620 kilocycles 483.6 meters		<u> </u>
KGW as 1000 N Portland, Ore.	Oregonian Publishing Co.	ļ
KTAR ae 500 NJ(1) Phoenix, Ariz. WFLA ae 1000 Na(2.5) Clearwater, Fla.	KTAR Broadcasting Co. Florida West Coast Bdctg. Co., Inc.	ą.
WLBZ ak 500 C Bangor, Maine	Maine Broadcasting Co., Inc.	ļ
WSUN ae 1000 Na(2.5) St. Petersburg, Fla. WTMJ ae 1000 N(2.5) Milwaukee, Wis.	Florida West Coast Bdctg. Co., Inc. Journal Company	1
630 kilocycles 475.9 meters		ļ
CFCT ae 500 G Victoria, B. C.	Victoria Broadcasting Assn.	ł
CJGX ae 500 FL Yorkton, Sask. CKOC ae 1000 635aG Hamilton, Ont.	Winnipeg Grain Exchange Wentworth Radio Bdctg. Co., Ltd.	i
CKTB ae 1000 635aL St. Catharines, Ont.	Wentworth Radio Bdctg. Co., Ltd.	i
CMCU z 150 Havana, Cuba CMQ z 250 Havana, Cuba CNRA ae 700 F Moncton, N. B.	Jorge Garcia Serra Jose Fernandez	i '
CNRA ae 700 F Moncton, N. B.	Canadian National Railways	iΩ
HIX ah 1000 Santo Domingo, D. R. KFRU ak 500 1 Columbia, Mo.	The Dominican Government KFRU, Inc. Dana McNeil	įΫ
KFRU ak 500 1 Columbia Mo. KGFX z 200 D Pierre, S. D. WGBF ae 500 W—1 Evansville, Ind.	Dana McNeil Evansville On the Air, Inc.	ZUT OUT
WMAL ae 250 (.5)—B Washington, D. C.	M. A. Leese Radio Corp., Inc.	Ι <u>Η</u>
WOS ak 500 lD Jefferson City, Mo. XETF ak 500 K Veracruz, Ver., Mexico XFG z 2000 638.3 Mexico City, Mexico	Missouri State Marketing Bureau Manuel Angel Fernandez	19
XFG z 2000 638.3 Mexico City, Mexico	Sria. de Guerra y Marina	D D
640 kilocycles 468.5 meters		DOTTED
CHRC ak 100 645aG Quebec, Que. CKCI ck 100 645a Quebec, Que.	CHRC, Ltd., Victoria Hotel Le Soleil, Ltd.	
CKCR ak 100 645G Waterloo, Ont.	Mitchell & Liddle	ĮΕ
KFI ah 50000 N1 Los Angeles, Calif. WAIU ae 500 1 Columbus, Ohio	Earle C. Anthony, Inc. Associated Radiocasting Corp.	LINES
WOI ae 5000 D Ames, Iowa	State College of Agriculture	100
650 kilocycles 461.3 meters		į
KPCB ac 100 Seattle, Wash. WSM aej 50000 N Nashville, Tenn.	Queen City Broadcasting Co. National Life & Accident Ins. Co.	ļ
660 kilocycles 454.3 meters		¦
CHWK ak 100 665 Chilliwack, B. C. CJRM z 500 665 Moose Jaw, Sask.	Chilliwack Broadcasting Co., Ltd.	l
CJRM z 500 665 Moose Jaw, Sask. CJRW z 1000 665 Fleming, Sask. RÜS z 500 664 Salvador	Jas. Richardson & Sons, Ltd. Jas. Richardson & Sons, Ltd.	ŀ
RUS z 500 664 Salvador WAAW agh 500 D Omaha, Neb.	Republic of El Salvador	I
WEAF ak 50000 R New York City	Omaha Grain Exchange National Broadcasting Co., Inc.	ļ
670 kilocycles 447.5 meters		
WMAQ ae 5000 N Chicago, Ill.	WMAQ, Inc. (NBC Lessees)	i
680 kilocycles 440.9 meters		i
CMAF ak 1000 Havana, Cuba	International Broadcasting Co.	ļ .
KFEQ ae 2500 D St. Joseph, Mo.	Scroggin & Co., Bank	!
KPO ak 5000 N San Francisco, Calif. WPTF ae 1000 N Dn Raleigh, N. C.	National Broadcasting Co., Inc. Durham Life Insurance Co.	!

690 kilocycles 434.5 met	ers
CFAC         ak         500         1G         Calgary, A           CFRB         ae         10000         CM         Toronto, C           CJCJ         ak         500         1LE         Calgary, A           NAA         z         1000	Ont. Rogers-Majestic Corp., Ltd.  Ilta. Albertan Publishing Co., Ltd.  Va. U. S. Navy  N. S. Canadian Marconi Co.
700 kilocycles 428.3 met	ers
WLW ae 50000 N Cincinnati	i, Ohio The Crosley Radio Corporation
710 kilocycles 422.3 met	ers
KMPC ae 500 Dn Beverly Hi WOR ak 5000 X Newark, N XEN agj 1000 711K Mexico Cit	I. J. Bamberger's Broadcasting Service. Inc.
720 kilocycles 416.4 met	ers
WGN ak 25000 C Chicago, II	II. WGN, Inc., Drake Hotel
730 kilocycles 410.7 met	ers
CHLS         ak         100         lb         Vancouver.           CHYC         z         5000         Sa         Montreal,           CKAC         ak         5000         CaM         Montreal,           CKCD         z         100         lb         Vancouver.           CKFC         ak         50         l         Vancouver.           CKMO         z         100         l         Vancouver.           CKWX         ak         100         lL         Vancouver.           CMK         aeh         3150          Havana, C           CXEF-XER         z         75000         735-665         Villa Acum.	, B. C. Vancouver Daily Province , B. C. United Church of Canada , B. C. Sprott-Shaw Radio Co. , B. C. Western Broadcasting Co., Ltd. , Uba National Broadcasting Co. of Cuba
740 kilocycles 405.2 met	ers
CJCA ae 500 745EL Edmonton KMMJ bk 1000 Dn Clay Cent WSB aeh 5000 N Atlanta, G WHEB ak 250 D Portsmout	r, Alberta Edmonton Journal, Ltd. er, Neb. M. M. Johnson Co. (R/C Lincoln) Atlanta Journal, Biltmore Hotel
750 kilocycles 399.8 mete	ers
KGU ai 2500 NX Honolulu.	Hawaii Advertiser Publishing Co. N. F. Wesley United Church ich. WJR, The Goodwill Station, Inc. iih., Mexico Radio Difusora National S. A.
760 kilocycles 394.5 mete	ers
KXA         ae         250         (.5)         Seattle, We Baltimore, We We ae         10000         BA         Baltimore, Baltimore, St. Louis, I We York           WJZ         ck         50000         BA         New York	ash. American Radio Tel. Co. Md. (See 1060 kcys. also) Mo. St. Louis University
770 kilocycles 389.4 mete	ers
KFAB ae 5000 1C Lincoln, N WBBM ae 25000 1C Chicago, II	eb. KFAB Broadcasting Co.
780 kilocycles 384.4 mete	ers
CKY         z         5000         Winnipeg,           CMBS         z         150         Havana, Cr.           CMCQ         z         1000         Havana, Cr.           KELW         aeh         500         2         Burbank, Cr.           KTM         ae         500         2(1)         Los Angele           WEAN         ak         250         CH(.5)         Providence           WMC         ak         500         N(1)         Memphis,           WPOR         aeh         500         b         Portsmout           WTAR         aeh         500         bC         Norfolk, V           KEP         z         1000         Mexico Cit	Man. Manitoba Telephone System uba Enrique Artalejo uba Andres Martinez Calif. Magnolia Park, Ltd. s, Calif Pickwick Broadcasting Corp., Ltd. , R. I. Shepard Broadcasting Service, Inc. Tenn. Memphis Commercial Appeal, Inc. h, Va. WTAR Radio Corp. (Norfolk) a. WTAR Radio Corp.
790 kilocycles 379.5 mete	ers
CMHC z 250 Tuinucu, C CMJK aeh 300 Camaguey, KGO ak 7500 N San Franci WGY ak 50000 R Schenectad	Cuba Frank H. Jones , Cuba Tano Gomez sco, Calif. General Electric Co. (Opr. NBC)

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800 kilo	cycles 374	4.8 meters		
WBAP ak WFAA ak	50000 Na 50000 Na	Fort Worth, Texas Dallas, Texas	Carter Publications, Inc. Dallas News-Dallas Journal	
810 kilo	cycles 370	0.2 meters		
CHNS ae CNRH ak VOAS ak WCCO ae WPCH ak XFC z XFI z	500 815aZG 500 815aZ 200 D 50000 C 500 D 350 1000 818	Halifax, N. S. Halifax, N. S. St. John's, N. F. Minneapolis, Minn. New York City Aguascalientes, Mex Mexico City, Mexico	Eastern Broadcasters, Inc. Gobierno del Estado de Aguascalientes	кс <b>чs.</b> 8 <b>90</b>
820 kilo	cycles 36	5.6 meters		MTRS.
CMGC z WHAS aj	25000 C	Matanzas, Cuba Louisville, Ky.	Oscar S. Mechoso The Louisville Times Co., Inc.	336.9 DIAL
830 kilo	ocycles 36.	1.2 meters		
CMGA z KOA ak WEEU ak WHDH ae WRUF ae XETW z	100 834 12500 NJ 1000 D 1000 DY 5000 DnC 500	Colon, Cuba Denver, Colo. Reading, Pa. Boston, Mass. Gainesville, Fla. Mexico City, Mexico	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 kilo	cycles 350	6.9 meters		İ
CHNC z CKGW ae CKLC ak CMC z CPRY ae XETH z XETM z XFB z	5000 a 5000 NEa 1000 G 500 5000 La 100 15000 P845 500	Toronto, Ont. Toronto, Ont. Red Deer, Alta. Havana, Cuba Toronto, Ont. Puebla, Mexico Matamoros, Mex. Jalapa, Mexico	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 Musquiz, A. Estado de Vera Cruz	         
850 kilo		2.7 meters		i
	100 D	,	Cannon Systems Inc	i
KIEV z KWKH ae WWL ak	10000 1 10000 1DnX	Glendale, Calif. Shreveport, La. New Orleans, La.	Cannon Systems, Inc. Hello World Broadcasting Corp. WWL Development Co. (Loyola Univ.)	į iΩ
860 kilo	cycles 348	3.6 meters [		ig Ig
VOGY z WABC ae WBOQ ae WHB ae XFX z	500 P 50000 aC 50000 a 500 D 500	St. John's, N. F. New York City New York City Kansas City, Mo. Mexico City, Mexico	Atlantic Broadcasting Corp. Atlantic Broadcasting Corp. (tests) WHB Broadcasting Co. Secretaria de Educacion Publica	OUT ON DOTTED
<b>870</b> kilo	cycles 344	l.6 meters		ΪĞ
WENR ak WLS ae	50000 Na 50000 Na	Chicago, Ill. Chicago, Ill.	Great Lakes Bdctg. Co. NBC Opr. Agricultural Broadcasting Co.	
<b>880</b> kilo	cycles 340	).7 meters		ĮΕ
CHIML ae CJCB ak CKCV ak CKPC ak KFKA ak KLX ae KPOF ae WCOC ae WGBI ah WQAN ak WSUI ae	50 4G 100 G 100 100 4L 500 2(1) 500 2 500 (1) 250 Q1 250 Q1 250 1	Hamilton, Ont. Sydney, N. S. Quebec, Que. Preston, Ont. Greeley, Colo. Oakland, Calif. Denver, Colo. Meridian, Miss. Scranton, Pa. Scranton, Pa. Iowa City, Iowa	Maple Leaf Radio Co., Ltd. Nathansan's Radio Headquarters Vandry, Inc. Cyrus Dolph Mid-Western Radio Corp. Tribune Publishing Co. Pillar of Fire Mississippi Broadcasting Co., Inc. Scranton Broadcasters, Inc. Scranton Times State University of Iowa	LINES
890 kilo	cycles 336	5.9 meters		!
CFBO z CKCO z CKPR ak CMCF ak CMX ae KARK ak KFNF ak KSEI ae KUSD ae	500 100 3 100 3G 250 1 500 1 250 500 2(1) 250 (.5)	St. John, N. B. Ottawa, Ont. Fort William, Ont. Havana, Cuba Havana, Cuba Little Rock, Ark. Shenandoah, Iowa Pocatello, Idaho Vermillion, S. Dak.	C. A. Munro, Ltd. Dr. G. M. Geldert Dougall Motor Car Co., Ltd. Raoul Karman, Casa DelaPorte Casa "Lavin" Francisco A. Lavin, Adm. Arkansas Radio & Equipment Co. Henry Field Company Radio Service Corporation University of South Dakota	 

	111062		REQUERICIES MI	DIAL HOMBERS
VOGT	400	893	Wabana, N. F.	The Gaiety Theatre
WGST ac	250	C(.5) 2(.5) (.5)R	Atlanta, Ga.	Southern Broadcasting Co.
WILL ak WJAR ae	250 250	2(.5) (.5)B	Urbana, Ill.	University of Illinois The Outlet Co.
WMMN ach	250	(.5) K	Fairmont, W. Va.	A. M. Rowe, Inc.
XETU z	100		Providence, R. I. Fairmont, W. Va. Pachuca, Mexico	Rodrigo Mariquez
900 kilo	cycle	s 333	.1 meters	
KGBU ak	500		Ketchikan, Alaska	Alaska Radio & Service Co.
KHJ ae	1000	ĊŤ	Los Angeles, Calif. Buffalo, N. Y.	Don Lee Broadcasting System WBEN, Inc., Buffalo Evening News City of Jacksonville
WBEN ae WJAX aeh	1000 1000	R N	Buffalo, N. Y.	WBEN, Inc., Buffalo Evening News
WJAX ach WKY ac	1000	N	Jacksonville, Fla. Oklahoma City, Okla.	Oklahoma Publishing Co.
WLBL ae	2000	Ď	Oklahoma City, Okla. Stevens Point, Wis.	Wis. Dept. Agriculture & Markets
910 kiloo	cvcle	s 329	.6 meters 🗌	
	500		Saskatoon, Sask.	The Electric Shop, Ltd.
CFQC z CFLC ae	100	915	Prescott, Ont.	Radio Association of Prescott
TICR z XEW ak	50 5000	911	San Jose, Costa Rica	Cadena Radio-difusora Mexicana S. A.
XEW ak XFF z	500	915	San Jose, Costa Rica Mexico City, Mexico Chihuahua, Mex.	Gobierno del Estado de Chihuahua
				The state of the s
920 kiloo	-		.9 meters 🗌	
CMBW z CMCN z	150 250	925 925	Havana, Cuba Havana, Cuba	Alvarez-Moris Antonio Ginard
CMDE z	250	925	Havana, Cuba	Evilio Villar
HHK z	1000	′	Havana, Cuba Port au Prince, Haiti	Republic of Haiti
KFEL ak	500	1	Denver, Colo. Denver, Colo. Seattle, Wash.	Gene O'Fallon (Albany Hotel)
KFXF ae KOMO aj	500 1000	1 N	Denver, Colo.	Colorado Radio Corp. Fisher's Blend Station, Inc.
KPRC ae	1000	N(2.5)	Houston, Texas	Houston Printing Co. (Houston Post
WAAF ak	. 500	D	Houston, Texas Chicago, Ill. Babson Park, Mass.	Drovers Journal Publishing Co.
WBSO ae	500	D R	Babson Park, Mass.	Broadcasting Service Org., Inc. The Detroit News
WWJ ak	1000		Detroit, Mich.	The Detroit News
	cycles		.4 meters $\square$	
CFCH ak CFRC ak	100 50	3LM 3(.2)	North Bay, Ont. Kingston, Ont. Brandon, Manitoba	Northern Supplies, Ltd. Queen's University
CKX ak	500	B	Brandon, Manitoba	Manitoba Telephone System
CMIF z	200		Camaguey, Cuba	John L. Stowers
KFW1 aj	500 500	1 2(1)	San Francisco, Calif.	Radio Entertainments, Ltd.
KGBZ ak KMA ae	500	2(1) 2(1) 1(1)	York, Neb. Shenandoah, Iowa	Dr. Geo. R. Miller Earl E. May Seed & Nursery Co.
KROW ak	500	ī(ī)	Oakland, Calif.	Earl E. May Seed & Nursery Co. Educational Broadcasting Corp.
WBRC ak	500	C(1)	Birmingham, Ala.	Birmingham Bdctg. Co., Inc. Times-World Corp. WIBG, Inc. (Keswick Bldg.)
WDBJ ae WIBG ae	250 25	C(1) C(.5) D	Roanoke, Va. Glenside, Penna.	Times-world Corp.
			Glenside, Penna.	WIBG, Inc. (Keswick Bldg.)
940 kiloo				WIBG, Inc. (Reswick Bidg.)
	ycles	s 319.	.0 meters	
KOIN zk WAAT ae	ycles 1000 300	s 319.	.0 meters	KOIN, Inc. (New Heathman Hotel)
KOIN zk WAAT ae WCSH ae	2ycles 1000 300 1000	s 319.	O meters  Portland, Ore. Jersey City, N. J. Portland, Maine	KOIN, Inc. (New Heathman Hotel) Bremer Broadcasting Corp. Congress Square Hotel Co.
KOIN zk WAAT ae WCSH ae WDAY ae	1000 300 1000 1000	S 319. CT D R(2.5)	O meters  Portland, Ore. Jersey City, N. J. Portland, Maine Fargo, No. Dakota	KOIN, Inc. (New Heathman Hotel) Bremer Broadcasting Corp. Congress Square Hotel Co.
KOIN zk WAAT ae WCSH ae	2ycles 1000 300 1000	s 319.	O meters  Portland, Ore. Jersey City, N. J. Portland, Maine Fargo, No. Dakota Hopkinsville, Ky.	KOIN, Inc. (New Heathman Hotel) Bremer Broadcasting Corp. Congress Square Hotel Co. WDAY, Inc. (Black Bldg.) WFIW, Inc.
KOIN zk WAAT ae WCSH ae WDAY ae WFIW ae	1000 300 1000 1000 1000	S 319. CT D R(2.5) N C	O meters  Portland, Ore. Jersey City, N. J. Portland, Maine Fargo, No. Dakota	KOIN, Inc. (New Heathman Hotel) Bremer Broadcasting Corp. Congress Square Hotel Co.
KOIN zk WAAT ae WCSH ae WDAY ae WFIW ae WHA ak	1000 300 1000 1000 1000 1000 5000	S 319. CT D R(2.5) C D (3.5)	O meters  Portland, Ore. Jersey City, N. J. Portland, Maine Fargo, No. Dakota Hopkinsville, Ky. Madison, Wis.	KOIN, Inc. (New Heathman Hotel) Bremer Broadcasting Corp. Congress Square Hotel Co. WDAY, Inc. (Black Bldg.) WFIW, Inc. University of Wisconsin
KOIN zk WAAT ae WCSH ae WDAY ae WHIW ae WHA ak XEFO ak  950 kiloc CMHD z	1000 300 1000 1000 1000 1000 5000 cycles	S 319. CT D R(2.5) C D (3.5)	Portland, Ore. Jersey City, N. J. Portland, Maine Fargo, No. Dakota Hopkinsville, Ky. Madison, Wis. Mexico City, Mexico  6 meters  Caibarien, Cuba	KOIN, Inc. (New Heathman Hotel) Bremer Broadcasting Corp. Congress Square Hotel Co. WDAY, Inc. (Black Bldg.) WFIW, Inc. University of Wisconsin National Revolucionario Party (XFO)
KOIN zk wAAT ae WCSH ae WDAY ae WHA ak XEFO ak  950 kiloo CMHD z KFWB ak	1000 300 1000 1000 1000 5000 5000 cycles	S 319. CT D R(2.5) C D 0 (3.5) S 315.	Portland, Ore. Jersey City, N. J. Portland, Maine Fargo, No. Dakota Hopkinsville, Ky. Madison, Wis. Mexico City, Mexico  6 meters  Caibarien, Cuba Los Angeles, Calif.	KOIN, Inc. (New Heathman Hotel) Bremer Broadcasting Corp. Congress Square Hotel Co. WDAY, Inc. (Black Bldg.) WFIW, Inc. University of Wisconsin National Revolucionario Party (XFO)  Manual Alvarez Warner Bros. Broadcasting Corp.
KOIN zk WAAT ae WCSH ae WDAY ae WHIW ak XEFO ak  950 kiloo CMHD z KFWB ak KGHL ak	1000 300 1000 1000 1000 1000 5000 cycles 250 1000	S 319. CT D R(2.5) C D (3.5)	Portland, Ore. Jersey City, N. J. Portland, Maine Fargo, No. Dakota Hopkinsville, Ky. Madison, Wis. Mexico City, Mexico  6 meters  Caibarien, Cuba Los Angeles, Calif.	KOIN, Inc. (New Heathman Hotel) Bremer Broadcasting Corp. Congress Square Hotel Co. WDAY, Inc. (Black Bldg.) WFIW, Inc. University of Wisconsin National Revolucionario Party (XFO)  Manual Alvarez Warner Bros. Broadcasting Corp. Northwestern Auto Supply Co.
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KJR ae 5000 N Seattle, Wash. WCFL ak 1500 RX Chicago, Ill.	Northwest Broadcasting System, Inc. Chicago Federation of Labor
980 kilocycles 303.9 meters [	
CFCN ak 10000 985FL Calgary, Alberta CMGF z 100 987 Matanzas, Cuba KDKA ak 50000 B Pittsburgh, Pa.	The Voice of the Prairies, Ltd. Bernabe R. de la Torre Westinghouse Elec. & Mfg. Co.
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KEVD ak 250 Dn Los Angeles Calif	Los Angeles Broadcasting Co. KCYS.
WHO z 5000 RAX Des Moines, Iowa WOC ak 5000 RAX Davenport, Iowa WORK aj 1000 D York, Pa.	Central Broadcasting Co. Central Broadcasting Co. 1050
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RGGF ak 500 2(1) Colleyville, Kans.	Powell & Platz
KQW ae 500 T San Jose, Calif. WHN ae 250 1 New York City	Pacific Agricultural Foundation, Ltd.   Marcus Loew Booking Agency
WIS ae 500 N(1) Columbia, S. C.	WIS, Inc.
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WOAO ae 250 la New York City WRNY z 250 l New York City	Marcus Loew Booking Agency Marcus Loew Booking Agency
XEU ak 100 Veracruz, Mexico	Baltasat Pazos Sosa
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KYW ae 10000 N Chicago, Ill. WRAX ae 250 D Philadelphia, Pa.	Westinghouse Elec. & Mfg. Co. (KFKX)
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CMGH z 15 Matanzas, Cuba	O. y J. Alvarez
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XEFC z 10 Merida, Yuc.	Hugo Molina Font
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	WIAG	ak	1000	Dn	Norfolk, Neb.	Consolidated Gas, Elec. L. & Pwr. Co. Norfolk Daily News
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	CMCB	af	150			Metropolitan-Radio de Cuba
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		INDE	X BY	FF	REQUENCIES A	IN	DIAL NUMBERS	
1160	kilo	ocyc1	es	258	3.5 meters			
WOWO WWVA	ae ae	10000 5000	1C 1C		Fort Wayne, Ind. Wheeling, W. Va.		Main Auto Supply Co. West Virginia Broadcasting Corp.	
1170	kilo	cycl	es :	256	.3 meters		· _	
CMJE WCAU	z ae	50 50000	11 <b>75</b> C		Camaguey, Cuba Philadelphia, Pa.		Manuel Fernandez WCAU Broadcasting Co.	
1180	kilo	cyc1	es	254	.1 meters			
CMCJ KEX KOB WDGY WINS WMAZ	z ak ae ak ae ak	250 5000 20000 1000 500 500	1185 2N 2 Dn		Havana, Cuba Portland, Ore. Albuquerque, N. M Minneapolis, Minn. New York City Macon, Ga.		Rafael Rodriquez National Broadcasting Co. N. M. Coll. of Agr. & Mechanical Arts George W. Young American Radio News Corp. Southeastern Broadcasting Co.	
1190	kilo	ocycl	es	252	.0 meters			
WOAI VONF		50000 500	N		San Antonio, Texas St. John's, N. F.		Southern Equipment Co. Dominion Brdcstg. Co., Ltd.	
1200	kild	cvc1	es '	249	.9 meters			
CHCH	z	100					Montreal Radio Corp.	
CHLP	z ak	100 100	2 2		Montreal, Que. Montreal, Que.		La Patrie, Ltd. Okanagan Broadcasters, Ltd.	
CKOV CMGB	z	30	1205	•	Kelowna, B. C. Matanzas, Cuba Paragould, Ark.		Jose Anorga	
KBTM KERN	ak ak	100 100	D CT		Paragould, Ark. Bakersfield, Calif.		Beard's Temple of Music Bee Bakersfield Broadcasting Co.	
KFJB KFWF	ak	100	(.25)		Marshalltown, Jowa	a	Marshall Electric Co., Inc.	
KFWF KFXD	ak	100 100	5		St. Louis, Mo. Nampa, Idaho Grand Junction, Co		St. Louis Truth Center, Inc. Frank E. Hurt (R/C Boise)	KCYS.
KFXJ	ae ak	100		:	Grand Junction, Co	lo.	Western Slope Brdcstg. Co.	1210
KGDE	ae	100	(.25)	•	rergus raus, Minn.		Jaren Drug Co.	
KGDY KGEK	ak ak	100 100	ġ····	•	Huron, S. D. Yuma, Colo.		Voice of South Dakota, Inc.	MTRS.
KGEW	ak	100	ģ		Ft. Morgan, Colo.		Beehler Electrical Equipment Co. City of Fort Morgan	247.8
KGFJ	ae	100	• • • • •		Los Angeles, Calif.		Ben. S. McGlashan O. A. Çook	
KGHI KGVO	ak ak	100 100	• • • • •		Little Rock, Ark. Missoula, Mont.		Mosby's, Inc.	DIAL
KMLB	ae	100			Missoula, Mont. Monroe, La.		Mosby's, Inc. Liner's Broadcasting Station, Inc.	,
KVOS KWG	z ak	100 100	ĊŤ	•	Bellingham, Wash. Stockton, Calif.		KVOS, Inc. McClatchy Newspapers	!
WABI	ak	100			Bangor, Maine		First Universalist Society	1
WABZ WBBZ	ak	100 100	1		New Orleans, La. Ponca City, Okla.		Samuel D. Reeks	ļ
WBHS	ak ak	100	4		Huntsville Ala.		C. L. Carrell (R/C various cities) Radio Station WBHS, Inc.	1
WCAT WCAX	ak	100	Ď		Rapid City, S. D. Burlington, Vt. Janesville, Wis.		State School of Mines	1
WCAX	ak ak	100 100	• • • • • •	•	Burlington, Vt.		Burlington Daily News WCLO Radio Corp. (R/C Beioit)	ĺ
WCOD	ae	100	3		narrisburg, Pa.		Keystone Broadcasting Corp. South Bend Tribune (WSBT)	ĺ.
WFAM WFBC	ak	100 100	8C		South Bend, Ind. Greenville, S. C. Cincinnati, Ohio		South Bend Tribune (WSBT)	i₽.
WFBE	z ak	100	(.25)4 (.25)		Cincinnati, Ohio		News-Piedmont Co. Radio Station WFBE, Inc.	i∓
WHBC	ak	10			Canton, Ohio		Edward P. Graham	i≥
WHBY WIBX	ak z	100 100	(.3)	•	Green Bay, Wis. Utica, N. Y.		WHBY, Inc. WIBX, Inc.	¦∓
WIL	ae	100	5(.25)		St. Louis, Mo.		Missouri Broadcasting Corp.	ပ္ရွ
WJBC	ae	100	6		LaSalle, Ill.		Kaskaskia Broadcasting Co.	14
WJBL WJBW	ae ak	100 100	6 1		Decatur, III. New Orleans, La		Commodore Broadcasting, Inc. C. C. Carlson	!8
WKJC WLAP	ae	100	3		Lancaster, Pa.		Lancaster Bdctg. Service, Inc.	<u> </u>
WLAP WNBO	ae	100 100	(.25)		Louisville, Ky.		American Broadcasting Corp. of Ky.	l <del>d</del>
WNBW	aeh z	10	(.1)	•	Washington, Pa. Carbondale, Pa.		Spriggs Symplex WNBW, Inc.	ΙŌ
WORC	ak	100	(.1) CH		Worcester, Mass.		A. F. Kleindienst	CUT OUT ON DOTTED LINES
WPHR WRBL	ae ak	100 100	(.25)		Petersburg, Va.		WLBG, Inc. WRBL Radio Station, Inc.	IΕ
WWAE	aeh	100	8	•	Columbus, Ga. Hammond, Ind.		Hammond-Calumet Bdctg, Corp.	ίδ
10-AB	ak	25		•	Moose Jaw, Sask.		Moose Jaw Radio Assn. M. I. Higgins Elec. & Radio Co.	i
10-AK 10-BI	ak ak	15 25	• • • • • •		Stratford, Ont. Prince Albert, Sask.		M. I. Higgins Elec. & Radio Co. Prince Albert Radio Club	
10-BP	ak	25 25	1199	•	Wingham, Ont.		W. T. Cruickshank	!
10-BP 10-BQ 10-BU	ak	15			Wingham, Ont. Brantford, Ont.		Tom Brown & Harold Brown	!
	z	15	• • • • • • •		Canora, Sask.		Canora Radio Assn.	ŀ
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CFNB	ae	100	B		Fredericton, N. B.		James S. Neill & Sons, Ltd.	[] 6

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CJOR CKMC KASA	ak	500	E	Vancouver, B. C.	George C. Chandler
CKMC	ak ak	100 100	8	Cobalt, Ont.	R. L. McAdam E. M. Woody (Casa Grande Hotel)
KDLR	ak	100		Elk City, Okla. Devils Lake, N. Dak.	KDLR, Inc.
KFJI KFOR	ak	100		Klamath Falls, Ore.	KFJI Broadcasters, Inc.
KFOR	ak	100	(.25)	Lincoln, Neb.	Howard A. Shuman
KFPW KFVS	ak	100 100	6	Fort Smith, Ark. Cape Girardeau, Mo.	Southwestern Hotel Co. Oscar C. Hirsch
KFXM	ae ak	100	9	San Bernardino, Calif.	I. C. & E. W. Lee
KGCR	ah	100		Watertown, S. Dak.	Greater Kampeska Radio Corp.
KGNO	ak	100		Watertown, S. Dak. Dodge City, Kans. Olympia, Wash. Eureka, Calif.	Greater Kampeska Radio Corp. Dodge City Broadcasting Co. KGY, Inc. (Capitol Park Bldg.) Harold H. Hanseth
KGY	ak	100	ĎP	Olympia, Wash.	KGY, Inc. (Capitol Park Bldg.)
KIEM KPPC	z ak	100 50	DP 9	Pasadana Calif	Pasadena Presbyterian Church
KWEA	z	100	_	Pasadena, Calif. Shreveport, La.	Hello World Broadcasting Corp.
KWEA WALR	ae	100	i	Shreveport, La. Zanesville, Ohio	Hello World Broadcasting Corp. WALR Broadcasting Corp.
WBAX	ae	100	1	Wilkes-Barre, Pa.	John H. Stenger, Jr. (Morris Bldg.
WBBL	ak	100	7S 2	Richmond, Va.	John H. Stenger, Jr. (Morris Bldg. Grace Covenant Pres. Church WCBS, Inc. Clinton R. White
WCBS WCRW	ak ae	100 100	4	Springfield, III. Chicago, III.	Clinton R. White
WEBQ	ae	100	6	Harrisburg, Ill.	Harrisburg Broadcasting Co.
WEDC	z	100	3	Harrisburg, Ill. Chicago, Ill.	Emil Denemark, Inc.
WFAS	ak	100	3	White Plains, N. Y.	Westchester Broadcasting Corp.
WGBB WGCM	ae ae	100 100	3	Gulfport Miss	Harry H. Carman Great Southern Land Co.
WGNY	ac	50	P	Chester Two., N. Y.	Peter Goelet (Orange County)
WHBF	ae	100		White Plains, N. Y. Freeport, N. Y. Gulfport, Miss. Chester Twp., N. Y. Rock Island, Ill.	Rock Island Broadcasting Co
WHBU	aj	100		Anderson, Ind.	Anderson Broadcasting Corp.
WHET WIBU	ak	100	D	Troy, Ala.	Troy Broadcasting Co. Wm. C. Forrest
WIBU WJBI WJBY WJEJ WJW	ae ak	100 100	3	Poynette, Wis. Red Bank, N. J.	Monmouth Broadcasting Co., Inc.
WIBU	ae	100	ĭ	Lewisburg, Pa.	Businell University
WJBY	aeh	100		Gadsden, Ala.	Ingrams Broadcasting Co. A. V. Tidmore WJW, Inc.
WJEJ	aeh	100	D	Hagerstown, Md.	A. V. Tidmore
WKFI	ae ak	100 100	• • • • • •	Akron, Ohio Greenville, Miss.	J. Pat Scully
WMBG	aj	100	7C	Richmond, Va.	Havens & Martin, Inc.
WOCL	ak	50		Jamestown, N. Y.	A. E. Newton
WOMT	ae	100	aΥ	Jamestown, N. Y. Manitowoc, Wis.	Francis Mangin Kadow
WPAW WPRO	ak ak	100 100	a I aY	Providence, R. I. Providence, R. I.	Cherry & Webb Broadcasting Co. Cherry & Webb Broadcasting Co.
WODX	z	100		Thomasville, Ga.	Stevens Luke
WQDX WSBC	z	100	4	Chicago, III.	Stevens Luke WSBC, Inc.
WSEN	ak	100	•••••	Columbus, Ohio Springfield, Tenn. Gastonia, N. C.	Columbus Bdctg. Corp. (Seneca Hotel) 638 Tire & Vulc. Co. (R/C WLW) WSOC, Inc. WTAX, Inc.
WSIX	ae ae	100 100		Gastonia N. C.	WSOC. Inc.
WSOC WTAX	ae	100	<u></u>	Springfield, Ill.	WTAX, Inc.
XEX	z	500		Mexico City, Mexico	Excelsior, Cia Editorial S. A.
1220	111	1 .	245		
<b>1220</b> 1	K1100	сусц	es 245	5.8 meters 📃	
CMHK	z	15	1225	Cruces, Cuba	V. Villaneuva
KFKU	ae	500	а	Lawrence, Kans.	University of Kansas
KTW	z	1000	2S	Seattle, Wash.	First Presbyterian Church
KWSC WCAD WCAE	ae ak	1000 500	2(2) D	Pullman, Wash. Canton, N. Y.	State College of Washington
WCAE	ae	1000	Ř	Pittsburgh, Pa.	St. Lawrence University WCAE, Inc. and Sun-Telegraph
WDAE	ak	1000	С	Tampa, Fla.	WCAE, Inc. and Sun-Telegraph Tampa Daily Times (Tampa Terrace)
WREN	ak	1000	aB	Lawrence, Kans.	Jenny Wren Co.
1220 1	1-:1-	1.	242	0 0	·
<b>1230</b> , 1	K1100	cycle	es 243	3.8 meters 🗀	
CMBY	z	350	1235	Havana, Cuba	Callejas-Estefani
'CMCA	z.	150	1235	Havana, Cuba Havana, Cuba	Manuel Cruz
KFQD KGGM	aj ak	250 250	/ E) · · ·	Anchorage, Alaska	Anchorage Radio Club, Inc.
KGGM	ak ae	1000	N N	Albuquerque, N. M. San Francisco, Calif.	New Mexico Broadcasting Co. Pacific Broadcasting Co.
$\mathbf{WFBM}$	aeh	1000	(.5) N 1C	Indianapolis, Ind.	Indianapolis Power & Light Co.
WNAC	ae	1000	CH	Boston, Mass. South Bend, Ind.	Shepard Broadcasting Service, Inc. South Bend Tribune (WFAM)
WSBT	ak	500	1C	South Bend, Ind.	South Bend Tribune (WFAM)
1240	. •1		244		
1240	kilo	cycle	es 241	.8 meters	
<b>CMAB</b>	kilo	20	es 241	Pinar del Rio, Cuba	Jose Silvera
CMAB KGCU	z ak	20 250	1249 3	Pinar del Rio, Cuba	Jose Silvera Mandan Radio Assn.
<b>CMAB</b>	z	20	1249		

II	NDEX BY F	REQUENCIES AN	D DIAL NUMBERS	
KTFI ak WACO ak WKAQ ae	1000 1 500 1000 1C 1000 1000	Fort Worth, Texas Twin Falls, Idaho Waco, Texas San Juan, P. R. Detroit, Mich. Tampieo, 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	
1250 kiloc	ycles 239	9.9 meters 🗌		]
KFOX ae WAAM ae WCAL ae WDSU ak WGCP ak WLB ak WODA z	1000 2 1000 CT 1000 1(2.5) 1000 2 1000 C 250 1 1000 2 1000 2 1000 2 500	Northfield, Minn. Long Beach, Calif. Newark, N. J. Northfield, Minn. New Orleans, La. Newark, N. J. Minneapolis, Minn. Paterson, N. J. Minneapolis, Minn. Mexico City, Mexico	Carleton College Nichols & Warinner, Inc WAAM, Inc. St. Olaf College Jos. H. Uhalt May Radio Broadcasting Co. University of Minnesota Richard E. O'Dea Minnesota Broadcasting Corp. Eduardo Limon Segui	
1260 kiloc	ycles 238	8.0 meters 🗌		]
CMJI ak KOIL ak KRGV ae KVOA ak KWWG z WLBW ae WNBX ak WTOC ae	5 1000 B 500 1 500 1 500 C(1) 250 C(1) 500 CU	Ciego de Avila, Cuba Council Bluffs, Iowa Harlingen, Texas Tucson, Arizona Brownsville, Texas Erie, Pa. Springfield, Vt. Savannah, Ga.	Gilberto Gessa Lopez Mona Motor Oil Co. KRGV, Inc. (Rio Grande Na. Life Bldg.) Robert M. Riculfi Frank P. Jackson Broadcasters of Pennsylvania, Inc. WNBX Broadcasting Corp. Savannah Broadcasting Co., Inc.	í
1270 kiloc	ycles 236	6.1 meters		]
KVOR ae KWLC ak WASH ak WFBR ae	150 50 100 D2 1000 CT 1000 C 100 D2 500 a 500 R 1000 N 500 a	Havana, Cuba Camaguey, Cuba Decorah, Iowa Seattle, Wash. Colorado Springs, Col. Decorah, Iowa Grand Rapids, Mich. Baltimore, Md. Jackson, Miss. Grand Rapids, Mich.	Domingo Fernandez E. de Ugarriza Chas. W. Greenley Seattle Broadcasting Co. Reynolds Radio Co., Inc. Luther College Kunsky-Trendle Broadcasting Co. Baltimore Radio Show, Inc. Lamar Life Insurance Co. Kunsky-Trendle Broadcasting Corp.	KYCS.
1280 kiloc		1.2 meters 🗌		1300 MTRS.
WCAM ae WCAP ae	1000 (2.5) 500 1 500 1C 1000 C(2.5) 500 N(1) 500 1 500 C	Great Falls, Mont. Camden, N. J. Asbury Park, N. J. Chattanooga, Tenn. Madison, Wis. Trenton, N. J. Dallas, Texas	Buttrey Broadcast, Inc. City of Camden (City Hall Tower) Radio Industries Broadcast Co. WDOD Bdctg. Corp. (Hotel Patten) Badger Broadcasting Co., Inc. Trenton Broadcasting Co. City of Dallás (Hilton Hotel)	230.6 DIAL
1290 kiloc	ycles 232	2.4 meters 🗌		İ
KFUL ak KLCN z KTSA ak 1 WEBC ae 1	20 1000 N 500 1 50 D 1000 1C(2.5) 1000 N(2.5) 1000 C(2.5) 50 D	Cienfuegos, Cuba Salt Lake City, Utah Galveston, Texas Blytheville, Ark. San Antonio, Texas Superior, Wis. Pittsburgh, Pa. Saranac Lake, N. Y.	Oscar Zayas Intermountain Broadcasting Corp. News Publishing Co. (Buccaneer Hotel) C. L. Lintzenich Southwest Broadcast Co. (Plaza Hotel) Head of the Lakes Broadcasting Co. Pittsburgh Radio Supply House Smith & Ms ce	ļ-J
1300 kiloc	-	).6 meters 🗌		TOOT
KFH ae 1 KFJR ag WBBR aej 1 WEVD ae WFAB z 1 WHAZ ae WIOD aeh 1	20 500 3C 1000 1000 C1 500 3 1000 1 500 1 000 1 500 1 000 N	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.	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 Christianity	ON DOTTED LINES

1310	kilo	cycle	es 228	8.9 meters 🗀	
CMJP	z	7.5 100		Moron, Cuba	Cesar Canals Chas. C. Robinson
KCŘJ	ak ak	100 100	D C	Jerome, Arizona	Chas. C. Robinson
KFBK KFGQ	ak	100	7	Sacramento, Calif. Boone, Iowa	Jas. McClatchy Co. Boone Biblical College
KFPL	ck	100		Boone, Iowa Dublin, Texas Greenville, Texas Oklahoma City, Okla	C. C. Baxter
KFPM	ae ak	15 100	(.25)	Greenville, Texas	New Furniture Co-
KFXR KFYO	ak	100	(.25)Z		
KGBX	ae	100		Springfield, Mo.	KGBX, Inc.
KGBX KGCX KGEZ	ak	100 100	(.25)	Springfield, Mo. Wolf Point, Mont. Kalispell, Mont. Kearney, Neb.	KGBX, Inc. First State Bank of Vida Donald C. Treloar Central Nebraska Bdctg. Corp.
KGFW	aj ah	100		Kearney, Neb.	Central Nebraska Bdctg, Corp.
KIFH	z.	100		Juneau, Alaska	
KIT KMED	ak ak	100 100	• • • • • •	Yakima, Wash. Medford, Ore.	Valley Broadcasters, Inc. Mrs. W. J. Virgin KRMD, Inc. (Jefferson Hotel)
KRMD	ak	100		Shreveport, La.	KRMD, Inc. (Jefferson Hotel)
KTSM	z.	100	а	El Paso, Texas	in-State broadcasting Co., Inc.
KXRO WAML	ak z	100 100		Aberdeen, Wash. Laurel, Miss.	KXRO, Inc. (Hotel Morck) Southland Radio Corp.
WBEO WBOW	z	100		Marquette, Mich.	Lake Superior Broadcasting Co.
WBOW	ak	100	• • • • •	Terre Haute, Ind.	Banks of Wabash, Inc. Louis G. Baltimore
WBRE WCLS	z ae	100 100	b	Wilkes-Barre, Pa. Joliet, Ill.	WCLS, Inc.
WDAH	z	100	а	El Paso, Texas Buffalo, N. Y.	Tri-State Broadcasting Co., Inc.
WEBR WEXL	ae ak	100 50	Q(.25)	Buffalo, N. Y.	Howell Broadcasting Station
WFBG	ae	100	3	Royal Oak, Mich. Altoona, Pa.	Royal Oak Broadcasting Co. The Gable Broadcasting Co.
WFDF	ae	100	<u>.</u>	Flint, Mich.	Frank D. Fallain (Union Ind. Bldg.) WGAL, Inc. (Lancaster Newsp. Bldg.
WGAL WGH	ae ae	100 100	5	Lancaster, Pa. Newport News, Va.	WGAL, Inc. (Lancaster Newsp. Bldg.
WHAT	ak	100	4	Philadelphia, Pa.	Hampton Roads Broadcasting Corp. Independence Broadcasting Co.
WIAS	ak	100	7	Ottumwa, Iowa	Iowa Bdctg. Co. (Hotel Ottumwa)
WJAC WKAV	ae ae	100 100	3	Johnstown, Pa. Laconia, N. H.	WJAC, Inc. Laconia Radio Club
WKBB	ae	100	bYZ	Joliet, III.	Laconia Radio Club Richard W. Hoffman
WKBC WLBC	z ak	100 50	6	Birmingham, Ala.	R. B. Broyles Furniture Co.
WMBO	ak	100		Muncie, Ind. Auburn, N. Y.	D. A. Burton—A. J. Marriott WMBO, Inc. (Masonic Temple) New Bedford Bdctg. Co. (N. B. Hotel)
WNBH	ae	100	H(.25)	Auburn, N. Y. New Bedford, Mass.	New Bedford Bdctg. Co. (N. B. Hotel)
WOL WRAW	ae ak	100 100 >	5X	Washington, D. C. Reading, Pa.	American Broadcasting Co. Reading Broadcasting Co.
WROL	ak	100		Knoxville, Tenn.	Reading Broadcasting Co. Stuart Bdctg. Co. (Farragut Hotel)
WSAJ WSJS	ae ae	100 100	ċ	Grove City, Pa. Winston-Salem, N. C	Grove City College . Winston-Salem Journal Co.
WTEL	ae	100	4	Philadelphia, Pa.	Foulkrod Radio Eng. Co., Inc.
WTJS WTRC	ak	100	(.25)	Jackson, Tenn. Elkhart, Ind.	Sun Publishing Co. (Sun Blag.)
XEFB	ak ak	50 100	6 (.1) 1315	Monterrey, N. L., Mex	Elkhart Daily Truth  Ouintanilla y Stevenson
XEI	ak	150		Monterrey, N. L., Mex Morelia, Mexico	. Quintanilla y Stevenson Carlos Gutierrez M.
1320	kilo	cvele	es 22	7.1 meters 🗌	.
CMBF	z	150	1325	Havana, Cuba	Ramon Bardales
CMCY	ak	1000	1325	Havana, Cuba Pueblo, Colo.	M. D. Autran
KGHF KGMB	ak ak	250 250	(.5)	Pueblo, Colo.	C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co.
KID	ae	250	(.5) C	Honolulu, Hawaii Idaho Falls, Idaho	KID Broadcasting Co., Inc.
WADC	ae	1000	<u>Č</u>	Akron, Ohio	Allan T. Simmons
WSMB	ae	500	N	New Orleans, La.	WSMB, Inc.
1330	kilo	cycle	es 22	5.4 meters 🗌	
KGB	ae	1000	CT	San Diego, Calif.	Don Lee Broadcasting System
KMO	ak	250	100	San Diego, Calif. Tacoma, Wash.	KMO, Inc. (Hotel Winthrop)
KSCJ WDRC	ah ae	1000 500	1C(2.5) CH	Sioux City, Iowa Hartford, Conn.	Perkins Bros. Co. WDRC, Inc.
WSAI	ae	500	R(1)	Cincinnati, Ohio	The Crosley Radio Corp.
WTAQ	ae	1000	1C	Eau Claire, Wis.	The Gillette Rubber Co.
1340	kilo	cycle	es 223	3.7 meters 🗀	
KFPY	ae	1000	CT	Spokane, Wash.	Symons Bdctg. Co. (Symons Bldg.)
WCOA	agj	500	ç	Pensacola, Fla.	Pensacola Bdctg. Co. (San Carlos Hot.)
WSPD	ae	1000	C	Toledo, Ohio	Toledo Bdctg. Čo. (Com. Perry Hotel)

INDEX	BY FREQUENCIES AN	D DIAL NUMBERS	
1350 kilocycles	222.1 meters _		
KIDO         ak         1000            KWK         ae         1000         B           WAWZ         ae         250         1           WBNX         ae         250         1a           WCDA         ae         250         1a           WEHC         ae         500         D           WMSG         ae         250         1a	New York City Y Emory, Va.	C. G. Phillips & Frank Hill Thomas Patrick, Inc. (Hotel Chase) Pillar of Fire New York Met. Broadcasting Corp. Italian Educ. Bdctg. Co., Inc. Emory & Henry College New York Met. Broadcasting Corp.	
1360 kilocycles	220.4 meters		
KGER ah 1000 KGIR ak 500 NJ WCSC ae 500	Long Beach, Calif. J Butte, Mont. Charleston, S. C. Syracuse, N. Y. Chicago, Ill. Gary, Ind.	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 Bdctg. Co. (Post-Herald Station) Francisco Hornedo	
1370 kilocycles		<u></u>	
KFBL aj 50 3 KFJZ ae 100 KFJZ ae 100 KGAR ae 100 (.2 KGAR ak 100 KGAR ak 100 KGFG bk 100 2 KGFL zk 100 4 KGKL ak 100 5 KGKL ak 100 5 KONO ak 100 5 KONO ak 100 5 KONO ae 100 KICA z 100 4 KMAC ak 100 5 KONO ae 100 KICA z 100 6 KONO ae 100 KICA z 100 6 WHDAS aeh 100 C WHBD bk 100 WHDAS aeh 100 C WHBD bk 100 WHDF ak 100 WHBD ak 100 WHBD ak 100 WHBD ak 100 WHBD ak 100 WHBD ak 100 WHBD ak 100 WHBD ak 100 WHBB aeh 100 WHBB AEH 100 WHBB AEH 100 WHBB AEH 100 WHBB AEH 100 WHBB AEH 100 WHBB AEH 100 WHBB AEH 100 WHBB AEH 100 WHBB AEH 100 WHBB AEH 100	San Angelo, Texas Clovis, N. Mex. San Antonio, Texas San Antonio, Texas San Antonio, Texas San Antonio, Texas San Antonio, Texas San Antonio, Texas San Antonio, Texas San Antonio, Texas San Antonio, Texas San Antonio, Texas San Antonio, Texas Wash Wash Wash Wash Wash Wash Wash Wa	Aurelio Hernandez Genaro Sebater Enid Radiophone Co. (Oxford Hotel) Leese Bros. University of North Dakota Fort Worth Broadcasters, Inc. George Roy Clough Tucson Motor Service Co. Mitchell Broadcasting Corp. Oklahoma Broadcasting Co., Inc. KGFL, Inc. KGKL, Inc. (St. Angelus Hotel) Southwest Broadcasting Co. Walmac Co., Inc. (Blue Bonnet Stud.) Mission Broadcasting Co. H. H. Hanseth, Inc. (Hall Bldg.) First Cong. Church of Berkeley Iowa Broadcasting Co. KUJ, Inc. (Marcus Whitman Hotel) KVL, Inc. Wilson Duncan Broadcasting Co. Piedmont Broadcasting Corp. Baltimore Broadcasting Corp. Baltimore Broadcasting Corp. Baltimore Broadcasting Corp. Boltimore Broadcasting Corp. Boltimore Broadcasting Corp. Boltimore Broadcasting Corp. WIDAS Bdctg. Sta., Inc. (Elks Hotel) O. T. Griffin & G. F. Bissell F. C. Zieg F. P. Moler Station WHBQ, Inc. (Hotel Claridge) Upper Michigan Broadcasting Co. WIBM, Inc. (Otsega Hotel) James F. Hopkins, Inc. (Curtiss Bldg.) WRAK, Inc. Oglethorpe University Lexington Air Station Lynchburg Broadcasting Corp. F. J. Reynolds Hattiesburg Broadcasting Co. A. J. St. Antoine & E. J. Regan WRAK, Inc. Wilmington Radio Assn., Inc. Wilmington Radio Assn., Inc. WRDO, Inc. (Augusta House) Racine Bdctg. Corp. (Hotel Racine) Seneca Vocational School Jose Onofre Meza	MTRS. 217.3 DIAL
1380 kilocycles	217.3 meters [		EDC.
KOH ak 500 C KQV ak 500 2 WKBH aj 1000 1C WSMK ak 200 2	Pittsburgh, Pa.	Feliciano Isaac McClatchy Newspapers KQV Bdctg, Co. (Investment Bldg.) WKBH, Inc. (Radio Bldg.) Stanley M. Krohn, Jr. Jose A. Berumen	LINES

1390	kilo	cvcl	es 2	15.7 meters 🗌	
	ak	50	1395	Havana, Cuba	Wifredo & Hum. Fontanals Sanchez
€MCH €MCM	z	15	1395	Havana, Cuba	Aurelio Balino
CMDB	z	40	1395	Havana, Cuba	Julio Powers
KLRA	яe	1000	1.C	Little Rock, Ark.	Arkansas Broadcasting Co.
KOY	ae	500	C(1)	Phoenix, Arizona	Nielson Radio & Sporting Goods Co.
KUOA	bk	1000	1 '	Fayetteville, Ark.	Nielson Radio & Sporting Goods Co. Southwestern Hotel Co. (Ft. Smith)
WHK	ae	1000	C(2.5)	Cleveland, Óhio	Radio Air Service Corp. (Higbee Store)
1400	1-:1-	orro1.	oo 2	14.2 meters	
1400			es L		Teteratus Bar Com
KOCW	ae	500 250	(5)	Ogden, Utah	Interstate Bcg. Corp.
WBAA	z ak	500	(.5) 1	Chickasha, Okla. Lafayette, Ind. Brooklyn, N. Y. Brooklyn, N. Y.	J. T. Griffin Purdue University
WBBC	ae	500	2	Brooklyn N. Y.	Brooklyn Broadcasting Corp.
WCGU.	ak	<b>50</b> 0	2	Brooklyn, N. Y.	United States Broadcasting Corp.
WFOX	ak	500	2	Brooklyn, N. Y.	Paramount Broadcasting Co.
WKBF	ak	500	1W	Indianapolis, Ind.	Indianapolis Broadcasting, Inc.
WLTH	ae	500	2	Brooklyn, N. Y.	Voice of Brooklyn, Inc.
		_	_		
1410	kilo	cycl	es 2	12.6 meters	
KFLV	ak	500	4	Rockford, Ill. Amarillo, Texas	Rockford Broadcasters, Inc.
KGRS	ae	1000 500	1 CH	Amarillo, Texas	E. B. Gish
WAAB WBCM	ae	500 500	CH	Boston, Mass.	Bay State Broadcasting Corp.
WDAG	ae ae	1000	C 1	Bay City, Mich. Amarillo, Texas	James E. Davidson
WHBL	ae	500	4	Shehovgan Wis	National Radio & Bdctg. Corp. The Press Publishing Co.
WHIS	ak	250	2	Bluefield, W. Va.	Daily Telegraph
WODX	ea	500	3CU	Sheboygan, Wis. Bluefield, W. Va. Mobile, Ala.	Mobile Broadcasting Corp.
WRBX	ae	250	2	Roanoke, Va.	Richmond Development Corp.
WSFA	ak	500	3C	Montgomery, Ala.	Montgomery Broadcasting Co., Inc.
1420	kilo	cycl	es 2	11.1 meters	
KABC	ak	100	<u>.</u>	San Antonio, Texas	Alamo Bctg. Co., Inc. (Texas Theatre)
KBPS	aj	100	4	Portland, Ore.	Alamo Bctg. Co., Inc. (Texas Theatre) Student Body Benson Polytech. School
KCMC	ak	100		Texarkana, Ark.	Texarkana Gazette & Daily News
KFIZ	ak	100		Fond du Lac, Wis.	Reporter Printing Co.
KGFF	ak	100		Shawnee, Okla. San Francisco, Calif.	KGFF Bdctg. Co. (Aldridge Hotel) Golden Gate Broadcasting Co.
KGGC KGIW	ak	100	i · · · · ·	San Francisco, Calif.	Leonard E. Wilson
KGIX	ak ak	100 100		Trinidad, Colo.	J. M. Heaton
KGKX	Z			Las vegas, Ivevaua	
		100		Lewiston, Idaho	
KICK	_	100 100	Ÿ	Red Oak, Iowa	Sand Point Broadcasting Co.
KICK	z	100	 Y	Red Oak, Iowa Lamar, Colo.	Sand Point Broadcasting Co. Red Oak Radio Corp.
KICK	_	100 100 100 100	1	Las Vegas, Nevada Lewiston, Idaho Red Oak, Iowa Lamar, Colo. Eugene, Ore.	Sand Point Broadcasting Co. Red Oak Radio Corp. Lamar Broadcasting Co.
KICK KIDW KORE KUMA	z ak	100 100	1		Sand Point Broadcasting Co. Red Oak Radio Corp.
KICK KIDW KORE KUMA KWCR	z ak aeh ak ae	100 100 100 100 100	1  B(.25)	Yuma, Arizona Cedar Rapids, Iowa	Sand Point Broadcasting Co. Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtic G. Phillips Dr. Albert H. Schermann Cedar Rapids Broadcast Co.
KICK KIDW KORE KUMA KWCR KXL	z ak aeh ak ae ae	100 100 100 100 100 100	1	Yuma, Arizona Cedar Rapids, Iowa Portland, Ore.	Sand Point Broadcasting Co. Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtic G. Phillips Dr. Albert H. Schermann Cedar Rapids Broadcast Co. KXL Broadcasters (Hotel Multnomah)
KICK KIDW KORE KUMA KWCR KXL WAGM	z ak aeh ak ae ae ae	100 100 100 100 100 100 100	1  B(.25)	Yuma, Arizona Yuma Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine	Sand Point Broadcasting Co. Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curti: G. Phillips Dr. Albert H. Schermann Cedar Rapids Broadcast Co. KXL Broadcasters (Hotel Multnomah) Aroostook Broadcasting Corp.
KICK KIDW KORE KUMA KWCR KXL WAGM WAMC	z ak aeh ak ae ae af ae	100 100 100 100 100 100 100	B(.25)	Yuma, Arizona Yuma Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine	Sand Point Broadcasting Co. Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtic G. Phillips Dr. Albert H. Schermann Cedar Rapids Broadcast Co. KXL Broadcasters (Hotel Multnomah) Aroostook Broadcasting Corp. Raymond C. Hammett (Alabama Hot.
KICK KIDW KORE KUMA KWCR KXL WAGM WAMC WAZL	z ak aeh ak ae ae af ae	100 100 100 100 100 100 100 100	B(.25) 4	Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa.	Sand Point Broadcasting Co. Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtic G. Phillips Dr. Albert H. Schermann Cedar Rapids Broadcast Co. KXL Broadcasters (Hotel Multnomah) Aroostook Broadcasting Corp. Raymond C. Hammett (Alabama Hot. Hazleton Brdcstg, Service, Inc.
KICK KIDW KORE KUMA KWCR KXL WAGM WAMC WAMC WAZL WEHS	z ak aeh ak ae af ae z ak	100 100 100 100 100 100 100 100 100	B(.25)	Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill.	Sand Point Broadcasting Co. Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtic G. Phillips Dr. Albert H. Schermann Cedar Rapids Broadcast Co. KXL Broadcasters (Hotel Multnomah) Aroostook Broadcasting Corp. Raymond C. Hammett (Alabama Hot. Hazleton Brdestg, Service, Inc. WEHS, Inc.
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1440	kilo	cycl	es 20	8.2 meters		]
CMBL CMBN KDFN KLS KXYZ WBIG WCBA WMBD WSAN WTAD	ak ak ae ak ae ah ae z	20 30 500 250 500 500 250 500 250 500	1444 1444 D C(1) a 3C(1) a 3	Havana, Cuba Havana, Cuba Casper, Wyo. Oakland, Calif. Houston, Texas Greensboro, N. C. Allentown, Pa. Peoria, Ill. Allentown, Pa. Quincy, Ill.	Julio C. Hidalgo Armando Romeu Marrero Donald L. Hathaway Warner Bros. Harris County Broadcast Co. No. Carolina Broadcasting Co., Inc. B. Bryan Musselman Peoria Broadcasting Co. Allentown Call Publishing Co., Inc. Illinois Broadcasting Corp.	
1450	kilo	cycle	es 20	6.8 meters		1
KTBS WGAR WHOM WNJ WSAR WTFI 1460	ae ak ae ak aeh ak	1000 500 250 250 250 500 cycl	N B(1.) 1 1	Shreveport, La. Cleveland, Ohio Jersey City, N. J. Newark, N. J. Fall River, Mass. Athens, Ga.  95.4 meters	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.	
KSTP WJSV	ck	10000 10000	N(25) C	St. Paul, Minn. Washington, D. C.	National Battery Broadcasting Co. Old Dominion Broadcasting Co. (Transmitter at Alexandria, Va.)	
1470	kilo	cycl	es 20	4.0 meters		
KGA WLAC	ak ae	5000 5000	B C	Spokane, Wash. Nashville, Tenn.	Northwest Broadcasting System Life & Casualty Insurance Co.	
1480	kilo	cycl	es 20	2.6 meters	; [4];	
CMBK KOMA WKBW	z ak ae	15 5000 5000	1485 C C	Havana, Cuba Oklahoma City, Okla. Buffalo, N. Y.	Alberto Alvarez National Radio Mfg. Co. Buffalo Broadcasting Corp.	
1490	kilo	cycle	es 20	1.2 meters		
WCKY	ae	5000	N	Covington, Ky.	L. B. Wilson, Inc. (Mabley & Carew)	,
1500	kilo	-	es 19	9.9 meters		
CMBR KDB KGFI KGFK KGIZ KGKB KGKB KNOW KPJM KPQ KREG KXO WFDV WHEF WKBZ WKEU WMBQ WMBQ WMBC WMBC WMBC WMBC WMBC WMBC WMBC WMBC	z aajkkkkkajk aakk k aeekkeee aek aeeh ae	40 100 100 100 100 100 100 100 100 100 1	(.25) (.25) (.25) (.25) 1 (.25) 1 (.25)	Havana, Cuba Santa Barbara, Calif. Corpus Christi, Texas Moorhead, Minn. Grant City, Mo. Tyler, Texas Scottsbluff, Neb. Austin, Texas Prescott, Arizona Wenatchee, Wash. Santa Ana, Calif. El Centro, Calif. Rome, Ga. Kosciusko, Miss. Connersville, Ind. Ludington, Mich. LaGrange, Ga. Boston, Mass. Brooklyn, N. Y. Brooklyn, N. Y. Lapeer, Mich. Binghamton, N. Y. Bristol, Tenn. Philadelphia, Pa. Augusta, Ga. Rutland, Vt. Woodside, N. Y. Pittsburgh, Pa.	Tomas Basail Santa Barbara Broadcasters, Ltd. Eagle Broadcasting Co., Inc. Red River Broadcasting Co., Inc. Grant City Park Corp. East Texas Broadcasting Co. Hilliard Co., Inc. KUT Bdctg. Co. (Driskill Hotel) Scott & Sturm Wescoast Broadcasting Co. Voice of Orange Empire, Inc. E. R. Irey and F. M. Bowles Rome Broadcasting Corp. Attala Milling & Produce Co. William O. Knox K. L. Ashbacker Marshall & Malcolm Boston Broadcasting Co. (WRSC) Paul J. Gollhofer Arthur Faske First Methodist Protestant Church Howitt-Wood Radio Co., Inc. Radiophone Bdctg. Station WOPI Wm. Penn Broadcasting Co. Musicove, Inc. (Relays WLW) Philip Weiss Music Co. Long Island Broadcasting Corp. Walker & Downing Radio Corp.	KCYS. 1500 MTRS. 199.9 DIAL
XEFZ	ae	100		Coyoacan, Mexico	Manuel Zetina	

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

Anniston O-21 tr Birmingham O-21	Watts 500 100 100	KQW KREG	Kcys. 1010
Anniston O-21 tr Birmingham O-21	500 100	KQW KREG	1010
Solution   Solution	100	KREG	
Solution   Solution	100		1500
Gadsden O-21 100 WKBC 1310 Stockton J-2 Huntsville N-21 c 100 WBHS 1200 COLORADO Mobile Q-20 500 WODX C 1410 Colored Springs K 11		KDB (	
Huntsville N-21 c 100 WBHS 1200 COLORADO Mobile Q-20 500 WODX C 1410	250	KGDM	1100₽
Mobile Q-20 500 WODX C 1410-	100	KWG (	C 1200~
Mobile Q-20 Soo WODA C 1410 Coloredo Seminero W 11			
Montgomery P-21 500 WSFA C 1410- Colorado Springs K-11	1000	KVOR (	
Troy P-21 rc 100 WHET 1210- Denver K-11	500	KFEL	920
	500 1000	KFXF KLZ (	920~ 2 560~
ALASKA	12500	KOA N	v 830~
Anchorage 250 KFQD 1230 Juneau 100 KIFH 1310 Fort Morgan J-11	500	KPOF	880~
Juneau 100 KIFH 1310 Fort Morgan J-11 Ketchikan 500 KGBU 900 Grand Junction K-9 lc	100 100	KGEW KFXJ	1200 1200~
Ketchikan 500 KGBU 900 Grand Junction K-9 lc Greeley J-11	500	KFKA	880
ARIZONA Lamar L-12 lc	100	KIDW	1420
Jerome M-6 100 KCRJ 1310 Pueblo L-11 Phoenix N-6 500 KOY C 1390 Trinidad L-11	250	KGHF	1320
Phoenix N-6 500 KOY C 1390 Trinidad L-11 500 KTAP N 620 Yuma J-12	100 100	KGIW KGEK	1420 1200-
D	100	KGEK	1200-
Prescott M-6 100 KPJM 1500 CONNECTICUT			
500 KVOA 1260 Bridgeport H-27	250	WICC O	600
Yuma O-5 tl 100 KUMA 1420 Hartford H-27	500	WDRC C	2 1330
	50000	WTIC I	R 1060-
300.00	250	WCAC	600
Blytheville M-19 50 KLCN 1290 Fayetteville M-16 1000 KUOA 1390- DELAWARE			
Fort Smith N-16 100 KFPW 1210 Wilmington J-26	250	WDEL	1120
Hot Springs N-17 10000 KTHS N 1040-II	100	WILM	1420
Little Rock N-17 250 KARK 890-	200		
1000 KGHI 1200 DISTRICT OF C	COLU	IMBIA	
Paragould M-18 100 KBTM 1200 Washington J-26	10000	WJSV C WMAL I	C 1460*
Texarkana O-17 bl 100 KCMC 1420-	250	WMAL I	3 630
CALIFORNIA	500 100	WRC N	√ 950~ 1310°
	100	WOL	1310
Bakersfield L-2 br 100 KERN C 1200 FLORIDA Berkeley J-2 100 KRE 1370 Clearwater B 24			
Beverly Hills M-3 bl 500 KMPC 710- Clearwater R-24	1000	WFLA N	
Burbank M-3 500 KELW 780 Gallesville Cold	5000 1000	WRUF (	
Di Genera II-2	1000	WIOD 1	V 1300
Fresno K-2 500 KMJ C 580	1000	WQAM (WDBO)	560
Glendale M-3 100 KIEV 850 Orlando R-24	250 500	WDBO (	C 580 1340∻
Hollywood M-3 500 KMTR 570 Pensacola Q-21	1000	WCOA WSUN 1	
25000 KNX 1050. St. Petersburg S-24 Long Beach M-3 1000 KFOX C 1250. Tampa R-24	1000	WDAE (	
1000 KGER 1360	100	WMBR	1370-
Los Angeles M-3 1000 KECA N 1430- GEORGIA			
1000 KFAC 1300-II	100	WENC	1420
50000 KFI N 640- 500 KFSG 1120- Athens N-23 bc	500	WTFI	1450
250 KFVD 1000- Atlanta O-22	250	WGST ( WJTL WSB 1	C 890-
1000 KFWB 950-ll	100 5000	WJTL	1370 V 740-
100 KGFJ 1200/ Account 0 22	100	WRDW	1500
500 KPKD 1120 Columbus O-22	100	WRBL	1200
500 KTM 780 LaGrange O-22 1	100	WKEU	1500
Oakland J-1 250 KLS 1440 Macon O-23	500	WMAZ	180
500 KLX 880- Rome N-12	100 500	WFDV WTOC	1500 C 1260~
	100	WQDX	1210
Baseline T 2 100 KERK C 1210			
San Bernardino M-3 100 KFXM 1210- TIA WAII			
San Diego N-3 1000 KFSD N 600-   Honolulu	250	KGMB (	
1000 KGB C 1330- San Francisco J-1 1000 KFRC C 610- IDAHO	1000	KGU I	N 750
500 KEWI 930.II			
100 KGGC 1420    Boise G-5	1000	KIDO	1350
7500 KGO N 790-H Idano Lang C-7	250 100	KEXD	1320 1200
100 KJBS 10704 Nampa 0-13	250	KFXD KSEI	890
	100	KGKX	1420
1000 KTAR 560 Lewiston E-5 rc	E00	KTFI	1240-
	500	KILI	1210

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

ILLINOIS	Watts	Ксуз.	KANSAS	Watts	Ксуз.
Carthage J-18	50	WCAZ 1070-	Abilene K-15 bl	5000	KFBI 1050-
Chicago I-20	10000	KFKX 1020	Coffeyville M-15 tr	500	KGGF 1010-
	10000 500	KYW N 1020- WAAF 920-	Dodge City L-13 Kansas City K-16	100 100	KGNO 1210 WLBF 1420
	25000	WBBM C 770-I	Lawrence K-16	500	KFKU 1220
	1500	WCFL R 970		1000	WREN B 1220~
	100 100	WCRW 1210 WEDC 1210	Manhattan K-15 Topeka K-16	500 1000	KSAC 580 → WIBW C 580 →
	50000	WENR N 870-	Wichita L-15	1000	WIBW C 580∞ KFH C 1300∞
	500	WGES 1360			
	25000 1000	WGN C 720° WIBO 560-	KENTUCKY		
	20000	WJJD 1130.	Covington K-22	5000	WCKY N 1490-
	50000	WLS N 870	Hopkinsville M-20	1000 25000	WFIW C 940° WHAS C 820°
	5000 5000	WMAQ N 670- WMBI 1080-	Louisville L-21	100	WHAS C 820- WLAP 1200-
	500	WPCC 560-	Paducah M-19	100	WPAD 1420-
Ciarra I 20	100	WSBC 1210			
Cicero I-20	100 100	WEHS 1420- WHFC 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 Joliet I-19	100 100	WEBQ 1210- WCLS 1310	l	1000 100	WDSU C 1250* WJBO 1420
_	100	WKBB 1310 I	1	100	WJBW 1200 <sub>m</sub>
La Salle J-19	100	WJBC 1200 WMBD C 1440-	Į	500	WSMB N 1320-
Peoria J-19 Quincy K-18	500 500	WMBD C 1440- WTAD 1440	Shreveport P-17	10000 100	WWL 850 a KRMD 1310 a
Rockford I-19	500	KFLV 1410-	Ginevepore 1-17	1000	KTBS N 1450-
Rock Island I-18	100	WHBF 1210	l	100	KWEA 1210
Springfield K-19	100 100	WCBS 1210- WTAX 1210-	1	10000	KWKH 850
Tuscola K-20	100	WDZ 1070	MAINE		
Urbana J-20	250	WILL 890-	Augusta F-28	100	WRDO 1370
Zion I-20	5000	WCBD . 1080-	Bangor F-29	100	WABI 1200
		1		500	WLBZ C 620
INDIANA			Portland F-28 Presque Isle D-29 lc	1000 100	WCSH R 940 WAGM 1420
	100	WAIDII 1010	Tresque Isie D-29 ic	100	WAGNI 1420
Anderson J-21 Connersville K-21	100 100	WHBU 1210 WKBV 1500	MARYLAND		
Elkhart I-21 bc	50	WTRC 1310	Baltimore J-26	10000	WBAL B 1060*
Evansville L-20	500	WGBF 630-	1	250	WCAO C 600 WCBM 1370
Fort Wayne J-21	100 10000	WGL C 1370 WOWO C 1160	1	100 500	WCBM 1370 WFBR R 1270=
Gary I-20	1000	WIKS 1360-1	Cumberland J-25	100	WTBO 1420
Hammond I-20 bc	100 1000	WWAE 1200 WFBM C 1230	Hagerstown J-25 rc	100	WJEJ 1210
Indianapolis J-21	500	WFBM C 1230- WKBF 1400-	MASSACHUSE	TTS	
Lafayette J-20	500	WBAA 1400	Babson Park G-28	500	WBSO 920
Muncie J-21 South Bend I-20	50 100	WLBC 1310 WFAM C 1200	Boston G-28	500	WAAB C 1410
Bodell Bella 1-20	500	WSBT C 1230		25000	WBZ B 990-
Terre Haute K-20	100	WBOW 1310	l	1000 1000	WEEI R 590 WHDH 830
				100	WLOE 1500
				1000	WLOE 1500 WNAC C 1230
IOWA			Fall River H-28	250 100	WSAR 1450 WLEY 1370
Ames I-17	5000	WOI 640	Lexington G-28 New Bedford H-28	100	WNBH 1310
Boone I-17 Cedar Rapids I-18	100 100	KFGQ 1310. KWCR B 1420	Springfield H-27	1000	WBZA B 990-
Council Bluffs J-16	1000	KOIL B 1260	Wassaster G 28	100 100	WMAS 1420
Davenport I-18	5000	WOC R 1000*	Worcester G-28	250	WORC C 1200 WTAG R 580
Decorah H-18	100	KGCA 1270		200	2110 11 000
Des Moines I-17	100 100	KWLC 1270 KSO B 1370	MICHIGAN		
	5000	WHO R 1000-	Battle Creek I-21	_50	WELL 1420
Iowa City I-18	500	WSUI 880- KFJB 1200-	Bay City H-22	500	WBCM C 1410
Marshalltown I-17 Ottumwa I-17	100 100	KFJB 1200- WIAS 1310	Calumet E-19 Detroit H-22	100 100	WHDF 1370 WJBK 1370
Ottumwa J-17 Red Oak J-16	100	KICK 1420	20001011-22	10000	WJR B 750-
Shenandoah J-16	500	KFNF 890-		100	WMBC 1420
Sioux City I-15	500 1000	KMA 930- KSCJ C 1330-		1000 1000	WWJ R 920- WXYZ 1240
Waterloo I-17	500	WMT C 600-	East Lansing H-21	1000	WKAR 1040
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Columbia: C. National: Red, R; Blue, B; Both, N.

	Watts		Kcys.	NEVADA	****		17
Flint H-22	100	WFDF	1310		Watts	WOW	Kcys.
Grand Rapids H-21	500	WASH	1270-	Las Vegas L-5	100	KGIX KOH	1420 C 1380=
Ciuna Rupido II 21	500	WOOD	1310 1270- 1270	Reno I-3	500	KOH	C 1360#
Ironwood F-18 rc	100	WJMS	1420	ł			
Jackson I-21	100	WIBM	1370	I NEW HAMPSH	IRE		
Kalamazoo I-21 tl	1000	WKZO	590	Laconia G-28 lc	100	WKAV	1310
Lapeer H-22	100	WMPC	1500-	Manchester G-28	500		C 1430
Ludington H-20	- 100	WKBZ	1500	Portsmouth G-28 tc	250	WHEB	740
Marquette F-19	100 50	WBEO WEXL	1310 1310-	1 0000000000000000000000000000000000000			
Royal Oak H-22	90	WEAL	1310	NEW JERSEY			
MINNESOTA				Asbury Park I-27	500	WCAP	C 1280
			4000	Atlantic City J-27	5000	WPG	C 1280 C 1100-
Fergus Falls F-15	100	KGDE	1200-	Camden I-26	500	WCAM	1280
Minneapolis G-17	50000	wcco c		Jersey City I-27	300	WAAT	940
	1000 1000	WDGY WLB	1180-	Jan 303 0103 1 21	250	WHOM	1450
	1000	WRHM	1250- 1250-	Newark I-27	1000	WAAM	1250-
Moorhead F-15	100	KGFK	1500		250	WGCP	1250
Northfield G-17	1000	KFMX	1250		250	WNJ	1450
Not timele 3-17	1000	WCAL	1250=		5000	WOR	710-
St. Paul G-17	10000	KSTP N		Paterson I-27	1000	WODA	1250 '
				Red Bank I-27	100	WJBI	1210
MISSISSIPPI				Trenton I-26	500	WOAX	1280
	100	WEI	1210	Zarephath I-27	250	WAWZ	1350-
Greenville O-18	100 100	WKFI	1210- 1210-				
Gulfport Q-19	100	WGCM WPFB	1370	NEW MEXICO			
Hattiesburg Q-19 Jackson P-19 Kosciusko O-19 bc	1000	WJDX N		Albuquerque N-7	250	KGGM	1230-
Kosciusko O-19 bc	100	WHEF	1500	inbuducidae i	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			- 1		500	WOKO	C 1430
Cp. Girardeau L-19	100	KFVS	1210	Albany G-27 bl Auburn H-25	100	WOKO WMBO	1310
Columbia K-17	500	KFRU	630-	Binghamton H-26	100	WNBF	1500
Grant City J-16	100	KGIZ	1500∞	Brooklyn I-27	500	WBBC	1400-
Grant City J-16 Jefferson City L-17	500	wos	630	DIOORIJII I-27	1000	WBBR	1300
Joplin M-16	100	WMBH	1420*		500	WCGU	1400
Kansas City K-16	1000	KMBC C			500	WFOX	1400
	100 1000	KWKC WDAF F	1370 610		500	WLTH	1400
	500	WHB	860		100	WMBQ	1500
	1000	woo	1300	D65-1- TT 24	100	WMIL	1500
St. Joseph K-16	2500	KFEO	680*	Buffalo H-24	1000 100	WBEN I	R 900- 1310
St. Joseph K-16 St. Louis L-18	500	KFUŎ	550		1000	WGR	C 550-
DU 10010 - 10	100	KFWF	1200		5000	WKBW	C 1480~
	50000	KMOX C	1090-		50	WSVS	1370
	500	KSD F		Canton F-26	500	WCAD	1220
	1000	KWK P		Chester Twp.	50	WGNY	1210-
	1000	WEW	760	Elmira H-25 c	1000	WESG	1040
0 1 6 11 14 17	100	WIL	1200-	Freeport I-27	100	WGBB	1210
Springfield M-17	100	KGBX	1310-	Hudson Falls G-27	50	WGLC	1370
MONTERANIA				Jamestown H-24	50	WOCL	1210
MONTANA			h	New York City I-27	50000	WABC (	C 860-
Billings F-9	1000	KGHL N			250 50000	WBOQ	1350 860
Butte F-7	500	KGIR N			250	WCDA	1350
Great Falls E-8	1000	KFBB	1280-		50000		R 660 =
Kalispell D-7	100 100	KGEZ KGVO	1310 1200		500	WEVD	1300
Missoula E-7	100	KGCX	1310-		1000	WFAB	1300
Wolf Point E-11	100	KGCX	1310		500	WINS	1180
NEBRASKA					250	WHN	1010
		*** ** **			50000	WJZ I	B 760-
Clay Center J-14	1000	KMMJ	740-		5000	WLWL	1100-
Kearney J-14 bc Lincoln J-15	100	KGFW	1310- 770-		500	WMCA	570
Lincoln J-15	5000	KFAB C	7704		250	WMSG	1350
	100	KFOR WCAJ	1210 590-		500 1000	WNYC WOV	570 1130
Norfolk I-15	500 1000	WJAG	1060-		250	WPAP	1130 1010
North Platte J-13	500	KGNF	1430-		500	WPCH	810
Omaha J-15	500	WAAW	660-		250	WOAO	1010
	1000	wow R			250	WRNY	1010-
Scottsbluff I-11	100	KGKY	1500	Rochester G-25	5000	WHAM I	B 1150
York J-15	500	KGBZ	930-		500	WHEC	C 1430
				· · · · · · · · · · · · · · · · · · ·			

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

	Watts	и	Ссуз.	1	Watts		Kcys.
Saranac Lake F-26	50		1290	Portland E-3	500	KALE	C 1300
Schenectady G-27	50000	WGY R	790-	Fortiand 6-3	5000	KEX	N 1180-
Syracuse G-25	1000	WFBL C	1360		100	KBPS	1420
Dyracuse G-20	250	WMAC	570		500	KFIR	1300
	250	WSYR B	570	<b>l</b> .	1000	KFJR KGW	N 620-
Troy G-27	500	WHAZ	1300 l	ľ	1000	KOIN	C 940
Tupper Lake F-26	100		1420		500	KWJJ	1060
Utica G-26	100		1200		100	KXL	1420
Woodside I-27	100		1500				
White Plains H-27 bl	100	WFAS	1210				
			- 1	PENNSYLVAN	ΙA		
			- 1	Allentown I-26	250	WCBA	1440
NORTH CARO	LINA		- 1	1	250	WSAN	1440
Asheville M-23	1000	WWNC N	570	Altoona I-25	100	WFBG	1310
Charlotte M-24	25000	WBT C	1080-	Carbondale H-26	10	WNBW	1200
Gastonia M-24	100		1210-	Erie H-24	100	WERE	1420-
Greensboro M-24	500		1440		500		C 1260
Raleigh M-25	1000	WPTF N	680-	Glenside I-26 rc	25	WIBG	930
Wilmington N-26	100	WRAM	680- 1370-	Grove City I-24	100	WSAJ	1310
Winston-Salem M-24	100	WSJS C	1310	Harrisburg I-25	500	WBAK	1430
***************************************				1	100	WCOD	1200
					500	WHP	C 1430 -
NORTH DAKO	TA		- 1	Hazleton I-26 lc	100	WAZL	1420
			1	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 940	1	100	WKJC	1200
Fargo F-15	1000	WDAY N	.9407	Lewisburg I-26	100	WJBU	1210
Grand Forks E-15	100		1370	Philadelphia I-26	50000		C 1170-
Mandan F-13	250	KGCU	1240-	]	100	WDAS	1370
Minot E-13	250	KLPM	1240	1	500	WFI 1	R 560
			- 1		100	WHAT	1310
оню			- 1		500		C 610
				l	500		R 560
Akron I-23	1000	WADC C	1320- 1210-	1	100	WPEN '	1500
	100	WJW	1210-		250	WRAX	1020·
Canton I-23	10		1200	Discolusion I 24	100 50000	WTEL KDKA	1310
Cincinnati K-22	100		1200-	Pittsburgh J-24			B 980~
	1000	WKRC C	550-	ļ	500 1000	KQV WCAE I	1380∙ R 1220∞
	50000	WLW N	700-		1000	WLAE	R 1220 == C 1290 ==
C111 T 22	500	WSAI R	1330-		100	WJAS WWSW	1500-
Cleveland I-23	500		1450-	Reading I-26	1000	WEEU	830
	1000 500	WHK C	1390-	Iteaching 1-20	100	WRAW	1310
	50000	WJAY WTAM R	610- 1070-	Scranton H-26	250	WGBI	880
Columbus J-22	500	WAIU	640-	20141101111120	250	WOAN	880-
Columbus J-22	500	WCAH C	1430	Washington J-24	100	WNBO	1200-
	1000	WEAO	1430- 570-	Wilkes-Barre I-26	100	WBAX	1210-
	100	WSEN	1210		100	WBRE	1310 <sub>*</sub>
Dayton J-22	200	WSMK	1380-	Williamsport I-25	100	WRAK	1370
Mount Orab K-22	100		1370	_	100	WJEQ	1370
Toledo I-22	1000		1340	York J-25 tr	1000	WORK	1000-
Youngstown I-23	500	WSPD C I	570				
Zanesville J-23	100		1210-				
				PHILIPPINES			
0777 4770151				Cebu	500	KZRC	937.5
OKLAHOMA			l	Manila	1000	KZKA	1110
Chickasha N-14	250	KOCW	1400	141011110	50000	KZRM	618.5
Elk City N-13	100		1210-		50000	I CE I CIVI	010.3
Enid M-14	100		1370-	PORTO RICO			
Norman N-15	500	WNAD	1010	FOR TO KICO			
Oklahoma N-15	100	KFXR	1010- 1310-	San Juan W-34	1000	WKAO	1240-
	100	KGFG	1370	_		•	
	5000		1480-				
	1000	WKY N	900	RHODE ISLAN	ID		
Ponca City M-15	100		1200-		_	WEART 4	C 700
Shawnee N-15	100		1420-	Providence H-28	250		C 780
Tulsa M-15	5000		1140-		250	WJAR I WPAW	R 890
- WAGES 114-10	5000	21,00 21	-120		100	WPAW	1210
000001					100	WPRO	1210-
OREGON				00117711 0170			
Corvallis E-2	1000	KOAC	550	SOUTH CARO	LINA		
Eugene F-2	100	KORE 1	1420	Charleston O-25	500	WCSC	1360=
Klamath Falls G-3 c	100	KFJI i	1210	Columbia N-24	500	WIS 1	N 1010-
Marshfield F-1	100	KOOS i	1370 H	Greenville N-23 to	100	WFBC	1200
Medford G-2	100		1310	Spartanburg N-23	100	WSPA	1420

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

SOUTH DAKO	TAWatts Kcy	VIRGINIA	Watts Kcys.
Brookings H-15	1000 KFDY 55		1000 NAA 690
Huron H-14	100 KGDY 120	Danville L-25	100 WBTM 1370
Mitchell H-14	100 KGDA 137	)    Emory L-23	500 WEHC 1350 100 WLVA 1370
Pierre G-13 Rapid City H-12 Sioux Falls H-15	200 KGFX 63		100 WLVA 1370
Rapid City H-12	100 WCAT 120	Newport News L-26	100 WGH 1310
Sioux Falls H-15	1000 KSOO 111		500 WTAR C 780
Vermillion I-15 Watertown G-15	500 KUSD 89 100 KGCR 121		100 WPHR 1200 500 WPOR 780
Yankton 1-15	1000 WNAX C 57		100 WBBL 1210
rumton 1-10	1000 111121 0 0	Tacimione 10-20	100 WMBG C 1210
		il	5000 WRVA N 1110-
TENNESSEE		Roanoke L-24	250 WDBJ C 930
		.	250 WRBX 1410
Bristol L-23	100 WOP1 150		-
Chattanooga N-21 Jackson M-19 br	1000 WDOD C 128 100 WTJS 131	에 WASHINGTON	4
Knoxville M-22	100 WTJS 131 1000 WNOX C 56		100 KXRO 1310
Terror vine 1vi-22	100 WROL 131	Bellingham C-3	100 KVOS 1200
Memphis N-19	100 WHBQ 137	All Everett C-3	50 KFBL 1370
	500 WMC N 78	Olympia D-3 tl Pullman E-5	100 KGY 1210 1000 KWSC 1220
	500 WNBR 143		1000 KWSC 1220
	500 WREC C 60 5000 WLAC C 142		5000 KJR N 970- 1000 KOL C 1270
Nashville M-21	5000 WLAC C 142		1000 KOMO N 920
Springfield M-20	50000 WSM N 68 100 WSIX 121		100 KPCB 650~
Springheid W-20	100 WSIA 12	<b>"</b> ]	100 KRSC 1120~
		ll .	1000 KTW 1220 100 KVL 1370-
TEXAS		1	100 KVL 1370-
	1000 ECDS 14	d	250 KXA 760
Ama <del>ri</del> llo N-12	1000 KGRS 14 1000 WDAG 14	Spokane D-5	100 KFIO 1120 1000 KFPY C 1340
Austin Q-14	100 WDAG 14		1000 KFPY C 1340 5000 KGA B 1470
Beaumont R-17	500 KFDM 50	ń-II	1000 KHQ N 590-
Brownsville U-15	500 KWWG 126	Tacoma D-3	250 KMÖ 1330
College Sta. O-15	500 WTAW 112	0-1	500 KV1 C 570
Corpus Christi S-14	100 KGFI 150	Walla Walla E-5	100 KUJ 1370
Dallas P-15	10000 KRLD C 104	Wenatchee D-4	100 KPQ 1500
	50000 WFAA N 80 500 WRR C 128	Yakima D-4	100 KIT 1310
Dublin P-14		WEST VIRGIN	TA
El Paso P-9	100 KFPL 131 100 KTSM 131	WEST VINGIN	
	100 WDAH 131	n II Diueneia 1,-24	250 WHIS 1410
Fort Worth P-15	100 KFJZ 132		250 WOBU 580 250 WMMN 890~
	1000 KTAT 124		250 WININ 890 250 WSAZ 580
Columnton D 16	50000 WBAP N 80	"II TTM . 1' T 34	5000 WWVA C 1160-
Galveston R-16	100 KFLX 137 500 KFUL 129		0000 11 11 11 10 1100
Greenville O-15	15 KFPM 131	WISCONSIN	
Harlingen T-14	500 KRGV 126	(1)	1000 WTAO C 1330
Houston R-16			1000 WTAQ C 1330° 100 KFIZ 1420
	500 KTRH C 112	Green Bay G-19	100 WHBY 1200
	500 KXYZ 144	II Ianesville I-19	100 WCLO 1200-
Lubbock O-12 tr	100 KFYO 131	씨 La Crosse H-18	1000 WKBH C 1380-
San Angelo Q-13 San Antonio R-14	100 KGKL 137	Madison H-19	1000 WHA 940-
San Antonio K-14	100 KABC 142 100 KMAC 132	A II	500 WIBA N 1280
	100 KONO 132		100 WOMT 1210
	1000 KTSA C 129	Milwaukee H-19	250 WHAD C 1120 250 WISN C 1120
	50000 WOAI N 119		250 WISN C 1120 1000 WTMJ N 620-
Tyler P-16 rc	100 KGKB 150	à II	1000 WIM) N 620-
Waco Q-15	1000 WACO C 124	Racine I-20	100 WRJN 1370-
Wichita Falls O-14	250 KGKO 52	II Shehovgan H-20	500 WHBL 1410
		Stevens Point G-19	2000 WLBL 900₩
UTAH		Superior F-17	1000 WEBC N 1290-
	500 Y/Y 0		
Ogden I-7	500 KLO 140 1000 KDYL N 129	Ӈ WYOMING	
Salt Lake City I-7	1000 KDYL N 129		500 KDFN 1440-
	50000 KSL C 113	,	
VEDMONT		CAN	NADA
VERMONT		17	NADA
Burlington F-27	100 WCAX 120		
Rutland G-27	100 WSYB 150 100 WQDM 137	/ II	EOO CEAC COA
St. Albans F-27	100 WQDM 137 250 WNBX 126	Calgary B-7	500 CFAC 690 10000 CFCN 985-
Springfield G-27 Waterbury F-27 c	500 WDEV 55	{	500 CJCJ 690
Traction Daty 1 - D/ C	550 HDD1, 80	<b>1</b>	500 650

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

	Watts		Kcy	s.		Watts	1	Ксуз.
Edmonton A-8	250	CHMA	58		Quebec D-27	100	CHRC	645
Edinoliton A-0	500	CJCA		<u> 15-1</u>	Quebee D-M	100	CKCI	645
	500	CJCA CKUA	58			100	CKCV	880
Lethbridge C-8	100	CJOC	112	20 II				
Red Deer A-8	1000	CKLC	84	ال ۱۳	SASKATCHEW			
BRITISH COL	UMBI	A		- 11	Canora B-13 t1	15	10-BU	1200
Chilliwack B-3	100	CHWK	66		Fleming C-13 Moose Jaw C-11	1000	CJRW CJRM	665-
Kamloops B-5	100	CJFC CKOV	112	20	Moose Jaw C-11	500 25	10-AB	665 1200-
Kelowna C-6 tl	100	10-AT	120 115		Prince Albert A-11 rc	25	10-BI	1200∞
Trail C-6 c Vancouver B-3	25 100	CHLS	73		Regina C-12	500	CHWC	960-
vancouver B-3	500	CIOR	121		0.4	500	CKCK	960
	100	CJOR CKCD	73	30	Saskatoon B-11	500 500	CFQC CJGX	910
	50	CKFC	73	30	Yorkton B-13	, 500	CJGA	630
	100	CKMO		30-	NEWFOU	TAIL	AND	
	100 <b>5</b> 00	CKWX CNRV	73 103	30 II			VOAS	010
Victoria C-3	500	CFCT	63		St. Johns A-35	200 500	VOGY	810 860
				1		100	VONA	950
MANITOBA				- 11		500	VONF	1195
Brandon D-14	500	CKX	93			750	VOWR	<b>75</b> 0
Winnipeg D-15	5000	CKY	78	80-	Wabana A-35	400	VOGT	89 <b>3</b>
NEW BRUNSW	TOK				OENTED AT	43.40	EDIO4	
		CENID	121	ا ۱	CENTRAL	AIVL	ERICA	
Fredericton D-29	100 700	CFNB CNRA	63		COSTA RICA			
Moncton D-30 St. John D-30	500	CFBO	89		San Jose FF-23	50	TICR	911
St. John D-00	000		•	.	Sail Jose 11 -20	-	11010	711
NOVA SCOTIA					SALVADOR			
Glace Bay C-32	2000	VAS	68	85 l	Salvador CC-19 br	500	RUS	664
Halifax E-31	500	CHNS	81	15	Salvador CC-19 br	300	ROS	004
	500	CNRH	81		ME	XICO	•	
Sydney C-32	100	CJCB CKIC	88				•	
Wolfville D-31	50	CKIC	101	ון יי	AGUASCALIEN			
ONTARIO				- 1	Aguascalientes W-11 b	c 350	XFC	805
Brantford H-23 tr	15	10-BQ	120	nn l	DATA CALIEOT	33.TT 4		
Chatham H-22	250	CFCO	101	101	BAJA CALIFOR			
Cobalt E-23	100	CKMC	121	10 l	Tiajuana N-3 bc	300	XEFD	1020
Ft. William E-19 bl	100	CKPR		90	CHIHUAHUA			
Hamilton H-24	50	CHML		80		100	XIDD1	1000
Vingeton C-25	1000 50	CKOC CFRC		35   30	Chihuahua R-9	100 250	XEFI	1000 915
Kingston G-25 London H-23	5000	CIGC	<b>5</b> 9	9 <b>5</b>	Juarez P-9	5000	XFF XEAN XEFV	750 <del>-</del>
North Bay F-23 c Ottawa F-25	100	CFCH	93	30	Junio 1 - 3	50	XEFV	1370
Ottawa F-25	100	CKCO		90 I		100	XEJ	1000
D E 25	500 100	CNRO CFLC		00 15	COAHUILÁ			
Prescott F-25 Preston H-23	100	CKPC	88	80-	Piedras Negras S-12 tr	00000	XEPN	585 ∞
St. Catherines H-24 tl		CKTB	63	35 I	Saltillo, Coah, U-12	10	XEPN XEL	1000
Stratford H-23 tc	15	10-AK	120	00	Saltillo, Coah. U-12 Torreon U-11 tl	125	XETB	1380
Toronto G-24	500	CFCA	117		Villa Acuna R-12 c	<b>75</b> 000	XER-XEF	735-
•	10000 5000	CFRB CHNC		90-1 40	D. F.			
	500 500	CKCL		80 I	Coyoacan Y-13	100	XEFZ	1500
	5000	CKGW	N 84	40-	Mexico City Y-13	1000	XEB	1030
	500	CKNC	. 9€	60∗		500	XEFA	1250
	5000	CPR Y	84	40 I		250	XEFH	1360
Waterloo G-23	100	CKCR		45		250 100	XEG XEK	10 <b>75</b> 990
Windsor I-22 to	5000	CKOK 10-BP	C 54	40-		1000	XEN	711
Wingham G-23	25	IU-DP	11:	"		5000	XEFO	940
PRINCE EDWA	RD I	SLAND	)	ı		1000	XEP	<b>780</b>
Charlottestown C-31	500	CFCY	58	80 <b> </b>		250	XETA	1140
	100	CHCK	96	60 l		1000	XETR	610
Summerside C-31	100	CHGS	112	20		500 5000	XETW	830 910 <del></del>
OUEBEC				- 1		500	XEW	1210
	500	CFCF	N 103	30 l		2000	XFG	638
Montreal E-26	100	CHCH	120	00 I		1000	XFI	818
	100	CHLP	120	ōō l		5000	XFO	940
	5000	CHYC	73	30 I	T. 1 V 12	500	XFX	860
	5000	CKAC	C 7	30	Toluca Y-12	50	XEC	1000
				- 1				

HIDALGO	Wat	ts	Kcys.		Watt	9	Kcys.
Pachuca Y-13 rc	100	XETU	890	Guantanamo X-28 to	20	CMKJ	1300
JALISCO				Havana W-23	1000	CMAF	680
Guadalajara, Ja. X-10	100	XEA	1000		150 150		965
, , , , , , , , , , , , , , , , , , , ,	500		1155		150		1270 965
MICHOACAN					150	CMBF	1325
Morelia, Mich. Y-12	125	XEI	1310		225		1070
NEUVO LEON				ſ	150 15	CMBJ CMBK	1140 1485
	100				20		1444
Monterrey, N. L. U-13	100 100	XEFB XEFJ	1315 1000	Į	30		1444
	250	XEH	1132	1	40 150	CMBR CMBS	1500
	500	XET	690°	1	150	CMBW	780 925
PUEBLA				1	350	CMBY	1235
Puebla Z-13	100	XETH	840	Į.	150	CMBZ	1010
	100	212111	040		500 150	CMC CMCA	840- 1235
QUERETARO				ĺ	150	CMCB	1070
Queretaro X-12 br	40	XEFS	1000		250	CMCD	1140
TANKATH IDAG					250	CMCF	890
TAMAULIPAS	-0000	WEED.			50 250	CMCH CMCJ	1395 1185
Matamoros U-14 tr 18 N. Laredo S-13	50000 100	XETM XEFE	845 1000		15	CMCM	1395
1	50000	XENT	1115		250	CMCN	925
	10000	XEAW	965-		1000 150	CMCQ CMCR	780 1375
Tampico, Tams. W-14	70	XEFW	1240		150	CMCU	630
VERA CRUZ	250	XES	1055~		150	CMCW	965
	100	NETTO.			150	CMCX	1010
Jalapa Y-14	100 500	XETC XFB	1000 840		1000 40	CMCY CMDB	1325- 1395
Vera Cruz, Ver. Z-14	500	XETF	630		150	CMDD	588
	100	XEU	1010		250	CMDE	925
YUCATAN					3150 250	CMK	<b>73</b> 0
Merida, Yuc. X-19	10	XEFC	1050		1400	CMQ CMW	630 585
	105	XEY	<b>546.</b> 8		500	CMX	890
WEST 1	IND.	IES		Matanzas W-24	30 30	CMGB	1205
CUBA	12		- 1		100	CMGC CMGF	820 98 <b>7</b>
	250	CMIID	050		15	CMGH	1040
Caibarien W-25 Camaguey W-26	250 150	CMHD CMJC	950 1382	Moron	7.5	CMJP	1310
Calliaguey 11-20	50	CMJE CMJF	1175	Pinar del Rio W-22 Santa Clara W-25	20 30	CMAB CMHI	12 <b>49</b> 1030
	200	CMJF	930	Santiago X-28	150	CMKC	1034
	50 300	CMJG	1050 790	Tuinucu W-25 rc	250	CMHC	790
	50	CMJK CMJL	960	DOMINICAN R	EPUE	BLIC	
	50	CMJN	1270	Santo Domingo X-31		HIX	630
Cardenas W-24	30 50	CMGE	1375		1000	шх	030
Ciego de Avila W-26	50 5	CMJH CMJI	1150 1260	HAITI			
	15	CMJO	1110	Port au Prince X-30	1000	HHK	920
Cienfuegos W-25	40	CMHJ	1125				
Colon W-24	20	CMHL	1290	SOUTH A	AME]	RICA	
Cruces	100 15	CMGA CMHK	834 1225	Caracas Venz. DD-31	5000	YV1BC	960
			-220	Baoata Col	2000	HJN	380-

Map Key: For locating cities not shown on the RADEX Map of North America, use the small letters following the square 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, c 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	5:00	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

O	10 HIDER DI	CHILL	LETTERS MILE SMICE	11111	111.112
CFAC	690 Calgary, Alta., MST.	CJRW	665 Fleming, Sask., MST.	CMCD	1140 Havana, Cuba, EST.
	7:30-9 a.m.; 11:30 a.m1:30 p. m.; 4:30-6 p.m.	CKAC	7:30-10 p.m. 730 Montreal, Que., EST.	CMCF	Noon-3 p.m.; 8 p.mmid. 890 Havana, Cuba, EST.
CFBO CFCA	890 St. John, N. B. 1120 Toronto, Ont., EST.	CKCD	7:30 a.mmid. 730 Vancouver, B.C.	CMCH	5-8 p.m. 1395 Havana, Cuba, EST.
CFCF	7:15-noon; 1:00 p.m11:30 1030 Montreal, Que., EST.	CKCI	645 Quebec, Que., EST. 1-1:30 p.m.	CMCJ	5-9 p.m. 1185 Havana, Cuba.
	8 a.mmid.	CKCK	960 Regina, Sask., MST.	CMCM	1395 Havana, Cuba.
CFCH	930 North Bay, Ont., EST. Noon-1 p.m.; 5-8.	CKCL	9-10 a.m.; 11 a.mnoon; 1-3:30, 580 Toronto, Ont., EST.	CMCQ	780 Havana, Cuba.
CFCN	985 Calgary, Alta., MST. 7:30 a.m1:30 p.m.	CKCO	8:30-10 a.m.; 11:45 a.m11 p.m. 890 Ottawa, Ont.	CMCR CMCU	1375 Havana, Cuba. 630 Havana, Cuba.
CFCO	1010 Chatham, Ont., EST.	CKCR	645 Waterloo, Ont., EST. 10 a.m1:15 p.m.; 4-7:30 p.m.	CMCW	965 Havana, Cuba, EST.
CFCT	Silent. 630 Victoria, B. C., PST.	CKCV	880 Quebec, Que., EST.	CMCX	6 p.mmid. 1010 Havana, Cuba.
	8:30 a.m12:30 p.m.; 6-8 p.m.; 10-11 p.m.	CKFC	Noon-2 p.m.; 6:30-7:30 730 Vancouver, B. C.	CMCY	1325 Havana, Cuba, EST. 8:30-10:30 p.m.
CFCY	580 Charlottetown, P. E. I. AST.	CKGW	Silent.	CM DB CM DD	1395 Havana, Cuba 588 Havana, Cuba.
05.10	11:30 a.mnoon; 4:30-8 p.m.		6:45 a.mmid.	CMDE	925 Havana, Cuba.
CFJC	1120 Kamloops, B. C., <i>PST</i> . 7:30-9:30 a.m.; noon-2 p.m.;	CKIC	1010 Wolfville, N. S., AST. 7:30-8:30 a.m.; 12:15-1:15 p.m.;	CMGA CMGB	1205 Matanzas, Cuba.
CFLC	5:30-7 p.m. 915 Prescott, Ont., EST.	CKLC	6-7 p.m. 840 Red Deer, Alta., MST.	CMGC CMGE	<ul><li>820 Matanzas, Cuba.</li><li>1375 Cardenas, Cuba, EST.</li></ul>
	8-10 a.m.; noon-2 p.m.; 5-7:30		8 a.m8 p.m.		Noon-2: 8-10 p.m.
CFNB	p.m. 1210 Fredericton, N. B., AST.	CKMC	1210 Cobalt, Ont., EST. Silent.	CMGF CMGH CMHC	987 Matanzas, Cuba. 1040 Matanzas, Cuba
CFQC	8:30-9:30 a.m.; 12:30-2 p.m. 910 Saskatoon, Sask.	CKMO	730 Vancouver, B. C. 960 Totonto, Ont., EST.	CMHC	790 Tuinucu, Cuba 950 Caibarien, Cuba
CFRB	690 Toronto, Ont., EST. 8 a.mmid.	СКОС	8 a.m12:30 p.m.;5-11:15 p.m. 635 Hamilton, Ont., EST.	CMHI	1030 Santa Clara, Cuba, EST. 11 a.m1 p.m.; 8-10 p.m.
CFRC	930 Kingston, Ont.		8 a.m10:30 p.m. 540 Windsor, Ont., EST.	CMHJ	1125 Cienfuegos, Cuba, EST.
CHCK	1200 Montreal, Que. 960 Charlottetown, P. E. I.	CKOK	7:30 a.mmid.	CMHK	11 a.m1 p.m.; 7-9 p.m. 1225 Cruces, Cuba
CHGS	Noon-2 p.m.; 5-7:30 p.m., AST. 1120 Summerside, P. E. I.	CKOV	1200 Kelowna, B. C., PST. 8-9 a.m.; 11:30 a.m2 p.m.;	CMHL CMJC	1290 Cienfuegos, Cuba. 1382 Camaguey, Cuba.
CHLP	6:30 a.m2 p.m.; 4-8 p.m., AST. 1200 Montreal, Que.	CKPC	4:30-7:30 p.m.; 9-11 p.m.	CMJE	1175 Camaguey, Cuba.
CHLS	730 Vancouver, B. C., PST. 7:30-8:30 p.m.; 8:50-11:30 p.m.		880 Preston, Ont., EST. 4 p.m11 p.m.	CMJF CMJH CMJH	1050 Camaguey, Cuba.
CHMA	580 Edmonton, Alta., MST.	CKPR	890 Ft. William, Ont., EST. 10 a.m2 p.m.; 6-8 p.m.		1150 Ciego de Avila, Cuba. 10 a.m2 p.m.; 5-10 p.m., EST.
CHML	Silent. 880 Hamilton, Ont., EST.	CKTB	635 St. Catharines, Ont., 1:30-5 p.m.; 6-10 p.m., EST.	CMJ	1260 Ciego de Avila, Cuba. 10 a.m1:30 p.m.; 6-10, EST.
CHNC	9 a.m2 p.m. 840 Poronto, Ont.	CKUA	580 Edmonton, Alta., MST.	CMJK CMJL	790 Camaguey, Cuba 960 Camaguey, Cuba.
CHNS	815 Halifax, N. S., AST.	CKWX	Silent. 730 Vancouver, B. C., PST.	CMJN	1270 Camaguey, Cuba.
CHRC	6 p.mmid. 645 Quebec, Que., EST.		4:30-7:30; 11:30-mid.	CMJ0 CMJP	1310 Moron, Cuba.
CHWC	9 a.m2 p.m.; 5 p.mmid.	CKX	930 Brandon, Man., CST. 8:30-9:30 a.m.	CMK	730 Havana, Cuba, EST. 10 a.mnoon; 6 p.mmid.
CHWC	7-9 a.m.; 10-11 a.m.; noon-1 p.	CKY	780 Winnipeg, Man., CST. 8:30 a.m4 p.m.; 7-10:45 p.m. 1249 Pinar del Rio, Cuba.	CMKC CMKJ	1034 Santiago, Cuba.
CHWK	m.; 3:30-mid. 665 Chilliwack, B. C., <i>PST</i> .	CMAB CMAF	1249 Pinar del Rio, Cuba.	CMQ	630 Havana, Cuba.
	Noon-8 p.m.		<b>680</b> Havana, Cuba, <i>EST</i> . 5-11:30 p.m.	CMW	585 Havana, Cuba, EST. 7:30 a.m11:30 p.m.
CHYC CJCA	730 Montreal, Que. 745 Edmonton, Alta., MST.	CMAY CMBC	<ul> <li>965 Ĥavana, Cuba.</li> <li>1270 Havana, Cuba, EST.</li> </ul>	CMX	890 Havana, Cuba, EST. 11 a.m2 p.m.; 8-mid.
	7:45-9:15 a.m.; noon-1; 5-7:30; mid1 a.m.	CMBD	11 a.m5 p.m.	CNRA	630 Moneton, N. B., AST. 12:30-2 p.m.
CJCB	880 Sydney, N. S., AST.	CMBF	1325 Havana, Cuba	CNRH	815 Halifax, N. S., AST.
CJCJ	10 a.m2 p.m.; 6-9 p.m. 690 Calgary, Alta., MST.	CMBG CMBJ	1070 Havana, Cuba. 1140 Havana, Cuba.	CNRO	Silent. 600 Ottawa, Ont., EST.
0000	9-11:30 a.m.; 1:45-3 p.m.; 6-7	CMBK CMBL	1485 Havana, Cuba.	CNRV	Noon-1 p.m.: 6-8:30 p.m.
CJGC	p.m. 595 London, Ont., EST.		3-5 p.m.		1030 Vancouver, B. C., PST. 2-3:30 p.m.; 5:30-8:30 p.m. 840 Toronto, Ont., EST.
	Silent.	CMBN	1444 Havana, Cuba, EST. 2-3 p.m.; 9:15-11 p.m.	CPRY	1-1:30 p.m.
CJGX	630 Yorkton, Sask., CST. 8:30-9:15 a.m.; 10:30-10:45 a.	CMBR CMBS	1500 Havana, Cuba. 780 Havana, Cuba	HHK	920 Port-au-Prince, Haiti. 630 Santo Domingo, EST.
CJOC	m.; 11:25-noon; 7:15-8 p.m. 1120 Lethbridge, Alta., MST.	CMBW	925 Havana, Cuba.		Silent.
2000	8:45-10 a.m.; noon-1:15 p.m.;	CMBY CMBZ	1235 Havana, Cuba 1010 Havana, Cuba, EST.	KABC	1420 San Antonio, Tex., CST. 6:45 a.m1:30 p.m.; 4-mid.
CJOR	3-4 p.m.; 6-8 p.m. 1210 Vancouver, B. C., PST.		9-10:30 a.m.; noon-2 p.m.; 4-5 p.m.; 6-7 p.m.; 8-11 p.m.	KALE	6:45 a.m1:30 p.m.; 4-mid. 1300 Portland, Ore., PST. 7-10:30 a.m.; 2:30-5; 6-7 p.m.;
	7:30 a.m1 p.m.; 4-7:30; 10:30-	CMC	840 Havana, Cuba.	MADE	8-mid.
CJRM	l a.m. 665 Moose Jaw, Sask., <i>MST</i> .	CMCA CMCB	1235 Havana, Cuba 1070 Havana, Cuba, EST.	KARK	890 Little Rock, Ark., CST. 7:30 a.m9 p.m.
	8-10:30 a.m.; noon-2:30 p.m.; 10-mid.		11:30 a.m1 p.m.; 5-6 p.m.; 7:30-10 p.m.	KASA	1210 Elk Čity, Okla., CST. 7 a.m9 p.m.
			o pina		

KBPS	1420 Portland, Ore., PST.	KFLV	1410 Rockford, Ill., CST.	KGCA	1270 Decorah, Iowa, CST.
KBTM		KFLX	10 a.m12:30 p.m.; 3-6 p.m.; 8-10 p.m. 1370 Galveston, Texas.	KCOD	1270 Decorah, Iowa, CST. 8:30-9:45 a.m.; 10:45-11:30 a. m.; 12:30-2:30 p.m. 1210 Watertown, S. D., CST.
KCMC		KFMX	1250 Northfield, Minn., CST.	KGCR	0:50 a.m5 p.m.; 5-9.
KCRC	6:45 a.m9 p.m. 1370 Enid, Okla., CST.	KFNF	10:15-10:35 a.m. 890 Shenandoah, Iowa, CST.	KGCU	1240 Mandan, N. D., MST. Noon-5 p.m.; 6:45-9 p.m.
KCRJ	10 a.m2 p.m.; 3:45-7:45 p.m. 1310 Jerome, Ariz., MST.		5-8 a.m.; 9-10 a.m.; 12:15-5 p.m; 6-10 p.m.	KGCX	Noon-5 p.m.; 6:45-9 p.m. 1310 Wolf Point, Mont., MST. 6:30-9 a.m.; 11:30-3; 6-9 p.m. 1370 Mitchell, S. D., CST.
	7;30-9;30 a.m.; noon-1 p.m.; 3:45-6 p.m.	KFOR	1210 Lincoln, Nebr., CST. 7 a.m10 p.m.	KGDA	1370 Mitchell, S. D., CST. 8 a.m4:30 p.m.; 5:30-9.
KDB } Max	1500 Santa Barbara, Calif. 8 a.mmid., PST.	KFOX	1250 Long Beach, Calif., <i>PST</i> . 6 a.mmid.	KGDE	1200 Fergus Falls, Minn.
KDFN	1440 Casper, Wyo., MST. 9 a.m9 p.m.	KFPL	1310 Dublin, Texas, CST. 6 a.m10:30 p.m.	KGDM	7 a.m9 p.m., <i>CST</i> .  1100 Stockton, Calif., <i>PST</i> . 6 a.msunset.
KDKA	980 Pittsburgh, Pa., EST. 7 a.m12:30 a.m. next day.	KFPM	1310 Greenville Teves CST	KGDY	1200 Huron, S. D., CST.
KDLR	1210 Devils Lake, N. D., CST.	KFPW	1210 Fort Smith, Ark., CST.	KGEK	7 a.m2 p.m.; 4-9 p.m. 1200 Yuma, Colo., MST,
KDYL	1210 Devils Lake, N. D., CST. 7 a.m3 p.m.; 5:30-9:30 p.m. 1290 Salt Lake City, Utah.	KFPY	7:45-9 a.m.; 1-2:45 p.m.; 6-9. 1210 Fort Smith, Ark., CST. 6:30 a.m2 p.m.; 5-10:30 p.m. 1340 Spokane, Wash., PST.	KGER	11:30 a.mmid. 1360 Long Beach, Calif., <i>PST</i> .
KECA	6:30 a.m1 a.m., <i>MŠT</i> . <b>1430</b> Los Angeles, Calif., <i>PST</i> .	KFQD	1230 Anchorage, Alaska.	KGEW	1200 Ft. Morgan, Colo., MST.
KELW	9 a.m11 p.m. <b>780</b> Burbank, Calif., <i>PST</i> .	KFRC	6 p.mmid. (Zone 6) 610 San Francisco, Calif.	KGEZ	Silent. 1310 Kalispell, Mont., MST.
KERN	9 a.m11 p.m. 780 Burbank, Calif., PST. 10 a.m1 p.m.; 5-8 p.m. 1200 Bakersfield, Calif., PST.	KFRU	7 a.m 1 a.m., <i>PST</i> 630 Columbia, Mo., <i>CST</i> .	KGFF	8 a.m9 p.m. 1420 Shawnee, Okla, CST.
KEX	7:30 a.mmid. 1180 Portland, Ore., <i>PST</i> .	KFSD	6:30-9 a.m.; 2-9 p.m. 600 San Diego, Calif., PST.	KGFG	7:30 a.m9 p.m. 1370 Oklahoma City, Okla.
KFAB	7 a.mnoon; 1 p.mmid. 770 Lincoln, Neb., CST.	KFSG	7:30 a.mmid. 1120 Los Angeles, Calif., <i>PST</i> .		7:15-10 a.m.; 3-3:45 p.m.; 7:45- 9:15 p.m., CST.
KFAC	6 a.m10:30 p.m. 1300 Los Angeles, Calif., PST.	KFUL	1:30-3 p.m.; 7:30-mid. 1290 Galveston, Texas, CST.	KGFI	1500 Corpus Christi, Texas.
KFBB	7 a.mmid.	KI OL	8-9:30 a.m.; 11 a.m1 p.m.; 2:30-	KGFJ	7 a.m3 p.m.; 6-10 p.m., CST. 1200 Los Angeles, Calif.
KFBI	1280 Great Falls, Mont., MST. 8 a.m3 p.m.; 5-10 p.m. 1050 Abilene, Kans., CST.	KFUO	4 p.m.; 5:30-8p.m.; 10:15-mid. 550 St. Louis, Mo., CST.	KGFK	24 hours daily. 1500 Moorhead, Minn., CST.
	5 a.m9 p.m.	KFVD	550 St. Louis, Mo., CST. 6:30-7 a.m.; 12:15-12:40 p.m. 1000 Los Angeles, Calif., PST.	KGFL	8 a.m9 p.m. 1370 Santa Fe, N. M., MST.
KFBK	1310 Sacramento, Calif., PST. 7 a.m11 p.m.	KFVS	1210 Cape Girardeau, Mo.		9-10 a.m.; 11 a.m3 p.m.; 4-5:30 p.m.; 7:30-9.
KFBL	1370 Everett, Wash., PST. 8:30 a.mnoon;3-6 p.m.;3-6 a.m.		9 a.mnoon; 4-7:30; 9-mid., CST.		ISIU Kearney Neb (S7)
KFDM	8:30 a.mnoon;3-6 p.m.;3-6 a.m. <b>560</b> Beaumont, Tex., CST. 7 a.m2 p.m.; 4:30-10:30 p.m.	KFWB	7:30 a.mmid.	KGFX KGGC	7:30 a.m1:30 p.m.; 5-10:30 p.m 630 Pierre, S. D. 1420 San Francisco, Calif.
KFDY	12:30-2 p.m.	KFWF	1200 St. Louis, Mo., CST. Silent.	KGGF	9 a.m9 p.m., PST
KFEL	920 Denver, Colo., MST. 7-8:30 a.m.; 10 a.m12:30 p.m.; 3-4:30 p.m.; 6-7:30 p.m.	KFWI	930 San Francisco, Calif.	KGGM	1010 Coffeyville, Kans., CST. 7:30 a.m2 p.m.; 5-10:30. 1230 Albuquerque, N. M.
KFEQ	3-4:30 p.m.; 6-7:30 p.m. 680 St. Joseph, Mo., CST.	KFXD	7-8 a.m.; 9 a.m1 p.m.; 6-7;30 p.m.; 11-1 a.m, PST. 1200 Nampa, Idaho, MST.	KGHF	8 a.m2 p.m.; 4-10 p.m., MST.
KFGQ	6 a. m7:45 p.m. 1310 Boone, Iowa, CST.	KFXF	7 a.m9 p.m. 920 Denver, Colo., MST.	KGHI	8 a.m2 p.m.; 4-10 p.m., MST. 1320 Pueblo, Colo., MST. 7 a.m1 p.m.; 4-10 p.m. 1200 Little Rock, Ark., CST.
KFH	6-7:30 a.m.: 1:30-2:30 p.m.	KI AI	8:30-10 a.m.; 12:30-3; 4:30-6;	Kum	8:30 a.m1:30 p.m.; 5-9. mid-
Krn	1300 Wichita, Kans., CST. 7-8:30 a.m.; 9-11 a.m.; 11:30	KFXJ	7:30-mid. 1200 Grand Jet., Colo., MST.	KGHL	3 a.m. 950 Billings, Mont., MST.
KFI	7-8:30 a.m.; 9-11 a.m.; 11:30 a.m2 p.m.; 3-10; 11-11:30 p.m. 640 Los Angeles, Calif., PST.	KFXM	8 a.m2 p.m.; 6-9 p.m. 1210 San Bernardino, Calif.	KGIR	7:30 a.m4 p.m.; 5:30-11. 1360 Butte, Mont., MST.
KFIO	6:30 a.mmid. 1120 Spokane, Wash., <i>PST</i> .	KFXR	1310 Oklahoma City Okla	KGIW	7 a.mmid. 1420 Trinidad, Colo., <i>MST</i> .
KFIZ	6 a.msunset. 1420 Fond du Lac, Wis., CST.	KFYO	7:30 a.m2 p.m.; 4-10, CST.  1310 Lubbock, Texas, CST. 6 a.m2 p.m.; 4-10 p.m. 550 Bismarck, N. D., CST.	KGIX	6-8 a.m.; 10-2 p.m.; 5-8 p.m. 1420 Las Vegas, Nev., PST.
KFJB	10 a.m1 p.m.; 4-10 p.m. 1200 Marshalltown, Iowa.	KFYR	6 a.m2 p.m.; 4-10 p.m. 550 Bismarck, N. D. CST.	KGIZ	6-9 a.m.; noon-3 p.m.; 6-9 p.m. 1500 Grant City, Mo., CST.
KFJI	6-9 a.m.; noon-3 p.m.; 6-9 p.m. 1210 Klamath Falls, Ore.	KGA	6:30 a.m12:30 p.m.; 2-11 p.m. 1470 Spokane, Wash., PST.	KGKB	7-11 a.m.; noon-5 p.m.; 6-9 p.m. 1500 Tyler, Texas, CST.
KFJM	7:30 a.m9 p.m., <i>PST</i> .	KGAR	6 a.mmid. 1370 Tucson, Ariz., MST.	KGKL	7 a.m2 p.m.; 4-10 p.m. 1370 San Angelo, Texas, CST.
	1370 Grand Forks, N. D. 7 a.m9 p.m., <i>CST</i> .		7 a.m1:30 p.m.; 4-11. 1330 San Diego, Calif., PST.		8 a.m11:30 p.m.
KFJR	1300 Portland, Ore., PST. 10:30 a.m2:30 p.m.; 5-6 p.m.;	KGB	7 a.mmid.	KGK0 KGKX	<ul><li>570 Wichita Falls, Texas.</li><li>1420 Lewiston, Idaho.</li></ul>
KFJZ	7-8 p.m.  1370 Fort Worth, Texas, CST.	KGBU	900 Ketchikan, Alaska. (Zone 8), 10 a.m3 p.m.; 5-7;		1500 Scottsbluff, Neb., MST.
	7 a.m11 p.m.	KGBX	10 p.m3 a.m. 1310 Springfield, Mo., CST.	KGMB	6:30 a.m2 p.m.; 4:30-9. 1320 Honolulu, Hawaii.
KFKA	880 Greeley, Colo., MST. 6-7:30 a.m.; 9 a.m2:30 p.m;		6:30-9:30 a.m.: 11 a.m2 p.m.:		7-9 a.m.; 10:40 a.m11 p.m. (Zone 5)
KFKU	8-11 p.m. 1220 Lawrence, Kans., CST.	KGBZ	4-10 p.m. 930 York, Neb., CST. 7:30-9:30 a.m.; 11 a.m12:30 p.	KGNF	1430 North Platte, Neb. 7 a.msunset, MST.
	2:30-3 p.m.; 6-6:15 p.m. 1020 Chicago, Ill.		m.; 2-3:30 p.m.; 5-6:30 p.m.;	KGŅO	1210 Dodge City, Kans.
<u></u>	Tueu Chicago, In.		8:30-10 p.m.		7:30 a.m3:30 p.m.; 5-9, MST.

KGO	790 San Francisco, Calif.	KNX	1050 Hollywood, Calif., PST.	KSO	1380 Des Moines, Iowa.
KGRS	7 a.m12:30 a.m., <i>PST</i> .  1410 Amarillo, Texas, <i>CST</i> .	KOA	6:30 a.m1 a.m. next day.  830 Denver, Colo., MST.	KSOO	1110 Sioux Falls, S. D., CST. 6 a.m8 p.m.
	6-8 a.m.; 10 a.m12:30 p.m.; 3-4:30, 6-7:30; 9-10 p.m.	KOAC	7 a.mmid. 550 Corvalis, Ore., PST.	KSTP	1460 St. Paul, Minn., CST. 6:30 a.m12:30 a.m. next day.
KGU	750 Honolulu, Hawaii.		6:30 a.m4 n.m.: 6-8:30 n.m.	KTAB	560 San Francisco, Calif. 6:45 a.m1 a.m., PST.
	6:15-10:30 a.m.; noon-1 p.m.; 3:15-11 p.m. (Zone 5)	KOB	1180 Albuquerque, N. M. 7 a.m9 p.m., <i>MST</i> .	KTAR	620 Phoenix, Ariz., MST.
KGVO	1200 Missoula, Mont., <i>MST</i> . 6 a.mmid.	KOCW Koh	<ul> <li>1400 Chickasha, Okla.</li> <li>1380 Reno, Nev., PST.</li> </ul>	KTAT	7 a.m11:15 p.m. 1240 Ft. Worth, Texas.
KGW	620 Portland, Ore., PST.	KOIL	8 a.mmid. 1260 Council Bluffs, la., CST.		7-9 a.m.: noon-1:30 p.m.: 4-7
KGY	6:30 a.mmid. 1210 Olympia, Wash., <i>PST</i> .		6 a.m1 a.m.	KTBS	p.m.; 9-mid. 1450 Shreveport, La., CST.
KHJ	6 a.mmid. 900 Los Angeles, Calif., PST.	KOIN	940 Portland, Ore., PST. 6 a.m1 a.m. next day.	KTFI	6 a.mmid. 1240 Twin Falls, Idaho, MST.
кно	7 a.m1 a.m. next day. 590 Spokane, Wash., PST.	KOL	1270 Seattle, Wash., PST. 6:45 a.mmid.	KTHS	6:30 a.mmid. 1040 Hot Springs, Ark., CST.
	7 a.mmid.	KOMA	1480 Oklahoma City, Okla.		9-10 a.m.; 11 a.m12:30 p.m.; 4:30-5:30; 7-9:30 p.m.
KICA Kick	1370 Clovi <sup>9</sup> , N. M. 1420 Red Oak, Iowa.	комо	7 a.m11 p.m., CST.  920 Seattle, Wash., PST.	KTM	780 Los Angeles, Calif., PST.
KID	Silent.  1320 Idaho Falls, Idaho, MST.	KONO	6:55 a.m12:30 a.m. next day.		6-10 a.m.; 1-5 p.m.; 8 p.m4 a.m. next day.
	9 a.mmid.	None	8:30-10 a.m.; 11 a.mnoon;	KTRH	a.m. next day.  1120 Houston, Texas, CST. 6:30-11 a.m.; noon-11:30 p.m.
KIDO	1350 Boise, Idaho, MST. 7 a.m10 p.m.	KOOS	8:30-10 a.m.; 11 a.mnoon; 1:30-4 p.m.; 6-7 p.m.; 8-10. 1370 Marshfield, Ore., PST.	KTSA	1290 San Antonio Toy CST
KIDW	1420 Lamar, Colo., MST. 6-8 a.m.; 2-6 p.m.; 8-10.	KORE	9 a.m9 p.m. 1420 Eugene, Ore., <i>PST</i> .		6-8 a.m.; 9:30-11:30 a.m.; 3-5 p.m.; 7-10 p.m.  1310 El Paso, Texas.  1220 Seattle, Wash.
KIEM KIEV	1210 Eureka, Calif., PST. 859 Glendale, Calif., PST.	KOY	7:45 a.m8:30 p.m. 1390 Phoenix, Ariz., MST.	KTSM KTW	1310 El Paso, Texas. 1220 Seattle Wash.
	6 a.msunset.		7 a.m10 p.m.	KÜJ	1310 wana wana, wasn.
KIFH KIT	<ul> <li>1310 Juneau, Alaska.</li> <li>1310 Yakima, Wash., PST.</li> </ul>	KPCB	650 Seattle, Wash., PST. 5:30 a.m8 p.m.; 10 p.m4 a.m.	KUMA	6 a.m. sunset, PST. 1420 Yuma, Ariz., MST.
KJBS	7 a.mmid. 1070 San Francisco, Calif.	KPJM	1500 Prescott, Ariz., MST. 9 a.m2 p.m.; 4-11 p.m.	KUOA	7-9 a.m.; noon-3 p.m.; 6-9 p.m. 1390 Fayetteville, Ark., CST.
	Mid. to local sunset, $PST$ .	KPO	680 San Francisco, Calif.	KUSD	7-8 a.m.; 11 a.m1 p.m.; 5-6:30. 890 Vermillion, S. D., CST.
KJR	<ul><li>970 Seattle, Wash., PST.</li><li>7 a.mmid.</li></ul>	KPOF	7:30 a.mmid., <i>PST</i> .  880 Denver, Colo., <i>MST</i> .		Silent. 570 Tacoma, Wash., PST.
KLCN KLO	1290 Blytheville, Ark.		7:30-9 a.m.; 2:30-4:30 p.m.; 6-8 p.m.	KVI	570 Tacoma, Wash., PST. 6:30 a.m1 a.m.
KLPM	1400 Ogden, Utah. 8:30 a.m10:30 p.m., MST. 1240 Minot, N. D., CST.	KPPC	1210 Pasadena, Calif., PST. Silent.	KVL KVOA	<ul><li>1370 Seattle, Wash.</li><li>1260 Tucson, Ariz.</li></ul>
KLFM	7 a.m1 p.m.; 6-7:45 p.m.; 10-	KPQ	1500 Wenatchee, Wash., PST.		6-9 a.m.; noon-3 p.m.; 6-9 p.m. 1140 Tulsa, Okla., CST. 7 a.m1:30 p.m.; 3-7:45; 9-mid.
KLRA	11:30 p.m. 1390 Little Rock, Ark., CST.	KPRC	7 a.m10 p.m. 920 Houston, Texas, CST.	KVOO	7 a.m1:30 p.m.; 3-7:45; 9-mid.
KLS	8-11 a.m.; 1-5 p.m.; 6:30-11 p.m. 1440 Oakland, Calif., PST.	KQV	6:30 a.mmid. 1380 Pittsburgh, Pa., EST.	KVOR	1270 Colorado Springs, Colo.
KLX	8:30 a.m7:30 p.m. 880 Oakland, Calif., PST.	KQW	8:30 a.m1 p.m.; 2-11 p.m. 1010 San Jose, Calif., PST. 7 a.m3 p.m.; 4:30-10 p.m.	KVOS KWCR	7 a.m10 p.m., <i>MST</i> .  1200 Bellingham, Wash.  1420 Cedar Rapids, Ia., <i>CST</i> .
	7 a.m11 p.m.		7 a.m3 p.m.; 4:30-10 p.m.		6:30 a.mmid.
KLZ	560 Denver, Colo., MST. 6:30 a.m11:30 p.m.	KRE	6:30-9:30 a.m.: noon-3 p.m.:	KWEA KWG	1210 Shreveport, La. 1200 Stockton, Calif., PST.
KMA	930 Shenandoah, Iowa, CST. 6-7:30 a.m.: 9:30-11 a.m.: 12:30-	KREG	6-9 p.m. 1500 Santa Ana, Calif., PST.	KWJJ	7 a.mmid. 1060 Portland, Ore.
	6-7:30 a.m.; 9:30-11 a.m.; 12:30- 2 p.m.; 3:30-5 p.m.; 6:30-8:30	KRGV		KWK	1350 St. Louis, Mo., CST. 6:55 a.m12:15 a.m. next day.
KMAC	1370 San Antonio, Tex., CST.		1260 Harlingen, Texas, CST. 7-9:30 a.m.; 12:30-3:30 p.m.	KWKC	1370 Kansas City, Mo.
	7-8:30 a.m.; 10-11 a.m.; noon- 1:30 p.m.; 4-6 p.m.; 7-8 p.m.;	KRKD	1120 Los Angeles, Calif., PST. 6 a.m1:30 p.m.; 3-7:30 p.m.	KWKH	850 Shreveport, La., CST. 8:30 p.mmid.
KMBC	10 p.m2 a.m. 950 Kansas City, Mo., CST.	KRLD	6 a.m1:30 p.m.; 3-7:30 p.m. 1040 Dallas, Texas, CST. 6-7:15 a.m.; 7:45-9 a.m.; 10-11	KWLC	1270 Decorah, Iowa, CST.
	6:15 a.mmid.		a.m.; 12:30-4:30; 5:30-7; 9:30-		6:30-8:30 a.m.; 9:45-10:45; 11:30 a.m12:30 p.m.
KMED	1310 Medford, Ore., PST. 8 a.m9:30 p.m. 580 Fresno, Calif., PST.	KRMD	mid. 1310 Shreveport, Ia., CST.	KWSC	
KMJ	/ a.mmu.	KROW	7 a.m1 p.m.; 2-5 p.m. 930 Oakland, Calif., PST.	KWWG	1260 Brownsville, Texas.
KMLB	1200 Monroe, La., CST. 7 a.m10 p.m.	KRSC	8-9 a.m.; 1-6 p.m.; 7:30-11 p.m. 1120 Seattle, Wash., PST.	KXA	760 Seattle, Wash., PST. 7 a.msundown; 9 p.mmid.
KMMJ	740 Clay Center, Neb., CST.		Sunrise to local sunset.	KXL	1420 Portland, Ore., PST.
KMO	5:45 a.msunset. 1330 Tacoma, Wash., PST.	KSAC	580 Manhattan, Kans., CST 8-9 a.m.; 10-10:30 a.m.; 12:30-	кхо	7 a.mmid. 1500 El Centro, Calif.
кмох	6:30 a.m11 p.m.	KSCJ	1:30 p.m. 1330 Sioux City, Iowa, CST.	KXRO	1310 Aberdeen, Wash., PST.
	6:45 a.m1 a.m.		6:30 a.m11 p.m.	KXYZ	7:30 a.mmid. 1440 Houston, Texas, <i>CST</i> .
KMPC	710 Beverly Hills, Calif. 6:30 a.m5:15 p.m.; 8-1 a.m.	KSD	550 St. Louis, Mo., CST. 7 a.m12:15 p.m.; 12:40-1; 4:30-		7-10 a.m.; 11 a.m1:15 p.m.; 3:30-10:30 p.m.
KMTR	PST. 570 Hollywood, Calif., PST.	KSEI	11 p.m. 890 Pocatello, Idaho, MST.	KYA	1230 San Francisco, Calif.
KNOW	6:30 a.mmid.	KSL	8 a.m11 p.m. 1130 Salt Lake City, Utah.	KYW	7:30 a.mmid., <i>PST</i> .  1020 Chicago, Ill., <i>CST</i> .
	7:30 a.m1 p.m.; 5-11 p.m.	NOL	7 a.mmid., MST.	<b></b>	7 a.m1 a.m. next day.

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₩ZRM	618.5 Manila, P. I.	WBBR	1300 Brooklyn, N. Y., EST.	WCLO	1200 Janesville, Wis., CST.
	6:30-7:30 a.m.; 12:15-1:15; 3-		Silent.		7:30 a.m3:30 p.m.; 5-9 p.m.
MAA	10:30 p.m. 690 Arlington, Va.	WBBZ	1200 Ponca City, Okla., CST. 6 a.m10 p.m. 1410 Bay City, Mich., EST.	WCLS	1310 Joliet, Ill., CST. 11 a.mnoon; 3-8 p.m.; 10 p.m
RUS	664 Salvador. 911 San Jose, C. R.	WBCM	1410 Bay City, Mich., <i>EST</i> . 8 a.mmid.	WCOA	mid. 1340 Pensacola, Fla., CST.
VAS	685 Glace Bay, N. S., AST.	WBEN	900 Buffalo, N. Y., EST.		9 a.m10:30 p.m.
VOAS	1-1:15 p.m.; mid12:15 a.m. 810 St. Johns, N. F.	WBEO	6:45 a.m1 a.m. 1310 Marquette, Mich., CST.	MCOC	880 Meridian, Miss., CST. 7:30 a.m2 p.m.; 5-11 p.m.
·	11 a.m12:30 p.m.; 4-5:30 p.m.;		9:30 a.m1:15 p.m.; 5-7 p.m. 1200 Huntsville, Ala., CST.	WCOD	1200 Harrisburg, Pa., EST.
'VOGT	7:45-10 p.m. (Zone 19) 893 Wabana, N. F.	WBHS	8 a.m2 p.m.; 5-9:30 p.m.	WCRW	1200 Harrisburg, Pa., EST. 8-11 a.m.; 3-6 p.m.; 8-11 p.m. 1210 Chicago, Ill., CST.
	Silent.	WBIG	<b>1440</b> Greensboro, N. C., <i>EST</i> .		7-8:30 a.m.; 11:30 a.m1:30
VOGY VONA	860 St. Johns, N. F. 950 St. Johns, N. F.	WBNX	8 a.m11 p.m. 1350 New York City, <i>EST</i> .	wcsc	p.m.; 6-7 p.m.; 9-10 p.m. 1360 Charleston, S. C., EST.
	12:30-2 p.m.; 6:30-8 p.m. (Zone 19)	WBOQ	9 a.mnoon; 3-6 p.m. 860 New York City.	WCSH	8 a.m3 p.m.; 6-11 p.m. 940 Portland, Maine, EST.
<b>YONF</b>	1195 St. Johns, N. F.	WBOW	1310 Terre Haute, Ind., CST.	WOOM	7:45 a.m1 p.m.; 2:30-11:15
Vown	Noon-2 p.m.; 6-8 p.m. (Zone 19) 750 St. Johns, N. F.	WBRC	7 a.m2 p.m.; 4-mid. 930 Birmingham, Ala., CST.	WDAE	p.m. 1220 Tampa, Fla., EST.
	Silent. 1410 Boston, Mass., EST.		7 a.m11 p.m.		8 a.mmid.
WAAB	7:45 a.mmid.	WBRE WBSO	1310 Wilkes Barre, Pa. 920 Babson Park, Mass.,	WDAF	610 Kansas City, Mo., CST. 6:26 a.mmid.
WAAF	<b>920</b> Chicago, Ill., CST.	WBT	7 a.m5 p.m., <i>EST</i> .	WDAG	1410 Amarillo, Texas, CST. 8-10 a.m.; 12:30-3; 4:30-6;
MAAW	6 a.mlocal sunset. 1250 Newark, N. J., <i>EST</i> .		1080 Charlotte, N. C., <i>EST</i> . 7 a.mmid.		7:30-9; 10-mid.
	7-9 a.m.; 10 a.mnoon; 2-4:30; 6-9 p.m.	WBTM	1370 Danville, Va., EST. 11 a.m1 p.m.; 6-6:30; 7-10:30	WDAH WDAS	7:30-9; 10-mid.  1310 El Paso, Texas.  1370 Philadelphia, Pa., EST.
TAAW"	<b>940</b> Jersey City, N. J., <i>EST</i> .		p.m.		9 a.m10:50 p.m.
WAAW	6 a.m6 p.m. 660 Omaha, Neb., CST.	WBZ	990 Boston, Mass., EST. 7 a.mmid.	WDAY	940 Fargo, N. D., CST. 6 a.m11 p.m.
WABC	6 a.m6 p.m.	WBZA	990 Springfield, Mass., EST.	WDBJ	930 Roanoke, Va., <i>EST</i> .
	860 New York City, EST. 7:30 a.m2 a.m. next day.	WCAC	7 a.mmid. 600 Storrs, Conn., EST.	WDB0	8 a.mmid. 580 Orlando, Fla., <i>EST</i> .
WABI	1200 Bangor, Maine, EST. 9 a.m2 p.m.; 6-10 p.m.	WCAD	Silent. 1220 Canton, N. Y., EST.	WDEL	7 a.mmid. 1120 Wilmington, Del., EST
WABZ	1200 New Orleans, La., CST.		12:30-1:20 p.m.		9 a.m10 p.m.
WACO	Noon-4 p.m.; 8 p.mmid. 1240 Waco, Texas, CST.	WCAE	1220 Pittsburgh, Pa., EST. 6:45 a.mmid.	WDEV	<b>550</b> Waterbury, Vt., <i>EST</i> . 9:30-11 a.m.; noon-2 p.m.
	6-7 a.m.; 9-noon; 1:30-4 p.m.; 7-9 p.m.	WCAH	1430 Columbus, Ohio, <i>EST</i> . 7:45 a.mmid.	WDGY	1180 Minneapolis, Minn. 6:30 a.m8:15 p.m., CST.
WADC	1320 Akron, Ohio, EST.	WCAJ	590 Lincoln, Neb., CST.	WDOD	1280 Chattanooga, Tenn.
<b>WAGM</b>	8:30 a.mmid. 1420 Presque Isle, Me., EST.	WCAL	10-10:45 a.m.; noon-12:30 p.m. 1250 Northfield, Minn., CST.	WDRC	7:30 a.m11 p.m., <i>CST</i> .  1330 Hartford, Conn., <i>EST</i> .
WAIU	10 a.m1 p.m.; 4:30-9:30 p.m. 640 Columbus, Ohio, EST.		9:45-10:15 a.m.	WDSU	8 a.mmid. 1250 New Orleans, La., CST.
	7 a.msunset.	WCAM	1280 Camden, N. J., <i>EST</i> . Silent.		7 a.m11:45 p.m.
WALR	<b>1210</b> Zanesville, Ohio, <i>EST</i> . 9 a.m10 p.m.	WCAO	600 Baltimore, Md., EST. 7 a.mmid.	WDZ	1070 Tuscola, Ill., CST. 7 a.m4:30 p.m.
WAMC	1420 Anniston, Ala., CST.	WCAP	1280 Asbury Park, N. J., EST.	WEAF	660 New York City, EST.
WAML	7-10:30 a.m.; noon-9 p.m. 1310 Laurel, Miss.	WCAT	9 a.mnoon; 2-7:30 p.m. 1200 Rapid City, S. D., CST.	WEAN	6:45 a.m1 a.m. next day. 780 Providence, R. I., EST
WAPI	1140 Birmingham, Ala., CST.		1:30-2:30 p.m.	WEAO	7:30 a.m1 a.m. next day. 570 Columbus, Ohio, EST.
WASH	6 a.m9 p.m. 1270 Gd. Rapids, Mich., EST.	WCAU	1170 Philadelphia, Pa., EST. 8 a.m1 a.m. next day.		1 p.mmid. 1290 Superior, Wis., CST.
	7 a.mmid.	WCAX	1200 Burlington, Vt., <i>EST</i> .	WEBC	1290 Superior, Wis., CST. 7 a.m11 p.m.
WAWZ	1350 Zarephath, N. J., EST. 7:45-8:45 a.m.	WCAZ	Noon-1 p.m. 1070 Carthage, Ill., CST.	WEBQ	1210 Harrisburg, Ill., CST.
WAZL	1420 Hazelton, Pa., EST.	WCBA	1:30 p.m2 p.m. 1440 Allentown, Pa., EST.		6-9 a.m.; noon-4 p.m.; 7:30- 9 p.m.
<b>WBAA</b>	1400 Lafayette, Ind., CST. Silent.		7:30 a.m1 p.m.	WEBR	<b>1310</b> Buffalo, N. Y., <i>EST</i> .
WBAK	1430 Harrisburg, Pa., EST.	WCBD	1080 Zion, Ill., CST. 7:30-10:30 a.m.; 4 p.m4:45	WEDC	7 a.m2 a.m. next day. 1210 Chicago, Ill.
74F A I	10:30-11:30 a.m.	WCBM	p.m. 1370 Baltimore, Md., EST.	WEE	1210 Chicago, Ill. 590 Boston, Mass., EST. 6:45 a.mmid.
WBAL	1060 Baltimore, Md., EST. 7 a.mmid.		7 a.m1:30 p.m.; 5-11 p.m.	WEEU	<b>830</b> Reading, Pa., <i>EST</i> .
WBAP	800 Ft. Worth, Texas, CST.	WCBS	1210 Springfield, Ill., CST. 11:15 a.m3 p.m.; 6:45-8:30	WEUC	8 a.m8 p.m.
	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.		p.m.		<b>1350</b> Emory, Va., <i>EST</i> . 6-8 a.m.; 11 a.m2 p.m.; 4-7.
<b>WBAX</b>	1210 Wilkes Barre, Pa., EST.	MCCO	810 Minneapolis, Minn. 6:45 a.m12:30 a.m., CST.	WEHS	1420 Cicero, Ill., CST.
WBBC	7:30-noon; 6-11 p.m. 1400 Brooklyn, N. Y., EST.	WCDA	1350 New York City, EST.	WELL	4-6 p.m. 1420 Battle Creek, Mich.
	7 a.m11; 7:30 p.m9 p.m.	WCFL	6 p.mmid. 970 Chicago, Ill., CST.	WENC	1420 Americus, Ga., EST.
₩BBL	1210 Richmond, Va., EST. Silent.	WCGU	6 a.mmid.	WENR	7 a.m2 p.m.; 4 p.msunset. 870 Chicago, Ill., CST.
<b>₩BBM</b>	770 Chicago, Ill., CST.		1400 Brooklyn, N. Y., <i>EST</i> . 3:45 p.m6; 10:30 p.m2 a.m.		10:15-11:45 a.m.; 3:30-7 p.m.;
	6:45 a.m10 p.m.; 11:30 p.m	WCKY	1490 Covington, Ky., CST. Midmid.	WERF	mid1:30 a.m. 1420 Erie, Pa., EST.
	2 a.m.		Midmid.	MEUL	ITLU EIR, Fa., EBI.

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WHA
                                                                    940 Madison, Wis., CST.
                                                                                                               WINS
                                                                                                                         1180 New York City, EST.
WESG 1040 Elmira, N. Y.
            Variable.
                                                                   10 a.m.-2 p.m.
                                                                                                                          7 a.m.-10:15 p.m.
          1300 New York City, EST.
8-9 a.m.; 10-noon; 3-9; 10.
                                                       WHAD 1120 Milwaukee, Wis., CST.
                                                                                                               WIOD
WEVD
                                                                                                                         1300 Miami, Fla., EST.
                                                                  9:30-10:15 a.m.; 8:30-9:30 p.m.
                                                                                                                          7 a.m.-1 a.m. next day.
610 Philadelphia, Pa., EST.
                                                                                                               WIP
                                                       WHAM 1150 Rochester, N. Y., EST.
WEW
            760 St. Louis, Mo., CST.
                                                                  7:45 a.m.-1 a.m.
                                                                                                                          9 a.m.-mid.
                                                                                                                          1010 Columbia, S. C., EST.
                                                                   820 Louisville, Kv., CST.
                                                                                                               WIS
           8 a.m.-11 a.m
                                                                                                                         7 a.m.-2 p.m.; 5:30-11 p.m.
1120 Milwaukee, Wis., CST.
          1310 Royal Oak, Mich., EST.
                                                                  7 a.m.-mid.
WEXL
          1310 Royal Oak, Mich., EST. 8 a.m.-11 p.m.
800 Dallas, Texas, CST.
6:45-8:30 a.m.; 10:30-1; 3-5; 5:30-6; 9-11:30 p.m.
1300 New York City, EST.
9-10 a.m.; noon-3; 9-10; 11-mid.
1200 South Bend, Ind., CST.
7:30 a.m.-3 p.m.; 5:30-8 p.m.
1210 White Plains, N. Y.
10 a.m.-noon; 3-5; 7-10 p.m.
1200 Greenville. S. C.
                                                       WHAT 1310 Philadelphia, Pa., EST. 9 a.m.-11:30; 1-4; 9-mid. WHAZ 1300 Troy, N. Y., EST.
                                                                                                               WISN
WFAA
                                                                                                                          9:30 a.m.; 10:15 a.m.-8:30 p.m.;
                                                                                                                            9:30-mid.
                                                                                                               WJAC
                                                                                                                         1310 Johnstown, Pa., EST.
                                                                 Silent.
860 Kansas City, Mo., CST.
                                                       WHB
                                                                                                                          8:30-10:30 a.m.; 4:30-6:15 p.m.;
WFAB
                                                                  6 a.m.-sunset.
                                                                                                                         9:15 p.m.-mid.
1060 Norfolk, Neb., CST.
                                                       WHBC 1200 Canton, Ohio, EST.
                                                                                                               WJAG
WFAM
                                                       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.
                                                                                                                          6 a.m.-sunset.
                                                                                                                           890 Providence, R. I., EST
                                                                                                               WJAR
WFAS
                                                                                                                          8 a.m.-mid.
WFBC
           1200 Greenville, S. C.
                                                                                                               WJAS
                                                                                                                         1290 Pittsburgh, Pa., EST.
                                                       10 a.m. 4 p.m.; 5-mid.

WHBL 1410 Sheboygan, Wis., CST.
7-10 a.m.; 12:30-3 p.m.; 6-8 p.m.

WHBQ 1370 Memphis, Tenn., CST.
                                                                                                                          7:30 a.m.-11:30 p.m.
           1200 Cincinnati, Ohio, EST.
WFBE
                                                                                                                          900 Jacksonville, Fla., EST.
                                                                                                               WJAX
          7 a.m.-11 p.m.
1310 Altoona, Pa.
WFBG
                                                                                                                          7 a.m.-mid.
                                                                                                                          610 Cleveland, Ohio, EST.
                                                                                                               WJAY
           10:30 a.m.-2:30 p.m.; 6:15-
          9:15 p.m.
1360 Syracuse, N. Y., EST.
                                                                  7:55 a.m.-10:30 p.m.
                                                                                                                          6 a.m.-sunset.
                                                       WHBU 1210 Anderson, Ind., CST.
                                                                                                                         1200 LaSalle, Ill., CST.
                                                                                                               WJRC
WFBL
                                                       7 a.m.-1 p.m.; 3-9 p.m.
1200 Green Bay, Wis., CST.
                                                                                                                          8-9 a.m.; 10 a.m.-12:30 p.m.;
           7:30 a.m.-mid.
WFBM 1230 Indianapolis, Ind., CST.
                                                                                                                            3:30-6:30 р.ш.
                                                       7 a.m.-10 p.m.
WHDF 1370 Calumet, Mich., CST.
                                                                                                                          1210 Red Bank, N. J., EST.
           7:30-10:15 a.m.; noon-3 p.m.;
                                                                                                               WJBI
                                                                                                                         5 p.m.-7 p.m.
1370 Detroit, Mich., EST.
             5:30 p.m.-mid.
                                                                  Silent till May 1
WFBR 1270 Baltimore, Md., EST.
                                                                                                               WJBK
                                                       WHDH 830 Boston, Mass., EST.
8 a.m.-12:45 p.m.; 2:45-7:15.
WHDL 1420 Tupper Lake, N. Y., EST.
                                                                                                                         7 a.m.-1 a.m.
1200 Decatur, Ill., CST.
            7 a.m.-mid.
          1310 Flint, Mich., EST.
                                                                                                               WJBL
                                                                                                                          6:30-8 a.m.; 9-10 p.m.; 12:30-3;
          7 a.m.-11 p.m.
1500 Rome, Ga., CST.
                                                                  7:45 a.m.-1 p.m.; 3-7:45 p.m.
                                                                                                                            6:30-11 p.m.
WFDV
          6-9 a.m.; noon-3 p.m.; 6-9 p.m.
1430 Manchester, N. H., EST.
                                                                   740 Portsmouth, N. H., EST.
                                                                                                                         1420 New Orleans, La.
1210 Lewisburg, Pa., EST.
                                                       WHEB
                                                                                                               W.IRO
                                                                   10 a.m.-sunset.
                                                                                                               WJBU
WFEA
           9 a.m.-11 p.m.

560 Philadelphia, Pa., EST.

6:45-9 a.m.; 9:45-11 a.m.; 1-2
                                                       WHEC 1430 Rochester, N. Y., EST.
                                                                                                                         Noon-6 p.m.
1200 New Orleans, La., CST.
                                                                 8 a.m.-mid.
WFI
                                                                                                               W.IRW
                                                       WHEE
                                                                          Kosciusko, Miss.
                                                                                                                         8 a.m.-noon; 4-8 p.m.
1210 Gadsden, Ala., CST.
           p.m.; 3-4:30 p.m.; 6-mid.

940 Hopkinsville, Ky., CST.

6 a.m.-3 p.m.; 5 p.m.-mid.
                                                       WHET 1210 Troy, Ala., CST.
                                                                                                               WJBY
                                                                 6-8 a.m.; 11 a.m.-5 p.m.
1420 Cicero, Ill., CST
                                                                                                                          6 a.m.-12:10 next day.
WFIW
                                                                                                                         1270 Jackson, Miss., CST.
                                                       WHFC
                                                                                                               WJDX
                                                                 7 a.m.-1:30 p.m.; 6 p.m.-1 a.m.
1410 Bluefield, W. Va., EST.
8-9 a.m.; noon-2 p.m.; 6-8 p.m.
1390 Cleveland, Ohio, EST.
                                                                                                                          6:15-10 a.m.; 11:30 a.m.-10 p.m.
WFLA
            620 Clearwater, Fla., EST.
                                                       WHIS
                                                                                                               WJEJ
                                                                                                                         1210 Hagerstown, Md.
           7:15 a.m.-mid.
                                                                                                                         7 a.m.-5 p.m.
1370 Williamsport, Pa.
1130 Chicago, Ill., CST.
WFOX 1400 Brooklyn, N. Y., EST.
1:30-3:45 p.m.; 9-10:30 p.m.
WGAL 1310 Lancaster, Pa., EST.
                                                       WHK
                                                                                                               WJEQ
                                                                  7 a.m.-mid.
1010 New York City, EST.
                                                                                                               MIID
                                                                                                                         6 a.m. 8:30 p.m.

1360 Gary, Ind., CST.

12:30-6:15 p.m.; 8-11 p.m.

1420 Ironwood, Mich., CST.
                                                       WHN
           10 a.m.-noon; 1:30-11 p.m.
WGAR 1450 Cleveland, Ohio, EST.
                                                                   1:30 p.m.-4 p.m.
1000 Des Moines, lowa.
                                                                                                               WJKS
                                                       WHO
          6 a.m.-3 a.m.
1210 Freeport, N. Y., EST.
                                                                  1000
                                                       WHOM 1450 Jersey City, N. J., EST.
WGBB
                                                                  8-10 a.m.; 3-6 p.m.; 9-mid.

1430 Harrisburg, Pa., EST.

8:30-10:30 a.m.; 11:30 a.m.-
                                                                                                                          7 a.m.-2:30 p.m.; 4:30 p.m.-sun-
          Silent.
630 Evansville, Ind., CST.
                                                                                                                          set.
750 Detroit, Mich., EST.
6:00 a.m.-1 a.m. next day.
Washington, D. C., E'.
WGBF
           6:30 a.m.-3:30 p.m.; 4-7; 9-11:30
                                                                                                               WJR
                                                                     1 a.m.
                                                                                                                          1460 Washington, D. C., ETS.
           880 Scranton, Pa., EST.
9:30 a.m.-12:30 p.m.; 1:30-4:30
                                                                                                               WJSV
WGRI
                                                       WIAS
                                                                  1310 Ottumwa, Iowa, CST.
                                                                                                                          7:30 a.m.-1 a.m. next day.
1370 Atlanta, Ga., CST.
                                                                   7:30 a.m.-1:30 p.m.; 4-9 p.m.
9:30 a.m.-12:30 p.m., 1:30-1
p.m.; 5:30-2 a.m.
WGCM 1210 Gulfport, Miss., CST.
8 a.m.-2 p.m.; 3-9 p.m.
                                                                                                               WJTL
                                                                  1280 Madison, Wis., CST.
                                                       WIBA
                                                                                                                          6:45 a.m.-mid.
                                                                  6:30 a.m.-11:30 p.m.
                                                                                                                          1210 Akron, Ohio, EST.
                                                                                                               WLW
                                                       WIBG
                                                                   930 Glenside, Pa., EST.
WGCP 1250 Newark, N. J., EST.
                                                                                                                          8 a.m.-10 p.m.
                                                                   Daybreak to sunset.
                                                                                                                           760 New York City, EST.
          Silent.
1360 Chicago, Ill., CST.
                                                                                                               WJZ
                                                                  1370 Jackson, Mich., EST.
                                                       WIBM
                                                                                                                          7:30 a.m.-1 a.m. next day.
WGES
                                                                  7:30 a.m.-8:15 p.m.
                                                                                                               WKAQ 1240 San Juan, P. R., AST.
2:30-4:30 p.m.; 7:30-10:30 p.m.
WKAR 1040 E. Lensing, Mich., EST.
           8 a.m.-12:30 p.m.; 6:15-8:30;
                                                                    560 Chicago, Ill., CST.
                                                       WIBO
              11 p.m.-2 a.m.
                                                                   6:30 a.m.-mid.
WGH
           1310 Newport News, Va.
                                                                  1210 Poynette, Wis., CST.
           7 a.m.-2 p.m.; 5-11 p.m., EST.
1370 Fort Wayne, Ind., CST.
                                                       WIBU
                                                                                                                          11-11:45 a.m.
                                                                                                               WKAV 1310 Laconia, N. H., EST. 9 a.m.-1 p.m.; 3-8 p.m. WKBB 1310 Joliet, Ill., CST.
                                                                   9 a.m.-9 p.m.
WGL
                                                                   580 Topeka, Kans., CST.
           6:15 a.m.-9:30 p.m.
                                                       WIBW
WGLC 1370 Hudson Falls, N. Y., EST.
                                                                   6 a.m.-mid.
                                                                                                                          8-11 a.m.; noon-3 p.m.; 8-10
            720 Chicago, Ill., CST.
                                                       WIBX
                                                                  1200 Utica, N. Y.
WGN
                                                                                                               WKBC 1310 Birmingham, Ala.
           7:30 a.m.-2 a.m.
                                                                   600 Bridgeport, Conn., EST.
                                                       WICC
WGNY 1210 Chester, N. Y., EST.
                                                                   7:30 a.m.-mid.
                                                                                                                                 Indianapolis, Ind., CST.
                                                                                                               WKBF
                                                                                                                          1400
            550 Buffalo, N. Y., EST.
                                                       WIL
                                                                   1200 St. Louis, Mo., CST.
WGR
                                                                                                                          6:30 a.m.-1:15 p.m.; 4:15-9;
           7:30 a.m.-mid.
                                                                   7 a.m.-mid.
                                                                                                                             11-mid.
                                                                                                               WKBH 1380 LaCrosse, Wis., CST.
            890 Atlanta, Ga., CST.
                                                       WILL
                                                                    899 Urbana, Ill., CST.
WGST
                                                                   10 a.m.-12:15 p.m.
                                                                                                                          7:30 a.m.-10 p.m.
           7 a.m.-11 p.m.
                                                                                                                          1420 Cicero, Ill., CST.
WGY
            790 Schenectady, N.Y., EST.
                                                       WILM
                                                                  1420 Wilmington, Del., EST.
                                                                                                               WKBI
                                                                   7:30 a.m.-2 p.m.; 4:30-10 p.m.
                                                                                                                          1:30-4 p.m.
           6:45 a.m.-i a.m. next day.
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WKBN	570 Youngstown, Ohio, EST.	WMBR	1370 Tampa, Fla., EST.	wos	630 Jefferson City, Mo.
WKBV	7 a.m1 p.m. 1500 Connersville, Ind., CST.	WMC	6:45 a.m10 p.m. 780 Memphis, Tenn., CST.	wov	<ul> <li>630 Jefferson City, Mo.</li> <li>9 a.m1:10 p.m., CST.</li> <li>1130 New York City, EST.</li> </ul>
WKBW	1480 Buffalo, N. Y., EST.	WMCA	7 a.m11 p.m. 570 New York City, <i>EST</i> .	wow	8 a.m6 p.m. 590 Omaha, Neb., CST.
WKBZ	9:15 a.m1 a.m. next day. 1500 Ludington, Mich., CST.		8-11 a.m.; noon-6 p.m.; 8:30 p.m2 a.m.		6:15-10 a.m.; 10:45 a.m2:3
WKEU	9 a.m9:30 p.m. 1500 LaGrange, Ga.	WMIL	1500 Brooklyn, N. Y., <i>EST</i> .	wowo	1160 Fort Wayne, Ind., CST.
WKFI	Greenville, Miss., CST.	WMMN	3 p.m9 p.m. 890 Fairmont, W. Va., EST.		7:30 a.m7:45 p.m.; 9:15 p.m. mid.
WKJC	7 a.m2 p.m.; 4-9 p.m. 1200 Lancaster, Pa., EST.	WMPC	7 a.m9 p.m. 1500 Lapeer, Mich., EST.	WPAD	1420 Paducah, Ky., CST. 7-9:30 a.m.; 11 a.m2 p.m.
WKRC	11 a.m3 p.m.; 6-8 p.m. 550 Cincinnati, Ohio, EST.	WMSG	Silent.  1350 New York City, EST.	WPAP	4-mid. 1010 New York City, EST.
WKY	6:45 a.mmid. 900 Oklahoma City, Okla.	WMT	Noon-3 p.m. 600 Waterloo, Iowa, CST.	WPAW	4 n.m.=8 n.m.
wkzo	6:30 a.mmid., CST.		7 a.m11 p.m.		1210 Providence, R. I., EST 9 a.m1:45 p.m.; 3 p.mmid.
	590 Kalamazoo, Mich., EST. 6:30 a.m8:15 p.m.	WNAC	1230 Boston, Mass., EST. 8 a.m1 a.m. next day.	WPCC	560 Chicago, Ill. Silent.
WLAC	6:30 a.m8:15 p.m. 1470 Nashville, Tenn., CST. 7 a.m11 p.m.	WNAD	8 a.m1 a.m. next day. 1010 Norman, Okla. Silent	WPCH	810 New York City, EST.
WLAP	1200 Louisville, Kv., CST.	WNAX	Silent. 570 Yankton, S. D., CST.	WPEN	8 a.msunset. 1500 Philadelphia, Pa., EST.
WLB	6:30 a.m11 p.m. 1250 Minneapolis, Minn.,	WNBF	6 a.mmid. 1500 Binghamton, N.Y., EST.	WPFB	7:30 a.m10:30 p.m. 1370 Hattiesburg, Miss., CST
WLBC	8 p.m9 p.m., <i>CST</i> . <b>1310</b> Muncie, Ind., <i>CST</i> .	WNBH	7 a.m10 p.m. 1310 New Bedford, Mass.,	WPG	7 a.m <sup>-</sup> -2 p.m.; 6-11 p.m. 1100 Atlantic City, N.J., EST
WLBF	7 a.m6 p.m. 1420 Kansas City, Kans.		<i>EST</i> . 9 a.m1:10 p.m.; 3-11 p.m.	WPHR	8:15 a.m6 p.m.; 8 p.m1 a.m 1200 Petersburg, Va., EST. 7-11 a.m.; noon-5 p.m.; 6-9 p.m. 780 Norfolk, Va.
WLBL	7 a.m11 p.m., CST.	WNBO	1200 Washington, Pa., EST.		7-11 a.m.; noon-5 p.m.; 6-9 p.m
	900 Stevens Point, Wis. 8 a.m3 p.m., CST. 1260 Erie, Pa., EST.		9 a.mnoon; 3-6 p.m.; 9 p.m mid.	WPOR WPRO	1210 Providence, R. I., EST.
WLBW	1260 Erie, Pa., EST. 8 a.m1 a.m. next day.	WNBR	1430 Memphis, Tenn., CST. 7:30 a.m12:30 p.m.; 3-10:15	WPTF	9 a.m1:45 p.m.; 3 p.mmid. 680 Raleigh, N. C., EST.
WLBZ	8 a.m1 a.m. next day. <b>620</b> Bangor, Maine, <i>EST</i> . 8:30 a.mmid.	WNBW	7:30 a.m12:30 p.m.; 3-10:15 1200 Carbondale, Pa. 1260 Springfield, Vt., EST.	WQAM	6:45 a.m9:15 p.m. 560 Miami, Fla., EST.
WLEY	1370 Levington Mass EST		6 a m -sunget	WQAN	7 a.m.=mid
WLIT	Noon-3 p.m.; 6-9 p.m. 560 Philadelphia, Pa., EST.	WNBZ WNJ	1290 Saranac Lake, N. Y. 1450 Newark, N. J., EST. 560 Knoxville, Tenn., CST.	-	880 Scranton, Pa., EST. 12:30-1:30 p.m.; 4:30-5:30 p.m. 1010 New York City, EST
	p.m.; 4:30-6 p.m.	MNOX	6:45 a.m11 p.m.	WQAO	1010 New York City, EST Silent.
WLOE	1500 Boston, Mass., EST. 10 a.m1:30 p.m.: 4:30-9:30	WNYC	570 New York City, EST.	WQBC	Silent. <b>1360</b> Vicksburg, Miss., <i>CST</i> . 7:30 a.m2:30 p.m.: 5-11 p.m.
WLS	p.m. 870 Chicago III CST	WOAI	11 a.mnoon; 6-8:30 p.m. 1190 San Antonio, Tex., CST. 6:30-9:15 a.m.; 11:15-3 p.m.;	WQDM	7:30 a.m2:30 p.m.; 5-11 p.m. 1370 St. Albans, Vt., EST. 8-9 a.m.; 11 a.m2 p.m. 1210 Thomasville, Ga.
0	p.m.; 7 p.m.; 1:30-5:30  870 Chicago, Ill., CST. 6-10:15 a.m.; 11:45 a.m3:30 p.m.; 7 p.m1 a.m.	WOAY	4:45-10:45 p.m. 1280 Trenton, N. J., EST.	WQDX	1210 Thomasville, Ga. 1370 Williamsport, Pa., EST.
WLTH	1400 Brooklyn, N. Y., EST.	WOAX	Noon-2 p.m.; 7:30-mid.		8:30 a.mmid.
WLVA	11 a.m1:30 p.m.; 6-7:30 p.m. 1370 Lynchburg, Va., EST.	WOBU	580 Charleston, W.Va., <i>EST</i> . 9 a.mnoon; 2-4 p.m.; 8:30 p.m	WRAM	1370 Wilmington, N. C., <i>EST</i> . 7:30 a.m3 p.m.; 6:30-11 p.m.
WLW	8 a.m11; 1-6 p.m. 700 Cincinnati, Ohio, EST.	woc	mid. 1000 Davenport, Iowa, CST.	WRAW	7:30 a.m3 p.m.; 6:30-11 p.m. 1310 Reading, Pa., EST. 7:30-9:30 a.m.
	6:30 a.m1 a.m. next day.	WOCL	7 a.m11 p.m.	WRAX	1020 Philadelphia, Pa., EST. 7 a.msunset.
	1100 New York City. 6-8 p.m., EST.		1210 Jamestown, N. Y., EST. Noon-mid.	WRBL	1200 Columbus, Ga., CST.
WMAC Wmal	<ul> <li>570 Syracuse, N. Y.</li> <li>630 Washington, D. C., EST.</li> </ul>	WODA WODX	<ul><li>1250 Paterson, N. J.</li><li>1410 Mobile, Ala., CST.</li></ul>	WRBX	7 a.m9 p.m. 1410 Roanoke, Va., <i>EST</i> .
WMAQ	8 a.mmid.	woi	1410 Mobile, Ala., CST. 9 a.m4 p.m.; 9-11 p.m. 640 Ames, Iowa, CST.	WRC	9 a.mnoon; 3-6 p.m.; 8 p.m1 950 Washington, D.C., EST
•	7 a.m1 a.m. next day. 1420 Springfield, Mass., EST.		6:30 a.m2:30 p.m. 1430 Albany, N. Y., EST.	WRDO	6:45 a.m1 a.m. next day. 1370 Augusta, Maine, EST.
	7:45 a.mmid.	WOL	9 a.m1 a.m. next day.		7-9:30 a.m.: 10:30 a.m1:30
w mAL	1180 Macon, Ga., EST. 7 a.m9:30 p.m. 1420 Detroit, Mich., EST.		1310 Washington, D. C., <i>EST</i> . 7 a.m1 p.m.; 3-9 p.m.	WRDW	p.m.; 3:30-10 p. m. 1500 Augusta, Ga., EST. 8 a.m2 p.m.; 5-11 p.m.
WMBC	1420 Detroit, Mich., EST. 7:30 a.mmid.	WOMT	1210 Manitowoc, Wis., CST. 7 a.m9 p.m.	WREU	600 Memphis, Tenn.
WMBD	1440 Peoria, Ill., CST.	WOOD	7 a.m9 p.m. 1270 Gd. Rapids, Mich., EST. 7 a.mmid.	WREN	1220 Lawrence, Kans., CST. 7 a.mmid.
WMBG	6-9:30 a.m.; 1-2:30 p.m.; 8-mid. 1210 Richmond, Va., EST.	WOPI	1500 Bristol, Tenn., EST.	WRHM	1250 Minneapolis, Minn. 6:15-9:45 a.m.; 10:35 a.m1 a.m
	7:30 a.m1:30 p.m.; 5-11 p.m. 1420 Joplin, Mo., CST.	WOQ	7 a.m2 p.m.; 4-11 p.m. 1300 Kansas City, Mo., CST.	we in	CST.
	Noon-2 p.m.; 6-7 p.m.		6-7 a.m.; 8:35-9:05 a.m.; 11- 11:30 a.m.; 2-3 p.m.; 10-11	WRJN	8 a.m10:30 p.m.
WMBI	1080 Chicago, Ill., CST. 7-7:30 a.m.; 10:30-noon; 12:30-	WOR	p.m. 710 Newark, N. J., EST.		1010 New York City. 1310 Knoxyille, Tenn., CST.
w <b>w</b> nc	1:30; 2:30-4 p.m.		6:45 a.mmid.		7 a.m10 p.m.
	1310 Auburn, N. Y., EST. 9 a.m9 p.m.	WORC	1200 Worcester, Mass., EST. 8 a.mmid.	WRR	1200 Dallas, Texas, CST. 6:30 a.m11 p.m.
WMBQ	1500 Brooklyn, N. Y., EST. 9-11 a.m.	WORK	1000 York, Pa., EST. 7:55 a.msunset.	WRUF	830 Gainesville, Fla., <i>EST</i> . 8 a.m8 p.m.
	3-11 g·III.		1.00 a.msunset.		о а.шо р.ш.

WRVA	1110 Richmond, Va., EST.	WTRC	1310	Elkhart, In .m7:30 p.n
WSAI	7 a.mmid. 1330 Cincinnati, Ohio, EST.	WWAE	1200	Hammond,
WSAJ	8 a.m11 p.m. 1310 Grove City, Pa.		7 a.m p.m 920	8:30; 11-1
WSAN	Silent. 1440 Allentown, Pa., EST.	MM1	7:30 a	.mmid.
WSAR	5 p.mmid. 1450 Fall River, Mass. <i>EST</i> .	WWL	850 8 a.m.	New Orlean -8:30 p.m.
WSAZ	1450 Fall River, Mass. EST. 8 a.m3:30 p.m.; 5-10 p.m. 580 Huntington, W. Va.	WWNC	<b>570</b> 7 a.m.	Asheville, I
	EST.	WWRL	1500	Woodside,
NSB	6-9 a.m.; noon-2 p.m.; 4-8:30 <b>740</b> Atlanta, Ga., CST. 6:25 a.m11 p.m.	wwsw	mid	n.; 11 a.mn 3 a.m. Pittsburgh,
WSBC	<b>1210</b> Chicago, Ill., CST.	WWVA	8 a.m.	-1:30 p.m.; Wheeling,
Nent	10-11:30 a.m.; 1:30-3:30; 5-6; 8-9; 11-mid.		7:30 a	.mmid.
WSBT	8-9; 11-mid. 1230 South Bend, Ind., CST. 6-7:30 a.m.; 3-5:30 p.m. 1210 Columbus, Ohio, EST.	WXYZ	1240 7:30 a	Detroit, M .mmid.
WSEN	о а.ш11 р.ш.	XEA	1000	Guadalajar nnoon; 2-3 Juarez, Me
NSFA	1410 Montgomery, Ala., CST.	XEAN	750 9 a.m	-2 n.m.: 5-1
WSIX	1210 Springfield, Tenn., CST. 6 a.m3 p.m.: 6-9 p.m. 1310 Winston-Salem, N. C.	XEAW XEB	965 1030	Reynosa, M Mexico Cit
WSJS	1310 Winston-Salem, N. C. 8 a.mmid. EST.	XEC	8 a.m.	-mid. Toluca, Me
WSM	8 a.mmid., EST. 650 Nashville, Tenn., CST. 7 a.mmid.	XED XEF	1155 735	Guadalajar Villa Acuna
WSMB	1320 New Orleans, La., $CST$ .		24 ho	ırs daily.
WSMK	7 a.mmid. 1380 Dayton, Ohio, EST. 7 a.m 8 p.m.: 10 p.mmid.	XEFA XEFB	1315	Mexico Cit Monterrey,
WSOC	1210 Gastonia, N. C., <i>EST</i> .	XEFC	1050	Monterrey, n2 p.m.; 6- Merida, M
WSPA	8 a.m10 p.m. 1420 Spartanburg, S. C., <i>EST</i> .	XEFD XEFE	1020 1000	Tijuana, M Laredo, Me Mexico Cit
WSPD	7:30 a.m11 p.m. 1340 Toledo, Ohio, <i>EST</i> .	XEFH XEFI	1360 1000	Chihuahua
NSUI	7:30 a.mmid. 880 Iowa City, Iowa, <i>CST</i> .	XEFJ XEFO	1000 940	Monterrey Mexico Cit
WSUN	<ul> <li>980 Iowa City, Iowa, CST.</li> <li>9-10 a.m.; 6-7 p.m.</li> <li>620 St. Petersburg, Fla., EST.</li> </ul>	XEFS	2-3 p. 1000	m.; 7-11 p.n Queretaro.
/svs	7:15 a.mmid. 1370 Buffalo, N. Y., EST.	XEFV	1370	0 p.m. Juarez, Me Tampico, I
SYB	8:30 a.m10 a.m.; 2-3 p.m. 1500 Rutland, Vt., EST.	XEFW XEFZ	1240 1500	Coyoacan,
SYR	1370 Buffalo, N. Y., EST. 8:30 a.m10 a.m.; 2-3 p.m. 1500 Rutland, Vt., EST. 10 a.m1 p.m.; 5-9 p.m. 570 Syracuse, N. Y., EST.	XEG XEH	8-11 p 1075	o.m. Mexico Cit
VTAD	570 Syracuse, N. Y., EST. 7 a.m3 p.m.; 4-11 p.m. 1440 Quiney, Ill., CST. 9:30 a.m1 p.m.; 2:30-8 p.m.	XEH	1132 9 a.m	Monterrey, -1:30 p.m.;
VTAG	9:30 a.m1 p.m.; 2:30-8 p.m. 580 Worcester, Mass., EST.	XEI	1310 2-3:30	1:30 p.m.; Morelia, M p.m.; 8:30- Juarez, Me
MATV	8 a.m11:15 p.m. 1070 Cleveland, Ohio, <i>EST</i> .	XEJ	1000 11 a.r	Juarez, Me n4 p.m.: 6
VTAQ	6:30 a.m1 a.m. next day. 1330 Eau Claire, Wis., CST.	XEK	990 1000	n4 p.m.; 6 Mexico Cit Saltillo, M
VTAR	7 a.m8 p.m. 780 Norfolk, Va., EST.	XEN	11 a.r	n1 p.m.; 6 Mexico Ci
VTAW	7 a.mmid. 1120 College Station, Texas.	XENT	10 a.r	nnoon; 2-4 Neuvo Lar
	Silent.	XEP XEPN	780	Mexico Cir Piedras Ne
TAX	1210 Springfield, Ill., CST. 7 a.m11:15, 3-6:45; 8:30-mid.	XER	585 735	Villa Acun
VTBO	1420 Cumberland, Md., EST. 7 a.m1:30 p.m.; 2:30-8 p.m.	XES	24 ho	urs daily. Tampico, l
NTEL	1310 Philadelphia, Pa., EST.		9-10:3 6:3	30 a.m.; noo 0-10 p.m.
VTFI	7-9 a.m.; 11-1 p.m.; 4-9 p.m. 1450 Athens, Ga., EST. 8 a.m4 p.m.; 6-10 p.m.	XET		Monterrey 2 p.m.; 6-
VTIC	8 a.m4 p.m.; 6-10 p.m. 1060 Hartford, Conn., EST.	XETA	1140	Mexico Cit
VTJS	7 a.m4 p.m.	XETB XETC	1380 1000	Torreon, Modeland Jalapa, Me
	7 a.m1 p.m.; 3-10:30 p.m.	XETF		Veracruz, m.; noon-2
NTMJ	620 Milwaukee, Wis., CST. 6:45 a.m12:30 a.m.	VF=:-	mic	1.
WTOC	1260 Savannah, Ga., EST. 7 a.mmid.	XETH	840 845	Puebla, Me Matamoro
				[73]

nd., CST., Ind., CST. p.m.; 4-11:30 lich., EST. ns, La., CST. N. C., CST. N. Y., EST. noon; 2-3 p.m.; , Pa., EST. 3-mid. W. Va., EST. fich., EST. ra, Mex.. CST. 3 p.m.; 5-11. ex., *MST*. 11 p.m. Mex. ty, Mex., CST. lex. ra, Mex. ıa, Mex. ity, Mex. , Mex., CST. -10 p.m. lex. Лeх. ex. ity, Mex. a. Mex. y, Mex. ty, Mex., CST. Mex. CST. Mex. Mex., CST. ity, Mex. y, Mex., *CST*. y, Mex., CSZ; 6-10 p.m. Mex., CST. D-10:30 p.m. Iex., CST. 6-11 p.m. ty, Mex. ex., CST. -9 p.m. ity, CST. 4 p.m.; 7-mid. redo, Mex. ity, Mex. egras, Mex. na, Mex. Mex., CST. on-2 p.m.; 5-6; y, Mex., *CST* -10 p.m. ity, Mex. Mex. ex. Mex., CST. p.m.; 7 p.m. ex. s, Mex.

XETR Mexico City, Mex. 890 Pachuca, Mex. XETU **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 910 Mexico City, Mex., CST 10 a.m.-mid. XEX 1210 Mexico City, Mex. XEY 546.8 Mexida, Mex. **XFB** 840 Jalapa, Mex. XFC 805 Aguascalientes, Mex. XFG 638.3 Mexico City, Mex. XFI 818.1 Mexico City, Mex. Mexico City, Mex. XFO 940 XFX 860 Mexico City, Mex. YV1BC 960 Caracas, Venz. 11 a.m.-1:30 p.m.; 5:45-10:30 p.m. 1200 Moose Jaw, Sask., MST. 10-AB 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-BP 1199 Wingham, Ont., EST. 9:30-11 p.m. 1200 Brantford, Ont., EST. 10-BQ 6-7 p.m. 10-BU 1200 Canora, Sask.

#### ADDITIONAL DX CALENDAR

Friday Night, Mar. 3rd 3:00-9:00 KPPC, 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 conpower-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

							, 0	11111011
				By	Cities			
Call	Megs.	Mtr	City .	•	Call	Megs.	Mtr	City
WPDO	2.458	191 07	Akron, Ohio.		WPDL	2 442	122.77	Lansing, Mich.
WPED	1.712	175.13	Arlington Mass		WPET	1.712	175.13	Lexington, Ky.
WPDY WPDN	$\frac{2.414}{2.458}$	124.20	Atlanta, Ga.		KGPL WPDE	1.712 $1.712$ $2.442$	$175.13 \\ 122.77$	Los Angeles, Calif.
WPDN	2.458	175.13 124.20 121.97 124.20 191.08	Atlanta, Ga. Auburn, N. Y. Bakersfield, Calif.		WPDE	2.442	122.77 $121.40$	Los Angeles, Calif. Louisville, Ky. Memphis, Tenn.
KGPS WPEQ	$\frac{2.414}{1.570}$	101.08	Bakersneid, Cani.		WPEL	$\frac{2.470}{1.570}$	191.08	Middlehoro Mass.
KGPJ	1.712	175.13	Baton Rouge, La. Beaumont, Texas Berkeley, Calif. Boston, Mass.		WPDK	2.450	122.40	Middleboro, Mass. Milwaukee, Wis. Minneapolis, Minn.
KSW WEY	2.422	175.13 123.79 192.43	Berkeley, Calif.		WPDK KGPB	$\frac{2.450}{2.416}$	$122.40 \\ 124.09$	Minneapolis, Minn.
WEY	$\frac{2.422}{1.558}$	192.43	Boston, Mass.		WPFA	1.712	175 13	Newton Mass.
WPEJ	1.712	175.13 122.40 187.85 122.40 123.79	Brookline, Mass. Brooklyn, N. Y. Brooklyn, N. Y. Bronx, N. Y. Buffalo, N. Y. Cedar Rapids, Iowa		WPEK WCF	2.430	123.45 187.85 122.40 191.08	New Orleans, La. New York, N. Y. New York, N. Y. Northampton, Mass.
WPEE	2.450	122.40	Brooklyn, N. Y.		WPFG	1.596	122 40	New York N. Y.
WRDU WPEF	$\frac{1.596}{2.450}$	122.40	Bronx N. Y.		WPEG WPEW	$\frac{2.450}{1.570}$	191.08	Northampton, Mass.
WMJ	2.422	123.79	Buffalo, N. Y.		KGPH	2 450	122.40	Okianoma Oity, Okia.
₩GOZ	2.470	121.40 $122.40$	Cedar Rapids, Iowa		KGPI	2.470	121.40	Omaha, Neb.
KGZF	2.450 $2.458$ $2.470$	122.40			KGJX WPDJ WPDP	2.470 1.712 2.414	$175.13 \\ 124.20$	Pasadena, Calif. Passaic, N. J. Philadelphia, Pa.
WPDV WPEY	2.458	121.97	Charlotte, N. C. Chattanooga, Tenn. Chicago, Ill.	-	MADD	2.414	124.20	Philadelphia Pa
WPDR	1 712	175 13	Chicago III		WPDU	$\frac{2.470}{1.712}$	175.13	Pittsburgh, Pa.
WPDC WPDD WKDU	1.712 $1.712$ $1.712$ $1.712$ $1.712$	121.97 121.40 175.13 175.13 175.13	Chicago, Ill.		KGPP	2.442	121.40 175.13 122.77 175.13 122.77	Portland, Ore.
WPDD	1.712	175.13	Chicago, Ill. Chicago, Ill.		WPEI WPDH	$\frac{2.442}{1.712}$	175.13	Providence, R.I. Richmond, Ind. Rochester, N. Y. Saginaw, Mich.
WKDU	1.712	175.13	Cincinnati, Ohio Cleveland, Ohio		WPDH	2.442	122.77	Richmond, Ind.
WRDH WPDI	2.458	121.97	Cleveland, Ohio		WPDR WPES	$\substack{2.458\\2.442}$	121.97	Rochester, N. 1.
KVP	$\frac{2.430}{1.712}$	$123.45 \\ 175.13$	Columbus, Ohio Dallas, Texas		KGPC	1.712	175.13	St. Louis Mo.
KGPN	2.470	121.40	Davenport, Iowa		KGPC WPDS	$\frac{1.712}{2.146}$	121.97 122.77 175.13 124.09	St. Louis, Mo. St. Paul, Minn.
WPDM	2.430	121.40 123.45 122.77	Davenport, Iowa Dayton, Ohio		KGPW	2.470	121.40	Salt Lake City San Antonio, Texas San Diego, Calif. San Francisco, Calif. San Francisco, Calif.
KGPX	2 442	122.77	Denver, Colo.		KGZE	2.506	119.64	San Antonio, Texas
KGZG	$\frac{2.470}{2.414}$	121.40	Des Moines, Iowa		KGZD KGPD	$\frac{2.430}{1.558}$	$123.45 \\ 192.43$	San Diego, Calif.
WCK WKDT WPDX	1.596	$124.20 \\ 187.85$	Detroit, Mich. Detroit, Mich. Detroit, Mich.		KGPD	$\frac{1.338}{2.470}$	121.40	San Francisco, Calif.
WPDX	2.414	124.20	Detroit, Mich.		KGPM	2.470	121.40	San Jose, Calif.
WRDS	1.574	190.48			KGPA	$\frac{2.470}{2.414}$	124.20	San Jose, Calif. Seattle, Wash. Shreveport, La. Sioux City, Iowa
WPDF WPDZ	$\frac{2.442}{2.470}$	$122.77 \\ 121.40$	Flint, Mich.		KGPY KGPK	$\frac{1.574}{2.470}$	$190.48 \\ 121.40$	Shreveport, La.
WPDZ KGPR	$\frac{2.470}{1.719}$	121.40	Flint, Mich. Fort Wayne, Ind. Fort Worth, Texas Framingham, Mass.			2.470	121.40	Sioux City, Iowa
WMP	$\frac{1.712}{1.574}$	175.13	Framingham, Mass.		WPEH WPEA	1.712	$175.13 \\ 121.97$	Somerville, Mass. Syracuse, N. Y.
KGZA WPEB WRDR	2.414	190.48 124.20 122.77 124.20			WRDQ	$\frac{2.458}{2.470}$	121.40	Toledo, Ohio
WPEB	2.442	122.77	Fresno, Calif. Grand Rapids, Mich.		KGZC	2.422	123.79	Topeka, Kans.
WRDR	$\frac{2.414}{2.414}$	124.20	Grosse Pt., Mich. Highland Park, Mich		WPDA	2.414	124.20	Tulare, Calif.
WMO	2.414		Highland Park, Mich		KGPO	2.450	122.40	Tulsa, Okla.
KGPQ KGZB	$\frac{2.450}{1.712}$	122.40 175.13 122.77	Honolulu, Hawaii Houston, Texas Indianapolis, Ind.		KGPG	2.422	123.79	Vallejo, Calif.
WMDZ	2.442	122.77	Indianapolis, Ind.		WPDW	2.422	123.79	Washington, D. C.
KGPE	2.422	123.79	Kansas City, Mo. Klamath Falls, Ore.		KGPZ	2.450	122.40	Wichita, Kans. Wichita Falls, Texas
₩PDT	2.442	122.77	Klamath Falls, Ore.		KGZI WPEM	$\frac{1.712}{2.470}$	175.13 $121.40$	Woonsocket, R. I.
WPDI	2.470	121.40	Kokomo, Ind.		WPEM	2.470	121.40	WOOHSOCKEL, IL. I.
				By Ca	ll Letter	s		
Call	Megs.	Mtr	City		Call	Megs.	Mtr	City
KGJX	1.712	175.13	Pasadena, Calif.		KGZD	2.430	123.45	San Diego, Calif.
KGOZ	2.470	121.40	Cedar Rapids, Iowa		KGZE	2.506	119.64	San Antonio, Texas
<b>KGPA</b>	2.414	124.20	Seattle, Wash.		KGZF	2.450	122 40	Chanute, Kans.
KGPB	2.416	124.09	Minneapolis, Minn.		KGZG	2.470 $2.442$ $1.712$	121.40 122.77 175.13	Des Moines, Iowa
KGPU	$\frac{1.712}{1.558}$	175.13	St. Louis, Mo.		KGZH KGZI	1 719	175 12	Klamath Falls, Ore. Wichita Falls, Texas
KGPC KGPD KGPD	2.470	192.43	San Francisco, Calif. San Francsico, Calif. Kansas City, Mo. Vallejo, Calif.		KSW	$\frac{1.712}{2.422}$	123.79	Berkeley, Calif. Dallas, Texas New York, N. Y. Detroit, Mich. Boston, Mass.
KGPE	2.422	121.40 $123.79$	Kansas City, Mo.		KSW KVP	1.712	175.13	Dallas, Texas
KGPG	2.422	123.79	Vallejo, Calif.		WCF	1.596	175.13 187.85	New York, N. Y.
KGPH KGPI	2.450	122.40	Oklanoma City, Okla		WCK WEY	$\frac{2.414}{1.558}$	124.20 192.43 187.85 175.13 122.77 123.79 124.20	Detroit, Mich.
KGPI	2.470	121.40	Omaha, Neb.		WEY	1.558	192.43	Boston, Mass.
KGPJ KGPK	$\frac{1.712}{2.470}$	175.13	Beaumont, Texas Sioux City, Iowa		WKDT WKDU	$\frac{1.596}{1.712}$	175 13	Detroit, Mich. Cincinnati, Ohio
KGPI	1.712	$121.40 \\ 175.13$	Los Angeles, Calif.		WMDZ	2.442	122.77	Indianapolis, Ind.
KGPM	2.470	121.40	San Jose, Calif.		WMDZ WMJ WMO	$\frac{2.422}{2.414}$	123.79	Buffalo, N. Y. Highland Park, Mich.
KGPM KGPN KGPO KGPP	2.470	121.40	Davenport, Iowa		WMO	2.414	124.20	Highland Park, Mich.
KGPO	2.450	122.40	Tulsa, Okla.		WMP	1.574		Framingham, Mass.
KGPP KGPQ	$\substack{2.442\\2.450}$	122.77 $122.40$	Portland, Ore. Honolulu, Hawaii		WPDA WPDB	1 719	$124.20 \\ 175.13$	Tulare, Calif. Chicago, Ill.
KGPR	$\frac{2.450}{1.712}$	175.13	Fort Worth, Texas		WPDC	1.712	175.13	Chicago, Ill.
KGPS	2.414	124.20	Fort Worth, Texas Bakersfield, Calif. Salt Lake City, Utah		WPDC WPDD	2.414 1.712 1.712 1.712	175.13	Chicago, Ill. Chicago, Ill.
₭GPW	2.470	121.40	Salt Lake City, Utah		WPDE	2.442	122.77	Louisville, Ky.
KGPX	2.442	122.77	Denver, Colo.		WPDF	2.442	122.77 $122.77$	Flint, Mich.
KGPY	$1.574 \\ 2.450$	190.48	Shreveport, La.		WPDH WPDI	$\frac{2.442}{2.430}$	122.77 $123.45$	Columbus Obio
KGPZ KGZA	$\frac{2.430}{2.414}$	$122.40 \\ 124.20$	Wichita, Kans. Fresno, Calif.		WPDJ	2.414	123.45 $124.20$	Passaic, N. J.
₩GZB	1.712	175.13	Houston, Texas		WPDJ WPDK	2.450	122.40	Richmond, Ind. Columbus, Ohio Passaic, N. J. Milwaukee, Wis.
KGZC	2.422	123.79	Houston, Texas Topeka, Kans.		WPDL	2.442	122.77	Lansing, Mich.

G 11							
Call	Megs.	Mtr	City	Call	Megs.	Mtr	City
WPDM	2.430	123.45	Dayton, Ohio	WPEG	2.450	122.40	New York, N. Y.
WPDN	2.458	121.97	Auburn, N. Y.	WPEH	1.712	175.13	Somerville, Mass.
WPDO	2.458	121.97	Akron, Ohio	WPEI	1.712	175.13	Providence, R. I.
WPDP	2.470	121.40	Philadelphia, Pa.	WPEJ	1.712	175.13	Brookline, Mass.
WPDR	2.458	121.97	Rochester, N. Y.	WPEK	2.430	123.45	New Orleans, La.
WPD\$	2.416	124.09	St. Paul, Minn.	WPEL	1.570	191.08	Middleboro, Mass.
WPDT	2.470	121.40	Kokomo, Ind.	WPEM	2.470	121.40	Woonsocket, R. I.
WPDU	1.712	175.13	Pittsburgh, Pa.	WPEO	1.570	191.08	Baton Rouge, La.
WPDV	2.458	121.97	Charlotte, N. C.	WPES	2.442	122.77	Saginaw, Mich.
WPDW	2.422	123.79	Washington, D. C.	WPET	1.712	175.13	Lexington, Ky.
WPDX	2.414	124.20	Detroit, Mich.	WPEW	1.570	191.08	Northampton, Mass.
WPDY	2.414	124.20	Atlanta, Ga.	WPEY	2.470	121.40	Chattanooga, Tenn.
WPDZ	2.470	121.40	Fort Wayne, Ind.	WPFA	1.712	175.13	Newton, Mass.
WPEA	2.458	121.97	Syracuse, N. Y.	WRDH	2.458	121.97	Cleveland, Ohio
WPEB	2.442	122.77	Grand Rapids, Mich.	WRDQ	2.470	121,40	Toledo, Ohio
WPEC	2.470	121.40	Memphis, Tenn.	WRDR	2.414	124,20	Grosse Pointe, Mich.
WPED	1.712	175.13	Arlington, Mass.	WRDS	1.574	190.48	E. Lansing, Mich.
WPEE	2.450	122.40	Brooklyn, N. Y.	WRDU	1.596	187.85	Brooklyn, N. Y.
WPEF	2.450	122.40	Bronx, N. Y.				

#### BY FREQUENCIES 1.558 megs. 192.43 meters GPD San Francisco, Calif. KGPD Boston, Mass. negs. 191.08 meters WEY 1.570 megs. WPEL Middleboro, Mass. WPEO Baton Rouge, La. WPEW Northampton, Mass 1.574 megs. 190.48 meters KGPY Shreveport, La. Framingham, Mass. E. Lansing, Mich. 1.596 megs. 187.85 meters CF New York, N. Y. WMP WRDS WCF WKDT Detroit, Mich. RDU Brooklyn, N. Y. 1.712 megs. 175.13 meters WRDU Pasadena, Calif. St. Louis, Mo. KGJX KGPC KGPJ KGPL Beaumont, Texas Los Angeles, Calif. Fort Worth, Texas KGPR KGZB KGZI Houston, Texas Wichita Falls, Texas KVP Dallas, Texas WKDU Cincinnati, Ohio Chicago, Ill. Chicago, Ill. Chicago, Ill. WPDB WPDC WPDD WPDU Pittsburgh, Pa. Arlington, Mass. WPED

Somerville, Mass.

Providence, R. I. Brookline, Mass. Lexington, Ky.

Newton, Mass.

WPEH

WPEI

WPET **EPFA** 

	By Frequencies
2414	megs. 124.20 meters
KGPA	Souttle Wash
KGPS	Seattle, Wash. Bakersfield, Calif.
KGZA	Fresno, Calif.
WCK	Detroit, Mich.
WMO	Highland Park, Mich.
WPDA	
WPDJ	Tulare, Calif.
	Passaic, N. J.
WPDX	Detroit, Mich.
WPDY	Atlanta, Ga.
WRDR	Grosse Pointe, Mich.
2,416	
KGPB	Minneapolis, Minn.
WPDS	St. Paul, Minn.
2,422	
KGPE	Kansas City, Mo.
KGPG	Vallejo, Calif.
KGZC	Topeka, Kans.
KSW	Berkeley, Calif.
WMJ	Buffalo, N. Y.
WPDW	Washington, D. C.
2,430	megs. 123.45 meters
KGZD	San Diego, Calif. Columbus, Ohio
WPDI	Columbus, Ohio
WPDM	Dayton, Ohio
WPEK	New Orleans, La.
	megs. 122.77 maters
KGPP	Portland, Ore.
KGPX	Denver, Colo.
KGZH	Klamath Falls, Ore.
WMDZ	Indianapolis, Ind.
WPDE	Louisville, Ky.
WPDF	Flint, Mich.
WPDH	Richmond, Ind.
WPDL	Lansing, Mich.
WPEB	Grand Rapids, Mich.
WPES	Saginaw, Mich.

2 450	megs. 122,40 meters
KGPH	Oklahoma City, Okla.
KGPO	Tulsa, Okla.
KGPO	Honolulu, Hawaii
KGPZ	Wichita, Kans.
KGZF	Chanute, Kans.
WPDK	Milwaukee, Wis.
WPEE	Brooklyn, N. Y.
WPEF	Bronx, N. Y.
WPEG	New York, N. Y.
2,458	megs. 121.97 meters
WPDN	Auburn, N. Y.
WPDO	Akron, Ohio
WPDR	Rochester, N. Y.
WPDV	Charlotte, N. C.
WPEA	Syracuse, N. Y.
WRDH	Cleveland, Ohio
2.470	megs. 121.40 meters
KGOZ	Cedar Rapids, Iowa
KGPD	San Francisco, Calif.
KGPI	Omaha, Neb.
KGPK	Sioux City, Iowa San Jose, Calif.
KGPM	San Jose, Calif.
KGPN	Davenport, Iowa
KGPW	Salt Lake City, Utah
(GZG NPDP	Des Moines, Iowa
WPDT	Philadelphia, Pa.
WPDZ	Kokomo, Ind.
WPEC	Fort Wayne, Ind.
NPEM	Memphis, Tenn. Woonsocket, R. I.
NPEY	Chattanooga, Tenn.
WRDQ	Toledo, Ohio
	megs. 119.64 meters
(GZE	San Antonio, Texas
	non interest of the

### Time on the Air of European Broadcasters

N 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 "thousandto-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.

				Sund	au	Week Da	us
Kcys.	City	Country	POWER	A.M.	P.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	0.00
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	Rome	Italy	50,000	4:15	5:00	2:15	5:00
689	Stockholm	Sweden	55.000	4:00	5:00	1:20	5:00
697	Belgrade	Yugoslovia	2.800	5:00	5:00		0:00
707	Madrid	Spain	2,000			As Sunday	
715	Berlin					ex. Monday	
715		Germany	1,500	12:15	6:30	As Sunday	
	Dublin	Ireland	1,200	3:30	6:00	8:30	5:30
734	Katowice	Poland	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	0.00
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	5:00	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		7:00
887	Brussels	Belgium				As Sunday	
905	Milan		15,000	7:00	6:00	As Sunday	
		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	10,000	4:00	5:00	1:30	5:00
941	Naples	Italy	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	Holland	20,000	3:15	6:45	2:45	6:45
1031	Viipuri	Finland	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	Horby	Sweden	10,000	4:00	5:00	1:30	5:00
1184	Geliwitz	Germany	5,000	12:30	6:00	As Sunday	0.00
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	0:00
1010	ле Оашр	T 12HOC	10,000	7:00	10:00 .	as sunday	
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# With the SHORT WAVES on SUNDAY

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

		AM	7.00-8.00	ZPG	Kuala Lampur, Malay 50.00
12.01-2.00 PI	K3AN T	Surabaya, Java 54.00		PK3AN	Surabaya, Java 54.00
1.00- 3.00 VI	K2ME	Sydney, Australia 31.28		VK2ME	Sydney, Australia 31.28
3.00-5.00		Johannesburg, S. A 43.50	7.30-8.00	CNR	.Rabat, Morocco 23.38
4.40- 5.00 PI	K3AN	Surabava, Java 54.00	8.00- 9.00	VK2ME	Sydney, Australia 31.28
5.00- 5.30 H	٧J	Vatican City, Italy 50.26			Pontoise, France 19.68
5.00- 6.00 PI	K3AN	Surabaya, Java 54.00		DIH	Nauen, Germany 15.03
		Johannesburg, S. A 49.20		ZPG	Kuala Lampur, Malay 50.00
Vi	K2ME	Sydney, Australia 31.28		CNR	Rabat, Morocco 23.38
R\		Moscow, U. S. S. R 50.00	9.00-10.00	• · · · · •	Pontoise, France 19.68
			10.00-11.00		Johannesburg, S. A 43.50
	3	Johannesburg, S. A 49.20		<b>.</b>	Pontoise, France 19.68
VI	K2ME	Sydney, Australia 31.28	10.30-11.00	CT3AQ	Funchal, Madeira Is 26.83

11.00 Noon	VQ7LO VE9CI	Heredia, C. R. 19.90 Nairobi, Kenya 49.48 London, Canada 109.62 Johannesburg, S. A. 43.50		REN VE9GW VE9CS	Rabat, Morocco.       32.32         Moscow, U. S. S. R.       45.38         Bowmanville, Ont.       49.22         Vancouver, B. C.       49.42
11.30 Noon	CT3AQ	Funchal, Madeira Is 26.83 Pontoise, France 25.20		YV1BC I2RO	Caracas, Venezula 49.00 Rome, Italy 25.40
		PM	4.30-5.00	EAR58	Santa Cruz de T., Canary Is
Noon 1-00		Pontoise, France 25.20	5.00 - 5.30	<b></b>	Rabat, Morocco
	VE9CS	Vancouver, B. C 49.42		12RO	Rome, Italy 25.40
	VQ7LO	Nairobi, Kenya 49.48	5.00-5.45	HBL	Geneva, Switzerland 31.30
1.00-2.00	VE9CI REN	London, Canada109.62 Moscow, U. S. S. R45.38	5.00- 6.00	нвр	.Geneva, Switzerland 38.47 Pontoise, France 25.60
1.00- 2.00	VE9GW	Bowmanville, Ont 49.22	0.00- 0.00	EAR58	Santa Cruz de T., Canary
	VE9CS	Vancouver, B. C 49.42			Is 41.60
	V Q7LO VE9CI	Nairobi, Kenya 49.48		OXY	.Skamlebark, Denmark 31.51
	FIUI	London, Canada109.62 Tananarive, Madag52.70		VE9GW	Moscow, U. S. S. R 45.38 Bowmanville, Ont
2.00- 2.30		Pontoise, France 25.20		VE9CS	Vancouver, B. C
2.00-3.00	OXY	Skamlebark, Denmark 31.51		YV1BC	Caracas, Venezuela 49.00
	REN	Moscow, U. S. S. R 45.38	5.30- 6.00	EAQ	Madrid, Spain 30.40
	VE9GW VE9CS	Bowmanville, Ont 49.22 Vancouver, B. C 49.42	6.00- 6.30 6.00- 7.00	OXY	Skamlebark, Denmark 31.51 Pontoise, France 25.60
	VQ7LO	Nairobi, Kenya 49.48	0.00- 1.00	EAQ	Madrid, Spain 30.40
	FIÙI	Tananarive, Madag 52.70		VE9GW	Bowmanville, Ont 49.22
2.30- 3.00	I2RO	Rome, Italy		VE9CS	Vancouer, B. C 49.42
3.00- 3.30	VQ7LO OXY	Nairobi, Kenya 49.48		YV1BC VE9HX	Caracas, Venezuela 49.00
3.00- 4.00	UA1	Skamlebark, Denmark 31.51 Rabat, Morocco 32.32		HKO	Halifax, Nova Scotia 49.59 Medellin, Colombia 50.60
	REN	Moscow, U. S. S. R 45.38	7.00-8.00		Vancouver, B. C 49.42
	VE9GW	Bowmanville, Ont 49.22		YV1BC	Caracas, Venezuela 49.00
	VE9CS	Vancouver, B. C	0.00.10.00	HKO	Medellin, Colombia 50.60
	I2RO PCM	Rome, Italy	8.00-10.00	HKD VE9CS	Barranquilla, Colombia 50.00 Vancouver, B. C 49.42
4.00-5.00		Pontoise, France 25.60		YV1BC	Caracas, Venezuela 49.42
0.00	OXY	Skamlebark, Denmark 31.51	10.00-12.00	VE9C\$	Vancouver, B. C 49.42

## 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 letters.

Broadcast B. Phone P.

	2100	deadt Di Inone I.			
3.998 4.174	$75.00 \\ 71.82$	HCJB Quito, Ecuador, 7:30-9:45 a.m. B British Ships P	6.060	49.48	W8XAL Cincinnati, O. Relays WLW 6-10; 30 a.m.;1:30-3:30 p.m.;7 p.m1:30 a.m. B
4.174	71.82	German Ships P	6.070	49.39	VE9CS Vancouver, B. C., Fri. 12:30-1:45
4.273	70.65	RV15 Khabarovsk, USSR 3 a.m9 a.m. B			a.m.; noon to mid. B
4.283	70.00	Italian Ships P	6.076	49.34	W9XAA Chicago, Ill., Sun. 11 a.m9 p.m. B
4.792	62.56	VE9BY London, Ontario, Sat. midn1 a.m. B	6.090	49.23	VE9BJ St. John, N. B., 5 p.m. and 11 p.m. B
4.975	60.27	GBC Rugby, England. Phones ships irregu- iarly	6.095	49.18	W9XF Chicago, Ill., 4:30-8 p.m.; 9:30 p.m 2 a.m. B
5.045	59.42	VRT-ZFA Hamilton, Bermuda. Phones WNB-GMBJ nights	6.096	49.17	W3XAL Boundbrook, N. J., Sat. 4:30 p.m 1 a.m. B
5.144	58.33	DIQ Nauen, Germany B	6.119	49.00	YV1BC Caracas, Venz. Relays 960 kcs.
5.766	52.00	XAM Merida, Yucatan. Tests XDA 10 a.m.			10:30 a.m1 p.m.; 5:15-10 p.m. B
		8 p.m. irreg. P		48.95	YV11BMO Maracaibo, Venz., 8-11 p.m. B
<b>5.87</b> 9	51.00		6.140	48.83	W8XK Pittsburgh, Pa. Relays KDKA 4-11
		8 p.m. irreg.			p.m. B
5.925	50.60	HKO Medellin, Colombia, TuesThur	6.335		VE9AP Drummondville, Que. B
F 000	F0.00	Sat. 8-10 p.mSun. 6-8 p.m. B	6.386	46.96	W3XL Boundbrook, N. J. Experimental B
<b>5.</b> 968	50.26	HVJ Vatican City, 2-2:15 p.m.; Sun. 5-5:30	6.426	46.65	VE9BY London, Ontario, Wed. 8:30-9:30
5.996	50.00	a.m. B	0.011	45 95	p.m.; Fri. 7-8 p.m.; Sat. 8-11 p.m. B
6.005	49.93	HKD Barranquilla, Col., 8-10 p.m. B	6.611	45.35	TGW Guatamala City, TuesThurFri.
0.000	49.90	VE9DR Drummondville, Que., 7 p.m mid. B	6 619	45.31	10:30 p.mmid. B PRADO Riobamba, Ecuador, Thur. 9-11
6.036	49.67	W4XB Miami, Fla. Reported 5-11 p.m. B	0.010	10.01	p.m., B
6.050	49.56	GSA Daventry, England. To Canada 8-10	6 649	45.10	
0.000	13,00	p.m. B	6.675	44.91	DGK Nauen, Germany. Heard 9 p.m. with
6.057	49.50	CMCI Havana, Cuba, 9-11 p.m. B	0.010	11.01	WEJ P
6.060	49.48	VQ7LO Nairobi, Kenya, 11 a.m3:30 p.m.;	6.888	43.54	KEQ Kahuku, Hawaii. Phones California
0.500	20720	Tues. 3-4 a.m.; Thur. 8-9 a.m. B	3.300		nights P

7.139	42.00	HJ4ABB Manizales, Colombia, Sat. 10	11.865	25.27	GSE Daventry, England, To India 9:30-
7.312	41.03	p.mmid. B CM5RY Matanzas, Cuba, Sat. 10:45-11:30	11.872	25.25	11:30 a.m. B W8XK Pittsburgh, Pa. Relays KDKA 4-10 p.m. B
7.518	39.89	KDK-KKH Kahuku, Hawaii, 9 p.m. and	11.898	25.20	Pontoise, France, 11:30 a.m2:30 p.m. B
7.610	39.40	2 a.m. HJ3ABF Bogota, Colombia, 7 p.m11 p.m.	$12.000 \\ 12.592$	24.98 23.81	FZS Saigon, Indo-China, 9-10 a.m. P DAN Norden, Germany, Talks to ships P
7.790	38.49	HBP Geneva, Switzerland, Sun. 5-5:45 p.m.	12.780	23.46	GBC Rugby, England. Phones ships irregularly
8.180	36.65	PSK Rio de Janeiro, Brazil. Reported work-	12.820	23.38	CNR Rabat, Morocco. Sun. 7:30 a.m 9 a.m. B
8.328	36.00	ing WOK P DAN Norden, Germany P	13.035 13.074	$\frac{23.00}{22.93}$	German Ships P J1AA Kemikawa-Cho, Japan. Phones, ex-
8.328	36.00	German Ships P			perimental P
8,566 8:645	35.00 34.68	Italian Ships P VE9BY London. Ontario Mon. 3-4 p.m. B	$13.219 \\ 13.278$	$\frac{22.68}{22.58}$	British Ships P YVQ Maracay, Venezuela P
8,831	33.95	British Ships P	13.296	22.55	CGA Drummondville, Que., 9 a.m2 p.m. P
8.950	33.50	TGX Guatamala City, Sat. 10 p.mmid. B	13.500	22.09	CGA Drummondville, Que., 9 a.m2 p.m. P GBB Rugby, England. Talks Canada day-
9.012	33.27	KEJ, Bolinas, Calif. Tests irregularly P	10.010	04.50	times. P
9.276 9.480	32.32 31.63	CNR Rabat, Morocco, Sun. 3 p.m6 p.m. B PLW Bandoeng, Java Phones Australia	13.816 14.450	$21.76 \\ 20.75$	SUZ Cairo, Egypt, 7 a.m. and 3:30 p.m. P GBW Rugby, England, 6 a.m. and 6 p.m. P
9.400	31.00	3-8 a.m. irreg.	14.485	20.60	RXC Panama City. Afternoons P
9.492	31.58	PRBA Rio de Janeiro, Brazil, 6-6:15 p.m. B	14.550	20.60	HBJ Geneva, Switzerland P
9.503	31.55	VK3ME Melbourne, Australia, Wed. 5-6:30	14.682	20.42	PSS Rio de Janeiro, Brazil, 5-6 p.m. P
0.510	01 50	a.m.; Sat. 5-7 a.m. B	14.760	20.32	HJB Bogota, Colombia 11 a.m. 5 p.m. P WMB Miami, Fla., 1-5 p.m. P
9.510	31.53	GSB Daventry, England. To Canada 8-10	14.796 15.066	$20.27 \\ 19.90$	WMB Miami, Fla., 1-5 p.m. P TI4NRH Heredia, Costa Rica, SatSun.
9.520	31.49	p.m. B OXY Skamleback, Denmark, 2-6:30 p.m. B	10.000	13.30	11-noon B
9.530	31.46	WZAAF ochenectady, N. 1., 5:15-11 p.m.;	15.120	19.83	HVJ Vatican City, 5-5:15 a.m. B
		SatSun., 4-11 p.m. B	15.140	19.81	GSF Daventry, England B
9.552	31.38	DJA Zeecen, Germany, 2 p.m6;30 p.m. B W1XAZ Springfield. Mass., 4 p.m12;30	15.190 15.204	19.73	DJB Zeesen, Germany, 8 a.mnoon B W8XX Pittsburgh, Pa. Relays KDKA
9.560	31.36	a.m. B	10.201	19.72	9 a.m4 p.m. B
9.570	31.33	SR1 Poznan, Poland, Tues. 6 a.m8 a.m. B	15.234	19.68	Pontoise, France, 8 a.m11 a.m. B
9.580	31.30	HBL Geneva, Switzerland, Sun. 5-5:45 p.m.	15.320	19.57	W2XAD Schenectady N. Y. Daily 1-3
0 505	01:00	agan. 4 F. L. L. B.	17 410	10.40	p.m.; SatSun. to 4 B
9.585 9.585	31.28 31.28	GSC Daventry, England B VK2ME Sydney, Australia, Sun. 1-2 a.m.;	15.410	19.46	KWO Dixon, Calif. Phones Hawaii 2-7 p.m.
8.000	J1.20	5-9 a.m.; 9:30-11 a.m. B	15.760	19.02	J1AA Kemikawa-Cho, Japan. Phones ex-
9.592	31.25	CT1AA Lisbon, Portugal, TuesFri., 5-7			perimental P
	04.00	p.m. B TI4NRH Heredia, Costa Rica, week days	16.150	18.56	GBX Rugby, England, 4 p.m. and 11 p.m. P
9.670	31.00	10-11 n.m. B	16.601 17.080	18.06 17.55	DAN Norden, Germany P GBC Rugby, England. Talks with ships
9.862	30.40	10-11 p.m. B EAQ Madrid, Spain, 5:30-7 p.m. B	17.000	11.00	irregularly P
9.862	30.40	J1AA Kemikawa-Cho, Japan, 5-7:45 a.m. B	17.770	16.90	GSG Daventry, England. To India 9:30-
9.895	30.30	LSN Buenos Aires, Argetina, 6 p.m. and	48 880	10.05	11:30 a.m. B
9.928	30.20	6 a.m. P HJY Bogota, Colombia. Phones OCI eve-	17.772 17.830	$16.87 \\ 16.82$	W3XAL Boundbrook, N. J., 8 a.m4 p.m. B PCV Kootwijk, Holland, 6-9 a.m. P
9.920	30.20	nings irregularly P	18.170	16.50	PMC Bandoeng, Java, 3:30-9 a.m. P
10,060	29.80	VRT-ZFB Hamilton, Bermuda, Phones	18.296	16.39	YVQ Maracay, Venezuela. Heard about
		WNB days			10 a.m. P
10.090	29.70	OPM Leopoldville, Congo. Phones ORK 9-11 a.m.; 3-6 p.m. P	18.400	16.29	PCK Kootwijk, Holland. Phones Java
10.163	29.50	German Ships P	10 444	10.05	about 7 a.m. P
10.212	29.35	PSH Rio de Janeiro, Brazil. Tests W2XBJ	18.444	16.25	HJY Bogota, Colombia, 11 a.m. and 4 p.m.
		evenings P	18.670	16.06	OCI Lima, Peru, 2 p.m. P
10.246	29.26	DIQ Nauen, Germany B	18.820	15.93	PLE Bandoeng, Java, TuesFri. 5:40-10:40
10.285 10.340	29.15 28.99	DJQ Koenigswusterhausen ORK Brussels, Belgium. Phones OPM 2-4,	20.020	-0.00	a.m. P
10.010	20.00	9-11 a.m.; 3-6 p.m. P	18.958	15.82	LSR Buenos Aires, Arg., 11 a.m. and 4 p.m.
10.830	27.68	KWV Dixon, Calif. Phones Hawaii irregu-			P
	00.00	larly P	19.270	15.57	PPU Rio de Janeiro, Brazil, 10:30 a.m. and
11.174	26.83	CT3AQ Funchal, Madeira, TuesThurs., 5-6:30 p.m.: Sun. 10:30-noon B			3:30 p.m. P
11 590	96 00	5-6:30 p.m.; Sun. 10:30-noon B XAM Merida, Yucatan P	19.282	15.55	FTM St. Assise, France, 10 a.m2 p.m. P
11.530	26.00	PPQ Rio de Janeiro, Brazil. Heard testing	19.678	15.24	CEC, Santiago, Chile, 11 a.m. and 4 p.m. P
11.644	25.75	6 p.m. P	19.684	15.23	EAQ Madrid, Spain. Phones P
11.680	25.67	YVQ Maracay, Venzuela. Tests Germany	19.895	15.07	LSG Buenos Aires, Argentina, 10:30 a.m 3:30 p.m. P
11.000		5-7 p.m.	20.028	14.97	DHO Nauen, Germany. Phones LSG
11.710	25.60	DGT Koenigswusterhausen B	20.020	11.01	7 a.m11 a.m. irregularly P
11.710	25.60	VE9JR Winnipeg, Manitoba, Tues. 6:30-	20.820	14.40	LSY Buenos Aires, Argentina. Heard 10
		8:30 p.m.; Fri. to 9			a.m. to 2 p.m. P
11.710	25.60	Pontoise, France, 4-7 p.m. B	21.020	14.27	LSN, Buenos Aires, Argentina, 8 a.m. and
11.750	25.51	GSD Daventry, England. To Oceania 4-30: 6:30 a.m. B			4 p.m. P
11.760	25.50	XDA Mexico City. Tests XAM 1 p.m. and	21.054	14.24	WKA Lawrenceville, N. J., 8 a.m-4 p.m. P
		6 p.m. P	21.069	14.23	PSA Rio de Janeiro, Brazil, 8 a.m. P WKK Lawrenceville, N. J., 8 a.m4 p.m. P
11.800	25.40	I2RO Rome, Italy, 11 a.m12:30 p.m.;	21.400 21 470	14.01 13.96	WKK Lawrenceville, N. J., 8 a.m4 p.m. P GSH Daventry, England B
		2:30-5:30 p.m. B	21 470	10.00	OMIL Davenery, England D

Index of S. W. Stations by Call Letters appeared in the February number and will again be in April issue.

## 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 a. 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 kcs.—KPQ, Wenatchee, Wash., Sunday morning, February 26th 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 11th, repay any listener for his loss of sleep. This club invites all listeners to tune in any Saturday morning from midnight to six a. 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 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 SS. 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. "December 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 kcs.) 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 kcs. 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 15th for an undetermined length of time. VE9GW was always one of our best liked stations.

## Here's Something You Have Wanted . .

## ♦ A RADIO PROGRAM

#### RADIO PROGRAMS

	MONDAY			TUESDAY		
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