THE MARCH 1933

RADEX EX

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



RADEX

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.

	SUNDAY NIGHT	4:00-6:00	WINS, 1180, New York City
3:00-5:00	March 5th KPCB, 650, Seattle, Wash.	4:00-6:00	WLWL, 1100, New York City
3.00-3.00	March 19th	4:30-6:00	10-BP, 1199, Wingham, Ont. March 31st
2:00-4:00	WBSO, 920, Needham, Mass. 10-BI, 1200, Prince Albert, Sask.	4:00-5:00	KGAR, 1370, Tucson, Ariz.
2:30-5:00	10-BI, 1200, Prince Albert, Sask.	4:00-6:00	WBBC, 1400, Brooklyn, N. Y.
12:00-1:00	March 5th, 12th, 19th, 25th	4:00-6:00	WOV, 1130, New York City
12:30-1:00	WSAZ, 580. Huntington, W. Va. KSOO, 1110, Sioux Falls, S. Dak. WGES, 1360, Chicago, Ill.		March 3rd, 17th
1:00-3:00	WGES, 1360, Chicago, Ill.	1:00-5:00	KASA, 1210, Elk City, Okla.
	MONDAY NIGHT	4:00-5:00	XES, 1055, Tampico, Mex.
	March 6th, 20th	12:30-1:30	March 3rd, 10th, 17th, 24th, 31st WCAL 590 Lincoln Nebr
4:30-5:15	WEAO, 570, Columbus, Ohio WAWZ, 1350, Zarephath, N. J.	1:00-2:00	WCAJ, 590, Lincoln, Nebr. CFCN, 985, Calgary, Alta. WENC, 1420, Americus, Ga.
5:00-6:00	March 6th, 13th, 20th, 27th	1:00-2:00	WENC, 1420, Americus, Ga.
12:00-2:30	WMIL, 1500, Brooklyn, N. Y.	1:00-3:00	CKCL, 580, Torento, Ont. KGEK, 1200, Yuma, Colo. CMJH, 1150, Ciego de Avila, Cuba
1:00-4:00	WM1L, 1500, Brooklyn, N. Y. WSUI, 880, Iowa City, Iowa WABZ, 1200, New Orleans, La.	1:30-3:30 4:30-5:00	CMIH 1150 Ciogo de Avile Cube
1:00-5:00	WABZ, 1200, New Orleans, La.	1.00-0.00	SATURDAY NIGHT
2:00-4:00 5:15-5:30	KOY, 1390, Phoenix, Ariz. WHP, 1430, Harrisburg, Pa,		Feb. 25th
0.15-5.50	TUESDAY NIGHT	3:00-1:00	KPQ, 1500, Wenatchee, Wash.
	Feb. 28th		March Ath
3:00-6:00	WOPI, 1500, Bristol, Tenn.	12:00-2:00	CMCH, 1395, Havana, Cuba WRBX, 1410, Roanoke, Va. WILL, 890, Urbana, III. CHGS, 1120, Summerside, P. E. I. CHML, 880, Hamilton, Ont.
4:00-5:00	KGAR, 1370, Tucson, Ariz.	12:00-4:00 1:00-3:00	WRBX, 1410, Roanoke, Va.
2:00-3:00	March 7th WJMS, 1420, Ironwood, Mich.	1:30-2:30	CHGS 1120 Summerside P. E. I.
2.00-0.00	March 14th	2:00-3:00	CHML, 880, Hamilton, Ont.
2:00-4:00	WHET, 1210, Troy, Ala. KFBI, 1050, Abilene, Kans.		March 4th, 18th
4:00-5:00	KFBI, 1050, Abilene, Kans.	1:00-5:00	WJEJ, 1210, Hagerstown, Md.
2:30-3:30	March 28th WCLO 1200 Innesville Win	2:30-4:30 3:00-6:00	WJEJ, 1210, Hagerstown, Md. 10-AB, 1200, Moose Jaw, Sask. 10-AT, 1155, Trail, B. C.
2.00-0.00	WCLO, 1200, Janesville, Wis. March 7th, 14th, 21st, 28th	0.00-0.00	March 11th
12:00-1:00	XEH, 1132, Monterrey, Mex.	3:00-6:00	KGIR, 1360, Butte, Mont.
3:00-4:00	XEH, 1132, Monterrey, Mex. CFJC, 1120, Kamloops, B. C. KFGQ, 1310, Boone, Iowa	5:00-6:00	KGIR, 1360, Butte, Mont. WOL, 1310, Washington, D. C.
3:00-4:00	KrGQ, 1310, Boone, Iowa	1:00-3:00	March 11th, 25th
	WEDNESDAY NIGHT March 1st	1.00-3.00	KUSD, 890, Vermilion, S. Dak. March 18th
2:00-3:00	CHWK, 665, Chilliwack, B. C. KXO, 1 00, El Centro, Calif.	2:00-3:00	WTOC, 1260, Savannah, Ga.
2:30-4:30	KXO, 1'00, El Cen'ro, Calif.	19.00 4.00	March 25th
11:30-1:00	March 1st, 8th, 15th, 22nd, 29th KFUO, 550, S. Louis, Mo. WHBL, 1410, Sheboygan, Wis.	12:00-4:00 2:00-2:30	WIBW, 580, Topeka, Kans. WFAS, 1210, White Plains, N. Y. WWNC, 570, Asheville, N. C.
12:00-1:00	WHBL, 1410. Shebovgan, Wis.	4:00-5:00	WWNC, 570. Asheville, N. C.
2:00-3:00	KFXJ, 1310, Grand Junction, Colo.		March 4th, 11th, 18th, 25th
2:30-4:30	KFXJ, 1310, Grand Junction, Colo. CKWX, 730, Vancouver, B. C. KGFF, 1420, Shawnee, Okla.	12:00-1:00	March 4th, 11th, 18th, 25th WJBK, 1370, Detroit, Mich, WWVA, 1160, Wheeling, W. Va. WCAH, 1430, Columbus, Ohio CMCD, 1140, Havana, Cuba
2:30-4:30	THURSDAY NIGHT	12:00-1:30 12:00-2:00	WCAH 1430 Columbus Objo
	March 2nd, 16th	12:00-3:00	CMCD, 1140, Havana, Cuba
11:30-3:00	WMBC, 1420, Detroit, Mich.	12:00-3:00	W W LL, 1900, W oodside, N. I.
3:00-5:00	March 9th	12:00-5:00 12:30-3:00	WTFI, 1450, Athens, Ga.
0.00-0.00	WHBF, 1210, Rock Island, Ill. March 30th	1:00-1:30	WBBZ, 1200, Ponca City, Okla. WKY 900, Oklahoma City
4:00-5:00	KPOF, 880, Denver, Colo.	1:00-2:00	WKY, 900, Oklahoma City CMCY, 1325, Hayana, Cuba
10 00 0 00	March 2nd, 9th, 16th, 23rd, 30th	1:00-2:00	KQV, 1380, Pittsburgh, Pa.
12:00-2:30 2:00-3:00	WM1L, 1500, Brooklyn, N. Y.	1:00-2:00 1:00-3:00	WGBF, 630, Evansville, Ind.
3:00-4:00	CFAC, 690, Calgary, Alta. CKOV, 1200, Kelowna, B. C.	1:00-3:00	KRLD, 1040, Dallas, Tex. WGES, 1360, Chicago, Ill.
	PRIDAT NIGHT	1:00-3:00	WOW, 590, Omaha, Nebr.
2.00.4.00	Feb. 24th	1:00-4:00	KGH 750 Honolulu H T
3:00-4:00 4:00-6:00	WCSC, 1360, Charleston, S. C. WOR, 710, Newark, N. J.	1:15-2:30 1:30-3:00	WOMT, 1210, Manitowoc, Wis.
1.00 0.00	March 3rd	2:00-3:00	CMGE, 1375, Cardenas, Cuba
2:00-4:00	10-BQ, 1200, Brantford, Oπt.	2:00-3:00	KMAC, 1370, San Antonio, Tex. CMGE, 1375, Cardenas, Cuba KFEL, 920, Denver, Colo.
4:00-6:00	WJZ, 760, New York City March 10th	2:00-4:00	KREL, 920, Denver, Colo. WWAE, 1200, Hammond, Ind. WMMN, 890, Fairmont, W. Va. CKWX, 730, Vancouver, B. C. CFCT, 630, Victoria, B. C. CKOV, 1200, Kelowna, B. C. CMJK. 790, Camaguey, Cuba KDB, 1500, Santa Barbara, Cal. KFYM, 1210, San Bernardino, Cal
2:00-5:00	CKPC 880 Preston Ont.	2:00-5:00 2:30-4:30	CKWX 730 Vancouver B C
4:00-6:00	WFOX, 1400, Brooklyn, N. Y. WPCH, 810, New York City	3:00-4:00	CFCT, 630, Victoria, B. C.
4:00-6:00	WPCH, 810, New York City	3:00-4:00	CKOV, 1200, Kelowna, B. C.
4:00-5:00	WNBX, 1260, Springfield, Vt.	3:00-4:00 3:00-4:00	CMJK, 790, Camaguey, Cuba
4:00-5:00	WABC, 860, New York City	3:00-4:00 3:00-4:00	KFXM 1210 San Bornardino Cal
5 :00-6:00	WJBU, 1210, Lewisburg, Pa.	3:00-4:00	KFXM, 1210, San Bernardino, Cal. KGER, 1360, Long Beach, Calif. KGCX, 1310, Wolf Point, Mont. KVOA, 1260, Tucson, Ariz.
2.00.4.00	March 24th	3:00-6:00	KGCX, 1310, Wolf Point, Mont.
3:00-4:00	KDLR, 1210, Devils Lake, N. D.	4:00-6:00	KVOA, 1260, Tucson, Ariz.
		[11	

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 concert hall. Leonard was taken to every musical event and, before he emerged from knee pants, became thoroughly schooled in the symphonies. The parents forbade "jazz" and it was not until Leonard reached the age of sixteen that he knew the subtle appeal of syncopation. Then he "bootlegged" modern recordings into the household and soon was tantalizing the keys with rhythmic tunes for schoolboy friends. This forbidden forte became his fortune when family reverses set in.

Joins Paul Whiteman

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



"Cannonball" Stoopnagle and "Mile-a-minute" Budd try out their new Model-1905, Whatisit. On Pontiac program, CBS, Thursdays at 9:30 p. m.

by the exponent of jazz symphonies. During his two and a half years with the Whiteman fold, he alternately served as featured pianist, arranger and assisting conductor on the stage. in radio, recording and movie studios. With Whiteman at the same time was a young singer named Bing Crosby, one of the original Rhythm Boys. Leonard and Bing struck up a professional and personal friendship which remained intact when Bing leaped to radio fame. Leonard joined the Crosby radio ensemble as one of the piano duo of Hayton and Arthur Schutt, and as Crosby's arranger. He accompanied Bing to the coast for the filming of "The Big Broadcast." Enroute they played eight weeks of theatre engagements, Hayton organizing and directing a new band in When Chesterfield coneach city. tracted 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 programs. Knight also "doubles" the comedy role of Wellington Watts. Alice Davenport, who plays the love interest, has had eleven proposals of marriage since she took the part.

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

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

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

A DX CRITIC INVESTIGATES

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. are making very brief excerpts from his letters. "Preposterous claims." "I wonder if there is anyone who is ignorant enough to believe "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. 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.

A classical 8:52 to 8:56 p. m. 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 Herbert. 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 receptiontwo tubes or ten—is a noteworthy feat. It supports our belief that in radio anything is possible and backs up our position-"If it's DX news it belongs in RADEX."

In the April issue, Mr. 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. 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 quarter-This is now on about hour chimes. 49.6 meters. England's station GSA is also on this channel, not helping its tone quality one bit. YVQ on 16.39 meters can be told by a station hum very loud at times and a crackling sound. This is a commercial station. Commercial stations do not care to have listeners write them about their transmissions, so I, for one, do not bother them with correspondence. Your short wave section is fine—keep it up. VK3ME came in yesterday morning (January 4th) like a local, starting the New Year right." Since Mr. Anderson wrote, YV1BC has moved down to 6119 kcs. or 49 meters.

R. Schmidt, 56 Willow, Hartford, Conn., uses a Stewart-Warner converter with a Silver-Marshall Model J and would like to hear from other Silver-Marshall owners. He writes, "So far have received I2RO, Rome, Italy, and EAQ, Madrid, Spain, with plenty of power. Those are my only two across the water. In the south I have received YV1BC, Caracas, Venezuela, and HKD, Barranquilla, Colombia. For the last two nights YV1BC has come in here at 6:30 and you have to turn the volume down."

"The real reason for this letter is a change in wavelength which I have just stumbled upon. YVQ in Maracay, Venezuela, is now using 22.28 meters, according to their announcement," advises Doyle E. Carpenter, Emmetsburg, Iowa. "Their schedule seems to be irregular. I have heard them talking with Miami, Florida, the last two afternoons at intervals all afternoon. They come in better than



Jane Froman, NBC blucs singer, former University of Missouri co-ed, started to be a 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, VRTZFB, 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

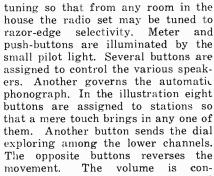
In THE home of the future the fullest use and enjoyment of radio will receive as much attention from architects and builders as the other necessities of heating and lighting and refrigeration. No longer will it be necessary to place the radio set where one may conveniently reach the dials. It may even 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 eniovment.

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

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



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 types. 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 This is not dangerous, but place. most manufacturers condemn 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 This means that an 80operated. hour standard storage battery will operate the eliminator approximately Can vour 30 continuous hours. charging outfit keep the battery going at this rate?

These eliminators take the 6-volt

battery supply and convert it from the direct flow to a broken, intermittent flow of rapid pulsations by means of a vibrator buzzing at 60 breaks a second to produce 60 cycle current. Such a current, when passed through the primary of a "step-up" transformer, will induce an alternating current in the secondary of much higher voltage. This output must then be rectified with a tube, type -80, and smoothed out to a high potential "B" power supply. 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 Marscilles of the "Fu Manchu" program, Columbia, Mondays at 8:30 p. m. EST.

46 Tube in Crosley

I have a Crosley model 705 receiver and I should like to use the 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 cycles. Nearly all large radio supply houses carry such apparatus. Try the following: Radolek Co., 601 W. Randolph St., Chicago; Insuline Corp., 25 Park Place, New York City; Allied Radio, 833 W. Jackson Blvd., Chicago; Wholesale Radio, 100 6th Ave., New York City.

New Tubes in Leutz Set

My Leutz radio receiver was rebuilt at the factory last year to take the -51 type of tubes in place of the original -24s. Now I wish to substitute the new 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 Barlow 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

P. S. There seems to be no further doubt that those who heard the reports of this cricket game were listening to Poste Parisien on 914 kcs. It did not seem probable that so many readers in so many different sections would pick up this European station but it is the only one we have been able to find which broadcast these games and its frequency is that reported by all listeners. R. R. Rawstron, Claremont, N. H., and Stanley Nevin, South Hadley Center, Mass., both send us letters from Fleming & Whitelaw, Australia House, London, England, which say: "The station to which you were listening was not 4RK in Rockhampton, Australia, but Poste Parisien, Paris. 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 kes. 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.

1. Seleccion de orquesta 2. " de piande piano de violin •• 3. •• de organa de marimba de acordeon
Solo vocal (Senor) (Dama) Coro 10. Musica clasica 11. popular 12. nacional 13. de baile 14. Fox trot Marcha 15. Vals
 Habla Vals 18. Anuncios de la Estacion Volumen-debil 19. 20. -mediano 21. -fuerte 22. Calidad de tono-mala de tono-buena 23. 24. Condiciones atmosfericas-buenas -malas 26. Musica Americana 27. Musica Espanol 27. 28. 28. Guitarr 29. Duo 30. La Vez Trio

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

Afmo. atto. y. s. s.

(English translation)

Chief Engineer, Radio Station (Call)

My dear Sir:

I have just had the great pleasure of hearing your station (Call) on —kes. and on the log below I am giving you some of the selections I listened to. Will you be so kind as to check this with your station log and send me a verification of my reception?

Orchestral selection Piano Violin 3. 4. Organ 5. Marimba Accordion "Vocal solo (man) (woman) " chorus 9. 10. Classical music 11. Popular 12. Native 13. Dance music 14. Fox trot 15. March
16. Waltz
17. Talking
18. Station announcement 19. Faint volume 20. Good volume 21. Great volume
22. Tone quality poor 23. good 24. Atmospheric conditions good 25. Atmospheric conditions bad 26. American music 27. Spanish music 28. Guitar 29. Duet 30. The time Trio

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. This list will not appear again and our readers should be sure to save the May edition for their future DXing.

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

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

Using the New Tubes

The articles regarding the substitution of the new type tubes in place of the old, aroused much interest. It must be understood that the new tubes will give their maximum value only in sets especially designed for them. In many older sets, a considerable increase in efficiency over the old tubes may be secured by using the newer types with suitable adapt-

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 10-watter gives 63.5. Some suggest that the distance should be squared before dividing by the power but this would place too much emphasis on the distance. It is probably true that there are too many other factors in radio reception besides distance and power to permit any kind of a mathematical formula. Using that suggested by Mr. Myretetus, all of the

following catches have the factor of 50; do our readers think they all have the same value as catches? A 200-watt station 10,000 miles distant, a 100-watter 5000 miles; a 50-watter 2500 miles and a ten-watter 500 miles?

"The department in RADEX showing time on the air is a wonderful help," concedes A. L. Long, 523 N. Dewey, Oklahoma City, "but it would be a great deal more of a help if the times were shown in the Index by Frequencies instead of the Index by Call Letters. Then when I am tuning (which is done by frequencies and not by call letters) I can see at a glance what stations on any 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 collection. The card or 'QSL' is blue in color and the letters 'KZRM' are in heavy red type in the center. It is signed by B. H. Silen, Manager. Here is some dope on the station: When signing off they always bid you (pronounced mah-boo-'Mabuhav' high). 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 RADEX. We are trying to strike a balance that will be satisfactory to the greatest number.

Measuring Distances

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

Building Sets

"I am especially interested in the letters you publish from makers of small sets," comments Wm. Dyke, 1200 Western Ave., Effingham, Ill. "I have built lots of them, none over four tubes. I think you should enlarge the space devoted to experiments with small sets. Though I have

made lots of small sets, I have never sold one nor tried to; have four in the house now." Mr. Dyke is more than 80 years old and greatly enjoys his radio work.

"Your letter saved me at least \$3.00," writes H. J. Jandron, 77 Marion Road, Watertown, Mass., to the Technical Editor. "This is a good example of the service RADEX is giving to its readers."

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

Annoying Interference

Several Radexers complain of interference with WTAM on 1070 kcs. and a few of them are sure it is a Spanish-speaking station. It hardly seems that the two low-powered Cubans known to be on this wave could be making the mischief. Neither does it come from the stations on 1060, 1080 or KMOX on 1090 although these have a serious heterodyne in some locations. channel is also very badly muddied up. For some reason the Radio Commission permits KFAB Lincoln and WBBM Chicago to use this wave together during the daytime. These stations are altogether too powerful and too close together geographically to use the same channel at the same time and the result is, like the Kilkenny cats, the two stations destroy each other during daylight hours in a large portion of the Middle West. As if two powerful stations on one wave were not enough, a number complain there is still another interfering signal on this channel.

"What powerful station," inquires Daniel C. Looby, Secy., Atlantic Radio Club, 1414 E. Cheltenham Ave., Philadelphia, Pa., "was interfering badly with WBBM on 770 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 kcys. talking about wires, etc., Tuesday morning, December 6th, at 2:00 A.M. EST, using the call EQ7? A number of members have also reported this station which gave no location. About every five minutes they would say 'EQ7 signing off till the next period. So long.' Then they would come back on the air about two minutes later and broadcast for about five minutes and sign off again."

In a later letter Mr. Looby answers his own question by saying that he has decided it is CMCQ off his 780 frequency which is interfering with WBBM.

E. G. Shook, Terre Haute, Ind., says: "On the morning of December 28th, I was listening to WBBM at 12:45 to 1:00 A.M. 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-thewool DXer. Didn't stay up late enough. I regret now that I didn't, taking advantage of having a Radiodyne, a 6-tube set, which was capable of bringing in good distances. Your article about the old days of radio

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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 These make for me every HJN. 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 keys., one that completely mystified me inasmuch as heavy static prevented me from identifying it," reports Edward F. Goss, 666 Park Place, Brooklyn, N. Y. "I came upon it at 2:20 A.M. and tried unsuccessfully till 3 A.M. to get its call. There were an orchestra and vocal selections, and at 3 A.M. I lost the program in the, by now, intense static. RADEX has no stations on 725 keys.

and I am in doubt whether it was one of the Vancouver 100-watters or possibly a trans-Atlantic station. It could hardly have been any of the more powerful stations around 730 kcys., as KMPC, a 500-watter from Beverly Hills, Cal., was coming in like a load of bricks on 710 kcys., much louder than my unknown station. Did any of the gang hear it?"

Modernizing RCA 60

"There is cheering news for our friends that are still using an RCA 60, model 1928," announces Rudolph Kure, 3633 Vine Street, Clifton, Cin-"Don't throw away the 'old cinnati. heap', rejuvenate it instead. The result will be astonishing. 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 informa-

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

On the Longer Waves

"Tell Mr. Sutfin of Hornell, N. Y., that I receive the long-wave European stations," says Eddie Grant, North Sydney, Nova Scotia. "I have a Victor, Model R-32, ten tubes. I receive G2LO, G2ZY, G6BM, G2BD, G5SC, 2RN, Athlone, OKR, OKP, CT1AA, SCF, SBB, F8GC, Poste Parisien, Beziers, Heilsburg and Stuttgart, Germany, and Beromuenster in Switzerland. Mr. Sutfin may write me if he wants more information on the European stations, especially the British Broadcasting Company stations."

"I note you have in the January issue a little on the longer waves," says Robert R. Rawstron, 296 Main St., Claremont, N. H. "TFU on 250 keys. with 17 KW of power broadcast daily from 3 to 6 A.M. EST, and Saturday and Sundays till 8 A.M., according to word from them. The address is, TFU, Box 547, Reykjavik, Iceland."

Are They Outlaws

"Concerning the broadcasting station in the Southern Hotel, Denton, Texas," advises Burney McClurkan, 804 N. Locust St., Denton, Texas, "the call letters are DNTX. Their frequency is 960 kcys. The owner of this station is R. E. Turner. DNTX does not have a Federal Radio Commission license. It has a 50-watt transmitter, but is allowed to use a power of only 5 watts. They are not

supposed to be heard outside the State of Texas. Their hours of broadcast are weekdays 10 A.M. to 2 P.M. CST; Sundays, 8:30 A.M. to 11 A.M., and 1:30 P.M. to 5 P.M. CST."

Another outlaw station, evidently the old WAIR of New Philadelphia, Ohio, is reported by Miss Lilian M. Bethel, 323 First St., N. E., 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 keys. 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 Rye, N. Y., has veris from several German stations which he gets daily from 1:00 to 2:30 A.M. I am taking his word that it was Heilsberg, and not Frankfurt, I received, since he has them verified. On the other side of the world I succeeded in adding 2BL, 2YA and 5CK, of which the latter was far the best, on December 27th from 5:00 to 5:50 A.M., with a church program. I deducted one more from the total of U.S. unheard, bringing that list to only 30 by logging KIDW. CMJK came in fine on a DX Sunday."

From South Dakota

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

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

Rules of the NNRC

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



Boake Carter is Philco's news editorialist, being on the air five times weekly 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 kcys. I'm using a Philco 7tube battery-operated superhet., model 35."

Three Receive 2KO

T. Colegrove, Frankfort, Mich., writes: "I just received a verification from 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 keys. 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 anything distant."

"Something ought to be done about WJJD operating so late," complains Murray D. Bryce, Rt. 1, Royal Oak, V. I., B. C., Canada. "Last Saturday they signed off at 6:30 P.M. PST. They were quite loud through KSL. KSL, with their new transmitter, is one of the finest stations in America, and should be accorded better treatment. The interference some nights from WJJD is terrible."

A Get-Together

Hartford, Conn., readers take notice: "Saturday evening finds four ardent DX fans gathered together for an evening of DX discussion and good-natured razzing on the ones we caught and the ones we missed during the week," preambles Sidney R. Kaufman, 60 Bretton Road, West Hartford, Conn. "We look forward to these meetings and would like to have a few more DXers added to the bunch."

"I am side-tracked, living in the 'Haven Home for Aged Men' here," writes Chas S. Humphrey, 109 Lowell Street, Peabody, Mass. "I have an old-timer three-tube battery set but I wouldn't swap it for that electric set downstairs. I can put it out of sight. I have to have a radio to play with to keep from getting old. I am only seventy-four."

"I see several of the DX fans are wondering about their verifications from YV1BC, Caracas," says Harry M. Gordon, 1002 Parade St., Erie, Pa. "I sent my verification in on October 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

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.

IITR, 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. "I have a homemade two-tube set, using a stage of t. r. f. ahead of a regenerative detector, which does not create any disturbance in other receivers. The tubes are a 27 and 56 respec-With this set I have received tively. 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 keys., 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 regular channels," 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 yet I have not had Central America, or any stations beyond the West Coast, I would like to hear what other owners of Crosley sets are doing."

"This is my first DX year, which began October 1st," writes Lloyd Harrison, 130 So. Hague Ave., Columbus, Ohio. "Using a 9-tube 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. 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 nearer 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. "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						
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 Marcus Loew Booking 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 W.I.W. Inc.				
1210	WSBC	Chicago, Ill., to WSBC, Inc.				
1370	WJEQ-					
	WRAK	Williamsport, Pa., to WRAK, Inc.				
1420		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				
1200	WFBC	Greenville, S. C., 50 to 100				
1370	WJBK	Detroit, Mich., 50 to 100				
DELETED						
570	TGW	Guatamala City				
1310	WKBS	Galesburg, Ill.				
1400	WCMA	Culver, Ind.				

REINSTATED

$\frac{1420}{1450}$	WERE WNJ	Erie, Pa. Newark, N. J.

CHAINS

Syracuse, N. Y., R to B Washington, D. C., New B 570 WSYR 630 WMAL

FREQUENCIES

585 XEPN Piedras Negras, Mex., from 885 1195 VONF St. John's, Newfoundland, from 1115

1310 WAML Laurel, Miss. from WTSL

NEW

1500 WKEU La Grange, Ga.

WHAT'S ON THE AIR TONIGHT?

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

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

Call	Dial	Call	Dial

Call	Dial	Call	Dial	
	}			

Call	Dial	Call	Dial

TIME-E Eastern Standard; C Central Standard; M Mountain Standard; P Pacific Standard. RADEX is the only nublication 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 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 Bartheii
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
WAAA WROC WSRT WSEA WSIS WQAM WREC WSBT WSFA WSJS WSPD WTAQ WTOC

– Waldorf-Astoria Orchestra K—WAGOT-ASSION OF CHESTA CKGW KFYR KGO KOA KPRC KSD KTBS WBEN WCAE WCKY WCSH WDAF WEAF WENR WFBR WEI 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

CFRB CKOK KFAB KFH KMBC KSCJ KSL KTRH WAAB WADC WBCM WBIG WBRC WBT WCAO WDAE WDBO WDOD WIDSU WEAN WEAN WIP WISN WJAS V WGR WHEC WID WISN WIAS WISV WKBH
WID WISN WIAS WISV WKBH
WLBW WLBZ WNAX WOKO WORC
WQAM WSBT WSFA WSJS WSPD WTAQ WTAR WTOC

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 WOKO WORC WQAM WSFA WSJS WSPD WTAR WTOC

Al Bernard, Minstrel 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 Just Plain Bill

CKOK WAAB WABC WCAO WCAU WHK WISY WKBW

Rhythm String Quartet
EN WCAE WCSH WEAF WFBR
WJAR WRC WSAI WTAG WTAM WTIC WWJ

Lowell Thomas

CKGW KDKA WBAL WBZ WBZA WGAR WHAM WJR WJZ WLW 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 CKOK KRLD WABC WADC WCAO WCAU WDRC WEAN WFBL WGR WHK WJAS WJSV WKRC WNAC WOKO WSBT WSPD WWVA

WORD WSBT WSPD WWVA
B— Amos 'n' Andy
CKGW KDKA WBAI, WBZ WBZA
WCKY WFLA WGAR WHAM WIOD
WJAX WJR WJZ WLW WPTF WRC
WRVA WWNC

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

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

WHO WIAM WWS

B — Tastycast 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

Van and Don, Comedy Team WCSH WDAF WEAF WENR WFBR WGY WJAR WOW WSAI WTAG Dolph Martin's Orchestra

WABC WCAO WCAU WDRC WEAN WFBL WFEA WGR WHEC WHP WJAS WJSV WLBZ WNAC WORO 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

- The Goldbergs KEYR KPRC WBEN WCAE WCSH WEAF WEEL WFAA WFBR WGY WJAR WKY WLIT WOAL WRC WJAR WKY WLIT WTAG WTAM WWJ

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

CKOK KMBC KMON WABC WADC WCAO WCAU WDRO WEAN WFBL WFBM WGN WGR WHAS WHK WIAS WJSV WKRC WNAC WOKO WSPD

 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

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

Voice of Firestone CPCF CKGW KPRC KSD KTBS KVOO WBEN WCAE WCSH WEAF WEEI WFAA on 8:45 WFBR WFLA MERI WFAA ON 8:49 WFBR WFLA
WGY WHO WIOD WIS WJAR WJDX
WKY WLIT WLW WMAQ WMC
WOAI WOC WOW WRC WRVA
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

C — Chesterfield Program
CNOK 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
WCAO WCAU WCCO WDAE WDBJ
WDBO WDRC WDSU WEAN WFBL
WFBM WGN WGST WHAS WPFC WFBM WGN WGST WHAS WHEC WHK WISN WJAS WJSV WKBW WHK WISN WJAS WJSV WKBW WKRC WLAC WLBZ WMBG WMT WNAC WOKO WORC WOWO WPG WOAM WREC WSPD WTAR WTOC

MONDAY—(Continued)

R — A. & P. Gypsies KSD WBEN WCAI

WCAE WCSH WDAF WEAF WEEL WGY WHO WJAR WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ B - Sinclair Minstrels

B — Sinclair Ministrels
KDKA KFYR KOIL KPRC KSO
KSTP KTBS KTHS KVOO KWCR
KWK WAPI WBAL WBZ WBZA
WDAY WBEC WFAA WFIA 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 R—Paul Whiteman and Orchestra
KDYL KFI KFSD KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTAR KTHS
WBEN WCAE WCSH WDAF WDAY
WEAF WEBC WEEL WFAA WFBA
WFLA WCY WHO WIBA WIOD
WJAR WJAX WJDX WXY WLIT
WMAQ WMC WOAI WOC WRY
WRVA WSAI WSB WSM WSMB
WTAG WTAM WTMJ WWJ WWNC
B—Jack Frost's Melody Moments

B — Jack Frost's Melody Moments KDKA WBAL WENR WGAR WHAM WJR WJZ WLW

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

M — 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

C — Columbia Hevue
CFRB CKOK KLRA KLZ KMBC
KSCJ KSL KTRH KTSA KVOR
WAAB WABC WADC WBBM WBCM
WBIG WBT WCAH WCAO
WCAU WCCO WDAE WDBJ WDOD
WDIC WDSU WFBL WFBM WFEA
AUTHS WULLE WHIK WHP WDIRC WDSU WFBL WFBM WFEA WGST WHAS WHEC WIIK WHP WJAS WJSV WKBII WKBN WKBW WLBZ WMBD WMT WNAX WNOX WODX WOKO WORC WPG WQAM WREC WSJS WSPD WTOC

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

WCKY WGAI WREN WSYR

E-10:15 p.m., C-9:15, M-8:15, P-7:15 B — Vic and Sade

KDYL KFSD KGO KOA K KWK KYW WBAL WCKY WREN WSYR KWCR WJZ

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

WOJS WOFD WIGG B — Alice Joy and Old Stager CFCF KOLL KSO KWCR KWK WBAL WCKY WGAR WHAM WJR WJZ WREN WSYR

National Radio Forum

M — National Radio Forum KECA KGA KPO KSD KTAR KTBS WBEN WCSH WDAF WEAF WEEL 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 KOL 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

C — Howard Barlow's Symphony
CFRB CKOK KFAB KFH KLZ
KMBC KSCJ KSL KTRH KVOR
WAAB WABC WADC WBCM WBRC
WBT WCAO WDOD WBCM WBRU
WEAN WFAN WFBM WHK WIBW
WICC WIP WISN WAS WJSD WICC WIP WISN WJAS WJSD WKBN WKBW WLBW WLBZ WMBD WNAX WODX WOKO WORC WQAM WSBT WSJS WSPD WTAR WTOC

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 WTAM WWJ
B— Amos'n' Andy
RDYL 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 KI.Z
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 WHE WIBW WICC WISN WISV 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 - Voice of Firestone

KDYL KFI KFSD KFYR KGHL KGIR 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 WALEC 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 KOIL KWCR KWK KYW WBZ WBZA WGAR WJZ WRC WREN

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 WELA WHEC WICU WISN WJAS WJSV WKBH WKBN WKBW WLBW WLBZ WNAX WODX WOKO WORC WQAM WSBT WSFA WSJS WSPD WTAQ WTAR WTOC

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

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

E-7:00 p.m., C-6:00, M-5:00, P-4:00 E-7:00 p.m., C-0:00, m-0:00, r-0:00 R — James Melton, Tenor KDYL KFSD KFYR KGO KHQ KOA KOMO KTBS WBEN WCSH WDAY WDAY WEAF WEBC WFRR WFI WIBA WJAR WMAQ WRC WSAI WTAG WWJ

 Myrt and Marge, See Monday 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

Radio in Education

B—Hadio in Education
RDKA 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 KWGR KWK KYW WBZ WBZA WGAR WJZ WREN WSYR

C — Boake Carter, See Monday R - The Goldbergs, See Monday

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

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

MSI D

R — Blackstone, Sanderson-Crumit

KSD KSTP KYW WBEN WCAE

WCSII WDAF WEAF WEBC WEEI

WFI WGY WHO WJAR WOC WOW

TUESDAY—(Continued)

WRC WSAI WTAG WTAM WWJ B — Eno Crime Club

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

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

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

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

C — Kate Smith
CKOK KMBC KMOX WABC WADC
WBCM WCAH WCAO WCAU WCCO
WFBL WFBM WGN WGR WHAS
WHIC WHK WISN WJAS WJSV
WKBH WKRC WOKO WOWO WSPD

- Wayne King and Orchestra KSD KSTP WBEN WCAE WCKY WCSH WEAF WEBC WEEI WFBR WFI WGY WHO WIBA WJAR WMAQ WOC WOW WRC WSAI WMAQ WOC WOW WRC

- 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

CHOK KMBC KMOX WABC WADC WCAO WCAU WDRC WEAN WFBL WFBM WGN WGR WHAS WHK WAS WJSV WKRC WNAC WOKO WOWO WSPD

B - Phillips Lord, See Monday

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

KFYR KOA KPRO KSTP WBAP WBEN WCAE WCKY WCSH WDAY WDAY WEAF WEEL WFBR WFI WGY WHO WJAR WKY WLS WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM 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-6:15
C — Threads of Happiness
CKOK KDB KERN KFBK KFII
KFPY KFRC KGB KHJ KLRA KLZ
KMBC KMJ KMOX KOIN KOMA
KRIJD KSL KTIRH KTSA KVI KWG
WABC WADC WBRC WBT WGAO
WCAU WCCO WDAE WDBO WDOD
WDRC WDSU WEAN WFBL WFBM
WGN WGST WHAS WHEC WHK
WJAS WJSV WKBW WKRC WLAC WNAC WORO WOWO WQAM WREC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 - Ed Wynn-Don Voorhees

KĎYL KFI KFSD 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 WTMJ WWJ WWNC C — California Melodies

C=Cantorna Metodies
CFRB CKOK KFH KLZ KMBC
KMOX KSCJ KSL KTRH KTSA
WABC WBCM WBIG WBRC WBT
WCAO WCAU WCCO WDAE WDOD
WDRC WEAN WFBM WFFA WHEC WHR 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

C - Five star Ineatre
KLRA WABC WBIG WBT WCAO
WCAU WDBJ WDOD WDRC WDSU
WEAN WFBL WFEA WHP WICC
WJAS WJSV WEBW WLAC WMBG
WNAC WNOX WOBU WOKO WORC WREC WSJS WTAR

R — Lucky Strike Hour

KDYL KFI KFSD KFYR KGO KGU KGW KHQ KOA KOMO KPRC KSD KGW KHQ KOA KOMO KPRC NSD KSTP KTAR KTBS KTHS WAPI WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEL WENR WFBR WFI WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMC WOAI WOC WRC WRVA WSB WSM WSMB WTAG WTAM WTMJ WWJ WWNC

B — Sigmund Spaeth, Tune Detective CFOF 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 WIAS WISV WKBN WKBW WLBZ WOKO WORC WPG WSBT WSPD

- 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

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 Octer CFCF CKGW KFYR KGIR KPRC KSTP KTBS KWK WBAL WCKY WENR WFLA WGAR WHAM WIBA WIS WJR WJZ WMC WRC WREN WSM WSYR WWNC

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

E-11:00 p.m., C-10:30, M-9:30, P-8:30

C — Isham Jones and Orchestra 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 WHCC WISN WJSV WKRN WKBW WLBW WLBZ WMBD WNAX WODX WOKO WORC WPG WQAM WSIS WSPD WTAR WTOC WWYA WTOC WWVA

E-12:00 p.m., C-11:00, M-10:00, P-9:00 R - The Goldbergs, See Monday B — Cab Calloway and 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 KTRH KVOR WABC WBRC WBT WCAH WCAU WDAE WDOD WDSU WEBL WGST WHAS WHK WHP WISN WJAS 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

WFBR Wri WAPI WCAE WEAF WFBR WFLA WIOD WJAR WMAQ WRC WSB WSM WSMB WTAM WWNC

- Ben Bernie and Orchestra KFI KFSD KGO KHQ KOMO KSD KTAR

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

C — vaugan Deceara CFRB CKOK KFH KMOX KSCJ KSL KTRH KVOR WAAB WABG WADG WBBM WBGM WBIG WBT WCAO WDAE WDBO WDDD WDRC WDSU WFAN WFEA WHEC WIP WDSU WFAN WFEA WHEE WIT WISN WAS WISY WKBH WKBN WKBW WLBW WLBZ WNAX WODX WORO WORC WQAM WSBT WSFA WSIS 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 CFRB CKOK KFAB KFH KLZ KSCJ CFRB CROK RABB RFH RLZ RSCJ
KSL KTRH RVOR WAAB WADC
WBCM WBIG WBRC WBT WCAO
WDAE WDBJ WDOD WDRC WDSU
WGR WGST WHAS WHEC WHP
WIP WISN WJAS WJSV WKBH
WLBW WLBZ WMT WNAX WNOX
WODX WOKO WORC WQAM WREC
WSBT WSFA WSJS WSPD WTAQ wToc

E-6:30 p.m., C-5:30, M-4:30, P-3:30 R—Harding Sisters, Piano 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 KES 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-6:00, M-5:00, P-4:00 C — Myrt and Marge, See Monday

C — myrt and marge, see Monday

R — Mischa Weisbord, Violist
KDYL KPYR KGO KHQ KOA
KOMO KSTP KTBS KYW WDAY
WDAY WEAF WEBC WFBR WGY
WHO WIBA WJAR WMC WOC WHO WIBA WJAR WMC WOO WOW WRC WSAI WSB WSM WTAG

E-7:15 p.m., C-6:15, M-5:15, P-4:15 - Buck Rogers, See Monday 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. THISPETING JACK SMITH, SEE MON.

ROYAL VAGABORDAS, KEN MUTTAY
KSD WBEN WCAE WCSH WDAF
WEAF WEEI WBR 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 WEEL WFBR WGY WJAR WLIT WRC WTAG

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 KFI KFSD KFYR KGO KHQ KOA KOMO KSD KYAR KTBS

KOA KOMO KSD KTAR 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 Sherlock Holmes

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 Romantic Bachelor CKOK KDB KERN KFBK KFH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KSCJ KSL KTRH KTSA KVI KWG WABC WACO WADC WBIG WBRC WBT WCAO WCAU WCCO WDBJ WDDD WDRC WDSU WEAN WFBL WFBM WGN WGST WHAS WHK WIBW WISN WJAS WJSV WKBI! WKBW WKRC WIAC WLBZ WMBG WMT WNAC WHAC WNOX WOXX 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 WSPD

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 KILI KLRA KLZ KMBC RFRC KGB RHJ KLRA KLZ KMBC
KMJ KMOX KOIN KOL KOMO
KSJ KTAT KTRH KTSA KVI KWG
WAAB WABC WADC WBRG WBT
WACH WCAO WCAU WCCO WDAE
WDBO WDOD WDRC WDSU WFBL
WFBM WCN WGST WHAS WHEC
WHK WIBW WJAS WJSV WKBW
WKRC WODX WOKO WOWO WQAM
WREC WRR WSPD

R—Ger Cob Bire Club

WREC WRR WSPD

R — Corn Cob Pipe Club

KDYL KFI KGHL KGIR KGO KGW

KIQ KOA KOMO KSD WBEN

WCAE WSH WDAF WEAF WEEI

WENR WFBR WGY WHO WJAR

WLIT WLIW WOC WOW WRC WVA

WTAG WTAM WTIC WWJ

B — D. W. Griffith's Hollywood

KDKA KOH, KPRC KWK WBAL

WBZ WBAA 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, Contratto
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
WDAF 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

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 — Eddic Duchin and Orchestra

C — Eddie Duchin and Orchestra
CKOK KFAB KLZ KMBC KSCJ
KTRH KVOR WABC WBRC WBT
WCAH WCAU WCCO WDAE WDOD
WDSU WEAN WFBI, WGST WHAS
WHK WHP WICC WISN WJAS
WJSV WKBW WLBW WMBD WMT
WNAC WNAX WNOX WOKO WORC
WPG WREC WSBT WSPD WTOC

— The Galdberg See Mender

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 - 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
WCAU WDAE WDOD WDRC WDSU
WGR WHEC WISN WJAS WJSV
WRBH 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 KPSD 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 Buck Rogers, See Monday - Wheatenaville, See Monday

Carson Robison, See Wednesday

E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — Keller, Sargent, See Tuesday - Van and Don, See Monday

E-7:45 p.m., C-6:45, M-5:45, P-4:45 B - Murder Mystery, See Tuesday Boake Carter, See Monday
 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 WBAN WCAE WCKY WCSII WDAF WDAY WEAF WEBC WEEI WFBR WEAVEL WCAY WOM DO WAAD WDAY WEAF WEBC WEET WFBM WFI WFLA WGY WHO WIOD WIAR 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 WREN

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 KPIJC KSD KSTP
KTAR KTBS WAPI WBEN WGAE
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
WSAF WYAC WTAA WTAA WAN 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

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

CFOF 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
WDSU WEAN WFBL WFBM WFEA WGST WHAS WHEC WHK WKBN WKBW WLBW WLBZ WMBD WMT WNAX WNOX WODX WOKO WORC WOWO WPG WQAM WREC WSIS WSPD WTOC

B - Homay Bailey, See Tuesday

E-10:45 p.m., C-9:45, M-8:45, P-7:45 Myrt and Marge, See Monday
 Prof. Jack McLallen, See Tuesday

Morton Downey

CHOR 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 E-11:00 p.m., G-10:00, M-9:00, P-1
R— James Melton, Tenor
KSD WCAE WCKY WEAF WIWRC WSAI WTAG WWJ.
C— Howard Barlow, See Monday
B— Amos 'n' Andy, See Monday WEAF WEBR

E-11:15 p.m., C-10:15, M-9:15, P-8:15 B — Murder Mystery, See Tuesday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 B — Cesare Sodero and Orchestra CFCF CKGW KDYL KEX KFSD KFYR KGA 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-3:00 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 — Amns 'n' Andy, See Monday R— Donald Novis, Tenor KDYL KFYR KGO KOA KOMO KSTP KTBS KYW WAPI WCSH WDAF WDAY WEAF WEBC WEEL WEBR WGY WIBA WJAR WMC WOW WEG WSAI WSB WSM WTIM 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— I rade 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

n — CHORS SEVICE CONCERN 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

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 WFBJ, 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

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 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
WKBIH WKBW WLBW WLBZ WNAX WIBW WICC WISN WJAS WJSV WKBH WKBW WLBZ WNAX WNOX WODX WOKO WORC WQAM WREC WSBT WSJS WSPD WTOC

E:9:30 p.m., C-8:30, M-7:30, P-6:30 R — Pond's Program

WEAF WENR WFBR WGY WHO WJAR WLIT WOC WOW WRC WSAI WTAG WTAM WWJ

FRIDAY—(Continued)

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

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 WJAX 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

R—Chevrolet—Al Jolson
KDYL KFI KFSD KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTAR KTBS
KTHS KVOO WBEN WCAE WCSH
WDAF WDAY WEAF WEBC WEEL
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

WIMJ WWNC

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 — myrt and Marge, See Mónday — Borrah Minevitch, Harmonica CKGW KSD WBEN WCKY WCSII WDAF WEAF WEEI WFBR WGY WJAR WOW WSAI WTAG WTAM WTIC WWJ

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

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

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 WDAE
WDBO WDOD WDRC WDSU WEAN
WFBM WHEC WHK WICC WISN
WJSV WLBW WLBZ WMBD WNAX
WOKO WORC WQAM WSBT WSIS
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 WISV
WLBW WMBD WNAC WNAN WOKO
A PG WSRT WSPD WTOC

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
WBBM WBCM WBIG WBRC WBT
WCAO WCAU WCCO WDAE WDBO
WDOD WDRC WDSU WEAN WFEA
WHEE WICC WISN WJSV WKBH
WLBW WLBZ WNAX WOKO WORC
WQAM WSBT WSFA WSJS WSPD
WTAQ WTAR WTOC WWAA
R—Waldorf-Astoria, See Monday
B—Little German Band

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 KPIC KSO KSTP KTAR KTBS KTHS KWCK 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 KMBC KRLD KTRH WABC WADC

MMBC MADD ATTH WABC WADC
WBBM WBCM WBIG WBRC WBT
WCAO WCAU WDAE WDBO WDOD
WDRC WDSU WEAN W'BM 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 WFLA WGAR WHAM WJZ WLW WOAI 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 WWYA

WTAR WWVA

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

B — Merle Thorpe Talk
KDYL KECA KEX KFSD KFYR
KGA KJIK KOA KOIL KPO KPRC
KSTP KTBS KWCR KWK WBAL
WBZ WBZA WEBC WENR WFLA
WGAR WHAM WHA WHOD 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 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 Tuesday

C — Easy Aces, See Tuesday

R— Archer Gibson, Organist

KEX KGA KJR KOA KPO KPRC

KSD KTBS WBEN WDAF WEAR

WEBG WEEL WFL WHO WIBA WIS

WJAR WMAQ WMC WOAI WOC

WSB WSMB WTAG WTAM WWJ

WWNC

RAMPICAL TAYARWER!

WW. AC.

B — American Taxpayers' League
KDKA KDYL KEX KFSD KFYR
KGA KGHL KGIR KJR KOA KOIL
RPO KPRC KTAR KWK WAPI
WBAL WCKY WDAY WEBC WFLA
WILAM WIBA WIOD WJAX 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 KOLL 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 WBBO
WDOD WDRC WDSU WEAN WFBM
WFFA WGR WHEC WICC WISN
MJSV WKBH WLBW WLBZ WNAX
WOKO WORC WPG WQAM WSBT
WSFA WSPD WTAQ WTAR WTOC
R — Economic World Today
KDYL KFSD KFYR KGA KFHL
KGIR KJR KOA KPO KPPC KSD
KSTP WAPI WBAP WBEN WCSH
WDAY WBAF WEBC WEEI
WFBR WFF WTLA WGY WHO WIBA

WDAF WDAY WEAR WEBC WEEL
WFBR WFF WTLA WGY WHO WIBA
WIOD WIS WJAR WJDX WKY
WMAQ WMC WOAL 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

C — Chesterfield, See Monday

R—Blue Danubs, Waltz Program

RDYL KPI KFSD KFYR KGO KGW

KOA KOMO KPRC KSD KSTP

KTBS WAPI WBAP WBEN WCAE

WOSH WDAF WEAF WEBC WFBR

WFLA WGY WIOD WIS WJAR

WJAX WJDX WKY WMAQ WMA

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 WHT 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 - Carborundum Band CKOK KMBC KMOX WAAB WABC
WCAO WCAU WCCO WGN WHAS
WHK WJAS WKBW WKRC WSPD
R — George Olsen and Orchestra

KDYL KFI KFSD KFYR KGO KGW KHQ KOA KOMO KSD KSTP WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC 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 CFRB CKOK KFH KLRA KLZ

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

E-10:15 p.m., C-9:15, M-8:15, P-7:15
C — Public Affairs Institute
KFH KLZ KSCJ KTRII KTSA KVOR
WAAB WBAC WADC WBBM WBCM
WBIG WBRC WBT WCAO WCAU
WCO WDAE WDBO WDOD WDRC
WDSU WEAN WFBM WFEA WHEC
WICC WJAS WJSV WKBH WLBW
WLBZ WMBD WNAX WOKO WORC
WPG WQAM WSBT WSJS WSPD
WTAR WTOC WWVA
R — Salen Signers

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
KTRH KVOR WAAB WABC WADC
WBCM WBRC WBT WCAO WCAU
WCCO WDAE WDBO WDDO WDRC
WDSU WEAN WFBM WHEC WHK
WICC WISN WJAS WJSV WLBW
WLBZ WMBD WNAX WOKO WORC
WPG WQAM WSBT WSJS WSPD
WTAR WTOC WWVA
B — Bucancers, Vocal Trio

B — Buccancers, Vocal Trio CFCF KDKA KOIL KSO KWCR KWK WBAL WBZ WHAM WJZ

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 WEEI WPBR 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

8 - 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 KTRIL KVOR WAAB WABC WADC
WBCM WBRC WBT WCAO WCCO
WDAE WDBO WDOD WDRC WDSU
WEAN WFAN WFBM WHEC WICC
WIP WJSV WKBH WLBW WLBZ WIP WJSV WKBH WLBW WLBZ WNAX WOKO WORC WQAM WSBT WSJS WSPD WTAR WTOC WWVA

- Paul Whiteman and Orchestra KSD WBEN WCAE WCKY WDAF WEAF WEEL WFBR WFL WGY 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

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
R — Vincent Lopez and Orchestra
KDYL KEX KFYR KGA KJR KPO
KPRC KSD KSTP KTBS KVOO
WBEN WCAE WCKY WDAF WEAF
WEBG WFBR WFI WFLA WHO
WIBA WIOD WJAR WJAX WKY
WMC WOAI WOC WSB WSBM
WTAG WTAM WWNC

SUNDAY

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

E-11:19 a.m., e-10:15, m-3:15, P-3:15

M — 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

C — SAIL LAKE 13DCFRAGE CHOP CFRB CKOK KFAB KIZ KSCJ KSL KTRH KTSA KVOR WABC WADC WBCM WBIG WBT WAOA WCAD WCOO WDAE WDBO WDDD WDRC WDSU WEAN WFEA WGR WHEC WILLY WEAN WILL WLAS WAND

E-12:15 p.m., C-11:15, M-10:15, P-9:15 E-12:15 J.M., C-11:15, M-10:15, P-3:15

B— Roxy's Gang
CFCF CKGW KDKA KDYL KEC
KEX KFSD KFYR KGA KJR KOA
KOU, KPO KPRC KSTP KTAR
KVOO KWK WAPI WBAL WBZ
WBZA WDAY WEBC WFAA WPLA WDAA WDAY WEBG 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

G — Street Singer CFRB CKOK KFAB KLZ KMBC KSCJ KSL KTRH KTSA KVOR WABC WADC WBCM WBIG WBT WARC WARD WEEN WEIG WEI WCAO WCCO WDAE WDBO WDOD WDSU WGR WHEC WHIK WIBW WISN WJAS WJSV WKBH WKBN WLBW 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 WDOD WDRC
WOSU WFBL WFBM WGR WGST
WHEC WIJK 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
KTRII KTSA KVOR WAAB WABC
WADC WBCM WCCO WDAE WDBJ
WDOD WDRC WDSU WFBJ, WFBM
WGR WGST WHEC WJAS WKBH
WLBW WLBZ WMT WNOX WODX
WOKO WPG WQAM WREC WJS
WSPD WTAQ WWVA
E — WAIEL Logan Pon Congert

WSPD WTAQ WWVA

— Walter Logan Pop Contert
CFCF CKGW KFYR KPRC KSD
KTBS KVOO WAPI WBEN
WCAE WCKY WCSH WDAF WDAY
WEAF WEBC WFAA WFBR WFI
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 RLZ KSCJ KSL KTRH
KTSA KVOR WAAB WABC WADC
WBCM WBIG WCAO WCCO WDAE
WDBO WDOD WDRC WDSU WGR
WHEC WIBW WJAS WJSV WKBH
WLBW 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 KIJ KIZ KMBC KMOX KOIN KOL KSI, KVI KWG WABC WBBM WBT WCCO WDSU WGR WGST WHAS WHEC WJAS WJSV WKRC WLAC WNAC WOWO WQAM WRR

R— International Radio Forum
CFCF CKGW KFI KFSD KGO KGW
KHQ KOA KOMO KSD KTBS WAPI
WBEN WCAE WCKY WCSH WDAF
WEAF WEEI WFAA WFBR WFLA
WGY WIOD WIS WJAR WJAX
WJDX WMC WOAI WOW WRVA
WSAI WSB WSM WSMB WTAG
WTAM WWJ WWNC R — International Radio Forum

WIAM WWN WWNG

B— Monarch Mystery Tenor

KDKA KDVI KFI KFVR KGO KOA

KOIL KSO KSTP KWCR KWK WBZ

WEZA WCIKY WDAY WEBC WGAR

WHAM WIBA WJAR WJAX WJR WJZ WMAQ WREN WTMJ WWNC

E-2:15 p.m., C-1:15, M-12:15, P-11:15 C — Poet's Gold—David Ross CFRB CKOK KFAB KFH KLRA KLZ KMISC 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

R—Clyde Doerr's Saxophone Octet 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 WOAL WOW WOOD WIS WIND WISH WOW WRC WRVA WSAI WSB WSM 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 WCY WHO WJAR WMAQ WOC WOW WRC WTAG WTAM WWJ

B - 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
WDAY WBEC WFAA WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX W.R WJZ WKY WLW WMC
WOAI WITTF WREN WRVA WSB
WSM WSMB WTMJ WWNC
C—Vield Adden-Harv Mose

C — Victor Arden-Harry Rose
CKOK KMBC KMOX WABC WBBM
WCAO WCAU WGR WHEC WHK
WJAS WJSV WKRC WNAC WOKO WOWO

E-3:00 p.m., C-2:00, M-1:00, P-12:00 C — N. Y. Philharmonic Orchestra C — M. T. Philiarmonic Urchestra
CFRB CKOK KFAB KFH KLZ KMBC
KRLD KSCJ KSL KTRH KVOR
WAAB WABC WADC WBCM WBIG
WBRC WBT WCAO WCCO WDAE
WDBO WDOD WDRC WDSU WFAN
WFBM WFEA WHEC WIIK WIBW
WICC WIP WISN WIAS WJSV WKBH
WKEN WYENW WI BU WT BZ WMBD WKBN WKBW WLBW WLBZ WMBD WODX WOKO WORC WQAM WSBT WSFA WSJS WSPD WTAQ WTAR WTOC WWYA

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

E-3:30 p.m., C-2:30, M-1:30, P-12:30 R — Dr. S. Parkes Cadman KDYL KFSD KFYR KGHL KGO KGW KHQ KOA KOMO KIRC KSD KGW KHQ KOA KOMO KIRC KSD KSTP KTAR KTHS KVOO WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WGY WHO WIBA WJAR WKY WLIT WOAI WOC WOW WRC WSAI WTAM WWJ

B — Manhattan Merry-Go-Round KDKA KOIL KWCR KWK KYW WBAL WBZ WBZA WHAM WJZ

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

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

B — Temple of Song CFCF CFCF KDKA KFI KFSD KFYR KGHL KGO KGW KOA KOIL KSO KSTP KTBS KWCR KWK WBAL KFI WBZ WBZA WCKY WEBC WGAR WHAM WIBA WIOD WIS WJAX WJR WJZ WKY WMAQ WMC WREN WRYA WSB WGA WGC WRVA WSB WSM WSMB WWNC

p.m., C-3:15, M-2:15, P-1:15 – 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 WEEN WCAE WCSH WDAF WEAF WEEL WFBR WGY WJAR WMAQ WOW WFR 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 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 WSM

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

National Vespers KFSD KFYR KGHL KGO KGW KHQ KOA KOIL KOMO KPRC KSO KTAR KTBS KWCR KWK WAPI WBAL WBAP WBZ WBZA WEBC WBAL WBAP WBZ WBZA WBZA 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 KYW WBAL WBZ WB WJR WJZ WLW WREN

WJR WJZ WREN

B — Josef Koestner's Orchestra

KDYL KFI KFYR KGHL KGIR

KGO KGW KHO KOA KOMO KPRC

KSTP KTAR KTBS KVOO WAPI

WBAP WDAF WDAY WEBC WIBA WJDX WKY WMC WOAI WS WSM WSMB WTMJ

R - Swift Garden Program CKGW KSD WBEN WCAE WCSH WDAF WEAF WEEL WFBR WFI WGY WHO WJAR WMAQ WOC WOW WRC WSAI WTAG WTAM WWJ

E-6:00 p.m., C-5:00, M-4:00, P-3:00 R — Catholic Hour KDYL KEX KFYR KGHL KGIR KJR KOA KPRC KSD KTAR KTBS KVOO WAPI WBAP WBEN WCAE WCKY WCSH WDAF WDAY WEAF WEBC WEEI WENR WFBR WFLA WEBG WEEL WENR WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLIT WMC WOAI WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WWJ WWNC

B — Josef Koestner's Orchestra KDKA KOIL KSO KWCR KWK 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

C—Cathedral Hour
CFRB CKOK KFH KLZ KMBC
KRLD KSCJ KSL KVOR WABB
WABC WADC WBBM WBCM WBIG
WBRC WBT WCAO WCAU WCCO
WDAE WDBO WDOD WDRC WDSU
WPBM WFEA WHEC WIBW WICC
WISN WJAS WJSV WKBH WKBN
WWKB WLBW WLBZ WNAX WOKO
WORC WQAM WSBT WSFA WSJS
WSPD WTAR WTOC WWVA

Our American Schools KDYL KECA KEX KFSD KFYR KGA KOA KPO KPRC KSD KSTP RGA ROA KPO KPRC KSD KSIP KTBS KVOO WBAP WBEN WCAE WCSH WDAY WFAF WEBC WEEI WENR WFBR WFLA WGY WIBA WIOD WJAR WKY WLIT 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 KPH KLZ KMBC KRLD KSCJ KSL
KTRH KVOR WABC WACO WADC
WBCM WBIG WBRC WET WCAO
WCCO WDAE WDBO WDDO WDRC
WDSU WEAN WFAM WFBM WFEA
WGR WHEC WIBW WICC WIP
WISN WJAS WJSV WKBH WKBN
WLBW WLBZ WNAC WNAX WOKO
WORC WPG WQAM WSBT WSFA
WSJS WSPD WTAR WTOC WWVA

R — Borrah Minevitch, Harmonica KDYL KFI KFSD KFYR KGO KGW ROIL RELATIONS RELATION WENEN WCAE WCKY WDAF WDAY WEAF WEBC WFBR WFLA WGY WIBA WIOD WIS WJAR WJAX WMAQ WOAI WRC WSMB WTAM WWJ

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

WTOC WWYA

B — Wheatenaville See Monday

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

B — Great Moments in History B—Great Moments in History
KDKA KDYL KFI KFSD KFYR
KGO KGW KHQ KOA KOIL KOMO
KPRC KSTP KTAR KVOO KWCR
KWK WBAL WBZ WBZA WDAY
WEBC WFAA WFLA WGAR WHAM
WIBA WIOD WIAX WJDX WJR
WJZ WKY WLS WLW WMC WOAI
WPTF WREN WRVA WSB WSM
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
WHAS WHK WJAS WJSV WKRC

WNAC

- 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-8:00, P-5:00
R—Chase and Sanborn—Eddie Cantor
CFCF CKGW KDYL KFI
KFSD
KFYR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KATR KVOO
WBEN WCAE WCSH WDAF WDAY
WEAF WEBC WFAA WFBR WFLA
WGY WHO WIOD WIS WJAR WJDX
WKY WLIT WLW WMAQ WMC
WOAI WOC WOW WRC WSB WSM
WSMB WTAG WTAM WTIC WTMJ
WWJ WWNOC WWJ WWNC

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

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Andre Kostelanetz Presents

C — Andre Kostelanetz Presents CKOK KLZ KMBC KMOX KRLD KSCJ KSL KTRH KTSA KVOR WABC WADO WBBM WBCM WBRC WBT WCAO WCAU WCCO WDAE WDBO WDOD WDRC WDSU WEAN WFBM WFEA WGR WHEC WHK WIBW WISN WJAS WJSV WKBH WLBU WLBZ WNAC WNAX WOKO WORC WBT 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 ROIL KSO KWCR WBAL WCKY WGAR WJZ WLS WREN

E-8:45 p.m., C-7:45, M-8:45, 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
WKBN WLBW WLBZ WNAX WODN
WOKO WORC WREC WSFA WSJS

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Fred Allen's Bath Club

C—Fred Allen's Bath Club
CKOK KDB KERN KFPK KFPK
KFRC KGB KHI KLRA KLZ KMBC
KMI 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 WGSY
WHAS WHEC WHK WISN WJAS
WJSV WKRC WLAC WMT WNAC
WOKO WORC WOWO WQAM WREC
WSPD WTAR WSPD WTAR

R — General Electric Concert

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

B — Warden Lawes—Sing Sing KDKA KOIL KSO KWCR KWK KYW WBAL 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

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 WOKO WSPD

R — Album of Familiar Music

R—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 WFIA WGY WHO WIOD WJAR WJAX WJDX WKY WMC WOAL WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ

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 KFII KLRA KLZ
KMBC KSCJ KTRH KTSA KVOR
WAAB WABC WADC WBBM WBCM
WCCO WDAE WDBJ WDOD WDRC
WOSU WFBL WFBM WFEA WGR
WGST WHEC WHK WHP WISN
WJAS WKBN WKBW WLBW WLBZ
WMBD WMT WNAX WNOX WODX
WOKO WORC WPG WQAM WREC
WSBT WSPD WTOC
R
— David Lawrence

- David Lawrence

R — David Lawrence
KDYL KPI KPSD KFYR KGO KGW
KHQ KOA KOMO KPRC KSTP
KTBS WBEN WCAE WCKY WCSH
WDAF WDAY WEAF WEBC WEEI
WPBR WFI WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WKY WMC
WOAI WOC WRC WSAI WSM WSMB
WTAG WYAM WITO WWI WWNC 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 WJDX WJZ
WKY WLW WMAQ WOAI
WREN WSB WSM WSMB WTMJ

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

E-10:30 p.m., C-9:30, M-8:30, P-7:30
C — Foreign Legion
CFRB CKOK KFH KLRA 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
KGHL KGIR KGG KGW KHQ KOA
KPRC KSTP KTAR KTBS KTHS
KYW WAPI WBAP WBEN WCAE
WCKY WCSH WDAF WDAY WEAF
WEBC WEEI WFBR WFI WFLA
WGY WHO WIBA WIOD WIS WJAR
WJAX WJDX WMC WOAI WOC
WOW WRC WRVA WSAI WSB WSM
WSMB WYAG WTAM WTAII WWI WSMB WTAG WTAM WTMJ WWJ WWNC

WWNO 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

CKOK KFAB KFH KLZ KSCJ KTRH CROK KFAB KFH KLZ RSCJ 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 WLJSZ 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

G — Isnam Jones and Orchestra
CFRB KTRH WABC WADC WBCM
WBRC WBT WCAO WCAU WCCO
WDAE WDBO WDDO WDRC WDSU
WEAN WGR WICC WISN WISV
WKBN WLBZ WNAC WOKO WPC
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

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

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

C — Ben Pollack and Orchestra CKOK KFAB KLZ KMOX KSCJ KTRH KVOR WABC WBRC WBT WCAU WCCO WDAE WDOD WEAN WGR WIBW WICC WISN WJSV WLBW WMBD WNAC WNAX WOKO WPG WSBT WSPD

B — William Stoess and Orchestra KPYR 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 WSMB WWNC B — William Stoess and Orchestra

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

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 Hass, 8:30 p.m. Saturday, C. Walter Logan, 1:15 p.m., Sunday, R. New York Philharmonie, 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. Symphone Marimba, 8:30 p.m., Sunday, B. Symphony Concert, 5:00 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. Cab Calloway, 12 mid. Tuesday and Friday, B. Jack Denny, 11:30 p.m., Mon. and Thurs.; 11:10 p.m., Saturday, R. Saturday, R. Eddie Duchin, 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, 3:00 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. Dick Mansfield, 6:15 p.m., Wednesday, R. Ozzie Nelson, 7:15 p.m., Saturday, R. Czie Nelson, 7:15 p.m., Saturday, R. George Olsen, 9:30 p.m., Saturday, R. Ben Pollack, 12 mid., Sunday and Friday, C. Freddie Rich, 1:00 p.m., Saturday, R. William Robisson, 9:30 p.m., Tuesday, B. Harold Stern, 11:30 p.m., Saturday, C. Williard Robisson, 9:30 p.m., Tuesday, B. Rudy Vallee, 8:00 p.m., Thursday, R. Fred Waring, 10:00 p.m., Wednesday, C. Anson Weeks, 7:00 p.m., Sat., B; 11:00 p.m., Fri., R. Ted 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.

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. Cuckoo, 10:30 p.m., Saturday, B. Cuckoo, 10:30 p.m., Saturday, B.
Easy Aces, 8:00 p.m., Tuesday, Thursday and Saturday, C.
Mark Bros., 7:30 p.m., Monday, B.
Jack McLailen, 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.
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 Club, 8:00 p.m., Tuesday and Wednesday, B. First Nighter, 9:00 p.m., Friday, B. First Nighter, 9:00 p.m., Fuday, B.
Foreign Legion, 10:30 p.m., Sunday, C.
Fu Manchn Mystery, 8:30 p.m., Monday, C.
Fu Manchn 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.
Grifith'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., Mon., Tues, and Wed., B.
Magic Voice, 8:15 p.m., Tuesday and Saturday, C.
March of Time, 8:30 p.m., Friday, C.
Moonshine and Honeysuekle, 2:30 p.m., Sunday, R.
Myrt and Marge, 7:00 and 10:45 p.m., daily, ex Sat. and
Sun., C.
Mysteries in Paris, 9:30 p.m., Monday C. Sun. C.

Mysteries in Paris, 9:30 p.m., Monday, C.
Pages of Romance, 5:30 p.m., Sunday, 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, C.
The Shadow, 8:30 p.m., Wednesday, 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.
Jesse Crawford, 11:30 p.m., Sunday, B.

PIANO AND ORGAN

Fray and Braggioti. 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. Ver Ohman and Arden, 2:30 p.m., Sunday, R. Ohman and Arden, 2:30 p.m., Sun, C.; 9:30 p.m., Sun, R. Lew White, 11:15 p.m., Saturday, B.

POPULAR PROGRAMS

POPULAR PROGRAMS

A. & P. Gypsies, 9:00 p.m., Monday, R.
Album of Familiar Musie, 9:30 p.m., Sunday, R.
Armour Program, 9:30 p.m., Friday, B.
Bath Club, 9:00 p.m., Sunday, C.
Blue 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.
Clicas 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.
Cortented Program, 10:00 p.m., Monday, R.
Five Star Theatre, 10:00 p.m., Wednesday, R.
Fivestone, 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.
Inside Story, 9:30 p.m., Friday, C. Household Musical Memories, 9:00 p.m., Tuesday, B. 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, B. Maxwell House, 9:00 p.m., Thursday, R. Borrah Minevitch, 7:00 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. Poot's Gold, 2:15 p.n., Sunday, C. Poot's Gold, 2:15 p.n., Sunday, C. Poot's Gold, 2:15 p.n., Sunday, C. Poet's Goto, 2:15 p.m., conday, C. Pond's Program, 9:30 p.m., Friday, R. Roxy's Gang, 12:15 p.m., Sunday, B. Royal Vagabonds, 8:00 p.m., Wednesday, R. Andy Sanella, 6:45 p.m., Wednesday, R. Sinelair Minstrels, 9:00 p.m., Monday, B. Sineson Club, 12 mid. Saturday, B. Supper Club, 12 mid., Saturday, B. Swifts' Garden, 5:30 p.m., Sunday, R. Wildroot Institute, 4:15 p.m., Sunday, R. Ed Wynn, 9:30 p.m., Tuesday, R. Yeast Foamers, 2:30 p.m., Sunday, B.

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

Dr. S. Parkes Cadman, 3:30 p.m., Sunday, R. Cathedral Hour, 6:30 p.m., Sunday, C. Catholic Hour, 6:00 p.m., Sunday R. Catholic Hour, 6:00 p.m., Sunday R. Church of the Air, 1:30 p.m., Sunday, C. Rev. Charles E. Coughlin, 4:00 p.m., Sunday. Mid-Week Hymn Sing, 6:30 p.m., 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 Ilomay Bailey, 10:30 p.m., Tuesday and Thursday, B. Elizabeth Barthell, 6:00 p.m., Monday, C. Al Bernard, 6:30 p.m., Monday, R. Boswell Sisters, 10:30 p.m., Thomasy, R.
Buccaneers, 11:00 p.m., Thurs: 9:15 p.m., Sat., C.
Buccaneers, 11:00 p.m., Saturday, B.
Eddie Cantor, 8:00 p.m., Sunday, R.
Charles Carliel, 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. 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. Fields 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 Joy, 10:30 p.m., Mon.; 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. 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 Robisson, 7:15 p.m., Wednesday and Thursday, B.

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 Salon Singers, 10:15 p.m., Saturday, B.
Sanderson-Crumit, 8:00 p.m., Tucsday, 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., Tucsday, Wednesday, Thursday, C.
Aileen Stanley, 11:15 p.m., Sunday, B.
Street Singer, 12:45 p.m., Sunday, B.
Street Singer, 12:45 p.m., Sunday, B.
Lawrence Tibbett, 8:30 and 11:30 p.m., every other Monday, B. day, 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.

TALKS

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, 0:45 p.m., 1 uesday, R. Edwin C. Hill, 10:30 p.m., Mon., Tues., Wed.; 9:30 p.m. Friday, C. Horlick's Health, 8:30 p.m., Tuesday and Friday, B. International Forum, 2:00 p.m., Sunday, R. H. V. Kaltenborn, 6:00 p.m., Tuesday and Thursday, C. Dr. Julius Klein, 7:00 p.m., Sunday, R. H. V. Kaltenborn, 6:00 p.m., Sunday, R. David Lawrence, 10:00 p.m., Sunday, R. Laws That Safeguard, 6:30 p.m., Saturday, B. National Radio Forum, 10:30 p.m., Monday, R. Our American Schools, 6:30 p.m., Sunday, R. Angelo Patri, 7:45 and 11:15 p.m., Sunday, C. Radio in Education, 7:15 p.m., Tuesday, B. Nelie Revell, 11:00 p.m., Wednesday, R. Sigmund Spacth, 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, R. Walter Winchell, 9:30 and 11:15 p.m., Sunday, B.

KEY TO SYMBOLS

As Shown in the Index by Frequencies and Dial Numbers

Frequency is given in kilocycles; wavelength in meters. Night power is shown in watts in third column. Daytime power is shown in parenthesis in fourth column in 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. 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-Verifies only occasionally. h

Does not verify. Verification 10c; letter 25c. d 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.

Daytime only. Dn Daytime with occasional evening hours.

Trans-Canada network. Canadian National Railways net-

work. All Canadian networks. H Yankee network.

Orange and gold network. K Mexican networks.

Canadian Pacific Ry. network (Dominion).

Canadian Radio Corp. network. National "Red" and "Blue" networks.

Has construction permit only.

Great Lakes network. National "Red" network.

S Sunday only. Don Lee System. 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 time. No information.

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FOR KEY TO SYMBOLS SEE PAGE 45

	FOR KEY TO SYMBOLS SE	SE PAGE 45
540 kilocycles	555.2 meters	
CKOK ae 5000 CC XEY z 105 546	Windsor, Ont. 6.8 Merida, Mex.	Essex Broadcasters, Ltd. Partido Socialista S. E.
550 kilocycles	545.1 meters	
	I(2.5) Bismarck, No. Dakota Corvallis, Ore. St. Louis, Mo.	South Dakota State College Evangelical Lutheran Church Meyer Broadcasting Co. Oregon State Agricultural College Pulitzer Publishing Co. Harry G. Whitehill Buffalo Broadcasting Corp. WKRC, Inc., Hotel Alms
560 kilocycles	535.4 meters	
KFDM ak 500 (1) KLZ ae 1000 C KTAB ae 1000 WFI ae 500 IR WIBO ae 1000 (1) WLIT ak 500 IR WNOX ak 1000 C(WPCC ak 500 Sa WQAM ae 1000 C	San Francisco, Calif. R Philadelphia, Pa. S)a Chicago, Ill. R Philadelphia, Pa. X Knoxville, Tenn.	Sabine Broadcasting Co., Inc. Reynolds Radio Co., Inc. Associated Broadcasters, Inc. WFI Broadcasting Co. Nelson Bros. Bond & Mtg. Co. Lit Bros. Broadcasting System, Inc. WNOX Inc. North Shore Congregational Church Miami Broadcasting Co.
570 kilocycles	526.0 meters	
KGKO z 250 (.5 KMTR ach 500 C KVI ac 500 C WEAO ac 1000 I WKBN ak 500 3 WNAX ac 1000 C WNYC ak 500 3 WSYR ak 250 B2 WWNC ac 1000 N	Hollywood, Calif. Tacoma, Wash. Columbus, Ohio Youngstown, Ohio New York, N. Y. Yankton, S. D. New York, 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. Brdcstg. Corp., (WMAC) Citizens Broadcasting Co., Inc.
580 kilocycles	516.9 meters	
WSAZ ak 250 1(Toronto, Ont. Edmonton, Alta. Havana, Cuba Havana, Cuba Fresno, 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.
XEPN z 100000 58	Piedras Negras, Mex.	(Yolanda Hotel), Eagle Pass, Texas
590 kilocycles	508.2 meters	
	15GZ London, Ont. (2) Spokane, Wash. Lincoln, Neb. Boston, Mass. Kalamazoo, Mich. Omaha, Neb.	Free Press Printing Co., Ltd. Louis Wasmer, Inc. Nebraska Wesleyan University Edison Electric Illuminating Co. WKZO, Inc., Burdick Hotel Woodmen of the World

INDEX B	T PREQUERIED III		
600 kilocycles 4	199.7 meters 🛭	4	KCYS.
CNRO ak 500 F KFSD ah 1000 N WCAC ak 250 2 WCAO ae 250 C WICC ae 250 2H(WMT ak 500 C WREC z 500 C(1)	Ottawa, Ont. San Diego, Calif. Storrs, Conn. Baltimore, Md. 5)C Bridgeport, Conn. Waterloo, Lowa	Canadian National Railways Airfan Radio Corp. Connecticut Agricultural College Monumental Radio Co. Bridgeport Bdctg. Station, Inc. Waterloo Broadcasting Co. WREC, Inc.	680 MTRS 440.9 DIAL
610 kilocycles	491.5 meters		
KFRC ae 1000 C WDAF ae 1000 R WIP ak 500 C WJAY ae 500 D XETR z 1000	San Francisco, Calif Kansas City, Mo. Philadelphia, Pa. Cleveland, Ohio Mexico City, Mexico	Pennsylvania Bdctg. Co. (WFAN) Cleveland Radio Broadcasting Corp.	
620 kilocycles	483.6 meters		1
KGW ae 1000 N KTAR ae 500 NJ(1 WFLA ae 1000 Na(2 WLBZ ak 500 C WSUN ae 1000 Na(2 WTMJ ae 1000 N(2.	2.5) Clearwater, Fla. Bangor, Maine 2.5) St. Petersburg, Fla.	Oregonian Publishing Co. KTAR Broadcasting Co. Florida West Coast Bdctg. Co., Inc. Maine Broadcasting Co., Inc. Florida West Coast Bdctg. Co., Inc. Journal Company	
630 kilocycles	475.9 meters		
CFCT ae 500 G CJGX ae 500 FL CKOC ae 1000 6358 CKTB ae 1000 6356 CMCU z 150	aL St. Catharines, Ont	Jorge Garcia Serra Jose Fernandez	
CNRA ae 700 F HIX ah 1000 KFRU ak 500 1 KGFX z 200 D WGRF ae 500 W—	Moncton, N. B. Santo Domingo, D. Columbia, Mo. Pierre, S. D. 1 Evansville, Ind. Washington, D. C. Jefferson City, Mo. Veracruz, Ver., Mex	KFRU, Inc. Dana McNeil Evansville On the Air. Inc. M. A. Leese Radio Corp., Inc. Missouri State Marketing Bureau ico Manuel Angel Fernandez	
640 kilocycles	468.5 meters		
CHRC ak 100 645 CKCI ck 100 645 CKCR ak 100 645 CKCR ah 50000 N1 WAIU ae 500 1 WOI ae 5000 D	5aG Quebec, Que. 5a Quebec, Que. 5G Waterloo, Ont.	CHRC, Ltd., Victoria Hotel Le Soleil, Ltd. Mitchell & Liddle Earl: C. Anthony, Inc. Associated Radiocasting Corp. State College of Agriculture	
650 kilocycles	461.3 meters]
KPCB as 100 WSM asj 50000 N	Seattle, Wash. Nashville, Tenn.	Queen City Broadcasting Co. National Life & Accident Ins. Co.	ļ
660 kilocycles	454.3 meters		
CHWK ak 100 665 CJRM z 500 665 CJRW z 1000 665 RUS z 500 664 WAAW agh 500 D WEAF ak 50000 R	5 Moose Jaw, Sask. 5 Fleming, Sask.	Chilliwack Broadcasting Co., Ltd. Jas. Richardson & Sons, Ltd. Jas. Richardson & Sons, Ltd. Republic of El Salvador Omaha Grain Exchange National Broadcasting Co., Inc.	
670 kilocycles	447.5 meters		
WMAQ ae 5000 N	Chicago, Ill.	WMAQ, Inc. (NBC Lessees)	-
680 kilocycles	440.9 meters	International Broadcasting Co.	J
CMAF ak 1000 KFEQ ae 2500 D KPO ak 5000 N WPTF ae 1000 N	Havana, Cuba St. Joseph, Mo. San Francisco, Cal Dn Raleigh, N. C.	Scroggin & Co., Bank	

690	kiloc	vcle	s 434	.5 meters	
CFAC CFRB CJCJ NAA VAS XET	ak	500 10000 500 1000 2000 500	1G CM 1LE 685(4)	Calgary, Alta, Toronto, Ont. Calgary, Alta, Arlington, Va, Glace Bay, N. S. Monterrey, Mexico	Calgary Herald, Ltd. Rogers-Majestic Corp., Ltd. Albertan Publishing Co., Ltd. U. S. Navy Canadian Marconi Co. Cadena Radio Difusora Mexicana S. A.
700 1	kiloc	ycle	s 428	3.3 meters	
WLW		50000	N	Cincinnati, Ohio	The Crosley Radio Corporation
710 1	kiloc	ycle	s 422	.3 meters	
KMPC WOR XEN	ae ak agj	500 5000 1000	Dn X 711K	Beverly Hills, Calif Newark, N. J. Mexico City	. R. S. MacMillan Bamberger's Broadcasting Service, Inc. Cerveceria Modelo S. A.
	kiloc	ycle	s 416	.4 meters	
WGN	ak :	25000	C	Chicago, Ill.	WGN, Inc., Drake Hotel
730 1	kiloc	ycle	s 410	.7 meters	
CHLS CHYC CKAC CKCD CKCD CKMO CKWX CMK XEF-XI	ak z ak z ak z ak aeh	100 5000 5000 100 50 100 100 3150 75000	1b Sa CaM 1b 1 1 1L 735-665	Vancouver, B. C. Montreal, Que. Montreal, Que. Vancouver, B. C. Vancouver, B. C. Vancouver, B. C. Vancouver, B. C. Havana, Cuba Villa Acuna, Mexic	W. G. Hassell (Province Bldg.) Northern Electric Co., Ltd. La Presse Publishing Co., Ltd. Vancouver Daily Province United Church of Canada Sprott-Shaw Radio Co. Western Broadcasting Co., Ltd. National Broadcasting Co. of Cuba Villa Acuna Broadcasting Co., Inc.
740 1	kiloc	ycle	s 405	.2 meters	
CJCA KMMJ WSB WHEB	ae bk aeh ak	500 1000 5000 250	745EL Dn N D	Edmonton, Alberta Clay Center, Neb. Atlanta, Ga. Portsmouth, N. H.	Edmonton Journal, Ltd. M. M. Johnson Co. (R/C Lincoln) Atlanta Journal, Biltmore Hotel Granite State Broadcasting Co.
750 1	kiloc	ycles	s 3.99.	.8 meters	
KGU VOWR WJR XEAN	aj ak ak 1 aeh	2500 750 10000 5000	NX B	Honolulu, Hawaii St. John's, N. F. Detroit, Mich. Juarez, Chih., Mex	Advertiser Publishing Co. Wesley United Church WJR, The Goodwill Station, Inc. ico Radio Difusora National S. A.
760 l	kiloc	ycles	s 394.	.5 meters	
KXA WBAL WEW WJZ	ae	250 0000 1000 50000	(.5) BA D BA	Seattle, Wash. Baltimore, Md. St. Louis, Mo. New York City	American Radio Tel. Co. (See 1060 kcys. also) St. Louis University National Broadcasting Co., Inc.
770 l	kilocy	ycles	389.	4 meters	
KFAB WBBM		5000 5000	1C 1C	Lincoln, Neb. Chicago, Ill.	KFAB Broadcasting Co. WBBM Bdctg, Corp. (Wrigley Bldg.)
780 k	cilocy	ycles	384.	4 meters	
CKY CMBS CMCQ KELW KTM WEAN WMC WPOR WTAR XEP	z z aeh ae ak ak aeh aeh	5000 150 1000 500	2 2(1) CCH(.5) N(1) b bC	Winnipeg, Man. Havana, Cuba Havana, Cuba Burbank, Calif. Los Angeles, Calif. Providence, R. I. Memphis, Tenn. Portsmouth, Va. Norfolk, Va. Mexico City	Manitoba Telephone System Enrique Artalejo Andres Martinez Magnolia Park, Ltd. Pickwick Broadcasting Corp., Ltd. Shepard Broadcasting Service, Inc. Memphis Commercial Appeal, Inc. WTAR Radio Corp. (Norfolk) WTAR Radio Corp. Cia. Difusora de Mexico S. A.
790 k	ilocy	cles	3 7 9.	5 meters	
CMHC CMJK KGO WGY	z aeh ak	250 300 7500	N	Tuinucu, Cuba Camaguey, Cuba San Francisco, Calif Schenectady, N. Y.	Frank H. Jones Tano Gomez . General Electric Co. (Opr. NBC) General Electric Co.

800 kilo	cycles 3	74.8 meters		
WBAP ak WFAA ak	50000 Na 50000 Na	Fort Worth, Texas Dallas, Texas	Carter Publications, Inc. Dallas News-Dallas Journal	
810 kilo	cycles 3	70.2 meters		
CHNS ae CNRH ak VOAS ak WCCO ae WPCH ak XFC z XFI z	500 815a2 500 815a2 200 D 50000 C 500 D 350 D 350		x. Gobierno del Estado de Aguascalientes o Sria, de Ind. C. y Trabajo	
820 kilo	cycles 3	65.6 meters		rrs.
CMGC z WHAS aj	25000 C	. Matanzas, Cuba Louisville, Ky.	The Louisville Times Co., Inc.	36.9 IAL
830 kilo	ocycles 3	661.2 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, Mexic	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	ocycles 3	356.9 meters		
CHNC z CKGW ae CKLC ak CMC z CPRY ae XETH z XETM z XFB z	5000 a 5000 NEa 1000 G 5000 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	
		352.7 meters		
KIEV z KWKH ae WWL ak	100 D 10000 1	Glendale, Calif. Shreveport, La.	Cannon Systems, Inc. Hello World Broadcasting Corp. WWL Development Co. (Loyola Univ.)	
860 kilo	ocycles 3	348.6 meters		
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, Mexic	Atlantic Broadcasting Corp. Atlantic Broadcasting Corp. (tests) WHB Broadcasting Co. Secretaria de Educacion Publica	
870 kild	ocycles 3	344.6 meters		
WENR ak	50000 Na 50000 Na	Chicago, Ill. Chicago, Ill.	Great Lakes Bdctg. Co. NBC Opr. Agricultural Broadcasting Co.	
880 kilo	_	340.7 meters		
CHML as CKCV ak CKPC ak KFKA ak KLX as WCOC as WGBI ah WQAN ak WSUI as	50 4G 100 G 100 4L 500 2(1) 500 2 500 (1) 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	
890 kile	ocycles	336.9 meters	3/	
CFBO z CKCO z CKPR ak CMCF ak CMX ae KARK ak KFNF ak KSEI 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, Iowe Pocatello, Idaho Vermillion, S. Dak	Raoul Karman, Lasa DelaForte Casa "Lavin" Francisco A. Lavin, Adm. Arkansas Radio & Equipment Co. Henry Field Company Radio Service Corporation	

					•	
	VOGT		400	893	Wabana, N. F.	The Gaiety Theatre
	WGST	ae	250	C(.5)	Atlanta, Ga. Urbana, Ill.	Southern Broadcasting Co.
	WILL	ak	250	2(.5)	Urbana, Ill.	University of Illinois
	WJAR WMM	ae N aeh	250 250	(. <u>5</u>)Ř	Providence, R. I. Fairmont, W. Va.	The Outlet Co.
-	XETU	z	100	(.5)	Pachuca, Mexico	A. M. Rowe, Inc. Rodrigo Mariquez
						Rodrigo Mariquez
	900	kilo	cycle	s 333	.1 meters 🔲	
	KGBU	ak	500		Ketchikan, Alaska	Alaska Radio & Service Co.
*5	≥KHJ	ae	1000	CT	Los Angeles, Calif. Buffalo, N. Y.	Don Lee Broadcasting System
	WBEN	ae.	1000	Ŗ	Buffalo, N. Y.	WBEN, Inc., Buffalo Evening News City of Jacksonville
	WJAX WKY	aeh ae	1000 1000	R N N	Jacksonville, Fla.	Oklahoma Publishing Co.
	WLBL	ae	2000	Ď	Oklahoma City, Okla. Stevens Point, Wis.	Wis. Dept. Agriculture & Markets
	010	1 .1		220		
	910	kilo	cycie	s 329	.6 meters	
	CFQC CFLC	z	500		Saskatoon, Sask.	The Electric Shop, Ltd.
		ae	100	915	Prescott, Ont.	Radio Association of Prescott
-	TICR XEW	z ak	50 5000	911	San Jose, Costa Rica	Codoma Badio diferens Marianas C. A
	XFF	z	500	915	Mexico City, Mexico Chihuahua, Mex.	Cadena Radio-difusora Mexicana S. A. Gobierno del Estado de Chihuahua
		-				Cobletino del Estado de Chimidania
	920	kilo	cycle	s 325	.9 meters 🔲	
	CMBW	z	150	925	Havana, Cuba	Alvarez-Moris
	CMCN		250	925	Havana, Cuba	Antonio Ginard
	CMDE HHK	z	250 1000	925	Havana, Cuba Port au Prince, Haiti	Evilio Villar Republic of Haiti
	KFEL	ak	500	i	Denver, Colo.	Gene O'Fallon (Albany Hotel)
	KFXF	ae	500	1	Denver, Colo.	Colorado Radio Corp.
	KOMO	aj .	1000	N	Denver, Colo. Seattle, Wash.	Fisher's Blend Station, Inc.
	KPRC	ae	1000	N(2.5) D	Houston, Texas Chicago, Ill.	Houston Printing Co. (Houston Post
	WAAF WBSO	ak ae	500 500	D	Chicago, III. Babson Park, Mass.	Drovers Journal Publishing Co.
	wwj	ak	1000	Ř	Detroit, Mich.	Broadcasting Service Org., Inc. The Detroit News
	-	kilo		6 377	.4 meters	
	CFCH	ak	100	3LM		Nesthan Complian Lad
	CFRC	ak	50	3(.2)	North Bay, Ont. Kingston, Ont.	Northern Supplies, Ltd. Queen's University
	CKX	ak	500	E E	Brandon, Manitoba	Manitoba Telephone System
	CMJF KFWI	z.	200	2	Camaguey, Cuba	John L. Stowers
	KGBZ	aj ak	500 500	1 2(1)	San Francisco, Calif.	Radio Entertainments, Ltd.
	KMA	86	500	2(1)	York, Neb. Shenandoah, Iowa	Dr. Geo. R. Miller Earl E. May Seed & Nursery Co.
	KROW	ak	500	1(1)	Oakland, Calif.	Educational Broadcasting Corp.
	WBRC	ak	500	C(1) C(.5)	Birmingham, Ala.	Birmingham Bdctg. Co., Inc.
	WDBJ	ae	250	C(.5)	Roanoke, Va. Glenside, Penna.	Birmingham Bdctg. Co., Inc. Times-World Corp. WIBG, Inc. (Keswick Bldg.)
	WIBG	ae	25	D		wibg, inc. (Reswick Bidg.)
	940	kiloo	cycle	s 319	.0 meters 🔲	
	KOIN	zk	1000	CT	Portland, Ore.	KOIN, Inc. (New Heathman Hotel)
	WAAT WCSH	ae	300 1000	D R(2.5)	Jersey City, N. J. Portland, Maine	Bremer Broadcasting Corp.
	WDAY	ae ae	1000	N (2.5)	Fargo, No. Dakota	Congress Square Hotel Co. WDAY, Inc. (Black Bldg.)
	WFIW	ae	1000	Ĉ	Hopkinsville, Ky.	WFIW, Inc.
	WHA	ak	1000	D _	Madison, Wis.	University of Wisconsin
	XEFO	ak	5000	(3.5)	Mexico City, Mexico	National Revolucionario Party (XFO)
	950	kiloo	ycle	s 315.	.6 meters 📃	
	CMHD	z	250		Caibarien, Cuba	Manual Alvarez
	KFWB KGHL	ak	1000	11110 E.	Los Angeles Calif	Warner Bros. Broadcasting Corp.
	KMBC	ak ak	1000 1000	NJ(2.5)	Billings, Mont.	Northwestern Auto Supply Co.
	VONA	ak Z	100	<u> </u>	Billings, Mont. Kansas City, Mo. St. John's, N. F.	Midland Bdctg. Co. (Pickwick Hotel) Lane, Gillard & Avery
	WRC	ak	500	N	Washington, D. C.	National Broadcasting Co., Inc.
	960	kiloc	vcle	s 312.	.3 meters	
	CHCK	ak	100	v	Charlottetown, P.E. I.	J. A. Gesner & W. E. Burke
	CHWC	ak	500	3FL	Regina, Sask. Regina, Sask.	R. H. Williams & Sons, Ltd.
	CKCK	ak	500	3FL	Regina, Sask.	Leader Post, Ltd. (Leader Bldg.)
	CKNC CMAY	ak z	500 150	M 96 5	Toronto, Ont. Havana, Cuba	Canadian National Carbon Co., Ltd. Efigenio Oliver
	CMBD	z	150	965	Havana, Cuba	Luis Perez Garcia
	CMCW	ak	150	965	Havana, Cuba	Vilarino y Cervantes
	XEAW	z	10000	965	Reynosa, Mexico	International Broadcasting Co.
	CMJL YVIBC	z ole	50		Camaguey, Cuba	Enrique Artimes
	TAIRC	ak	5000	0.0 5.5 0.0	Caracas, Venezuela	Broadcasting Caracas

INDEX BI F	REQUERCIES AN	B BIND NONDEN	
970 kilocycles 309	.1 meters		
KJR ae 5000 N WCFL ak 1500 RX	Seattle, Wash. Chicago, Ill.	Northwest Broadcasting System, Inc. Chicago Federation of Labor	
980 kilocycles 303	.9 meters		- Charles
	Calgary, Alberta	The Voice of the Prairies, Ltd.	•
CFCN ak 10000 985FL CMGF z 100 987 KDKA ak 50000 B	Matanzas, Cuba Pittsburgh, Pa.	Bernabe R. de la Torre Westinghouse Elec. & Mfg. Co.	
990 kilocycles 302	.8 meters	TI 0 W C	
WBZ ak 25000 BA WBZA ak 1000 BA XEK z 101	Boston, Mass. Springfield, Mass. Mexico City, Mexico	Westinghouse Elec. & Mfg. Co. Westinghouse Elec. & Mfg. Co. Arturo Martinez	
1000 kilocycles 29	9.8 meters]
KFVD ak 250 Dn	Los Angeles, Calif.	Los Angeles Broadcasting Co.	KCYS.
WHO z 5000 RAX	Des Moines, Iowa	Central Broadcasting Co. Central Broadcasting Co.	1050
WORK aj 1000 D	Davenport, Iowa York, Pa.	York Broadcasting Co.	
XEA ak 100	Guadalajara, Mexico Toluca, Mexico	Radiofonografica de Guadalajara, S.A. Jesus R. Benavides	
XEFE z 100	N. Laredo, Tams., Mex	r. Rafael T. Carranza	285.5
XEFI z 100 XEFI z 100	Chihuahua, Mexico Monterrey, Mexico	Feliciano Lopez Islas Rodolfo Junco de la Vega	DIAL
XEFJ z 100 XEFS z 40	Queretaro, Mexico Juarez, Mexico	Salvador Sanchez	2112
XEFS z 40 XEJ ak 100 K XEL ak 10	Juarez, Mexico	Juan G. Buttner & Leo Allande Antonio Garza Castro y J. T. Perez	
XEL ak 10 XETC z 100	Saltillo, Mexico Jalapa, Ver Mexico	Juventino Sanchez	
1010 kilocycles 29	6.9 meters 🗀		
CFCO ak 250	Chatham, Ont. Wolfville, N. S. Havana, Cuba Havana, Cuba	John Beardall (Wm. Pitt Hotel) Acadia University	
CKIC ak 50 CMBZ ak 150	Havana, Cuba	Manuel & Guillermo Salas Diario "El Mundo"	
CMCX z 150	Havana, Cuba	Diario "El Mundo" Powell & Platz	
KGGF ak 500 2(1) KQW ae 500 T	Coffeyville, Kans. San Jose, Calif. New York City	Pacific Agricultural Foundation, Ltd.	1
WHN ae 250 1	New York City	Marcus Loew Booking Agency	i
WIS ac 500 N(1) WNAD ac 500 2	Columbia, S. C. Norman, Okla.	WIS, Inc. University of Oklahoma	1
WPAP ae 250 la	New York City New York City	Marcus Loew Booking Agency	1
WQAO ae 250 la WRNY z 250 l	New York City New York City	Marcus Loew Booking Agency Marcus Loew Booking Agency	i
XEU ak 100	Veracruz, Mexico	Baltasat Pazos Sosa	į.
1020 kilocycles 29	3.9 meters 🗌		j i
KYW ac 10000 N WRAX ac 250 D	Chicago, Ill. Philadelphia, Pa.	Westinghouse Elec. & Mfg. Co. (KFKX) WRAX Broadcasting Co.	'
XEFD z 300	Tiajuana, Mex.	Carlos de la Sierra	
-	1.1 meters 🗌		H
CFCF ae 500 NG CMHI ck 30 a	Montreal, Que. Santa Clara, Cuba	Canadian Marconi Co. Laviz & Paz	-
CMKC z 150 1034a	Santiago de Cuba	Pinol Batlle y Co.	
CNRV ak 500 XEB ak 1000	Vancouver, B. C. Mexico City, Mexico	Canadian National Railways El Buen Tono, S. A.	1
	8.3 meters]
CMGH z 15	Matanzas, Cuba	O. y J. Alvarez	110
KRLD ac 10000 1C	Dallas, Tex.	KRLD Radio Corp. (Adolphus Hotel) Chamber of Commerce	11
WESG ac 1000 D	Hot Springs, Ark. Elmira, N. Y.	WESG, Inc.	ļ
WKAR ae 1000 D	East Lansing, Mich.	Michigan State College	. 1:
	5.5 meters	Jose Antonio Lefran	
CMJG z 50 KFBI ae 5000 Dn	Camaguey, Cuba Abilene, Kans.	Farmers & Bankers Life Ins. Co.	
K-NX ae 25000 X	Hollywood, Calif.	Western Broadcast Co. Hugo Molina Font	
XEFC z 10 XES dk 250 1055K	Merida, Yuc. Tampico, Mexico	Difusora Portena	İ
	-		

1060	kilo	cycl	es	282.8 meters	
KWJJ WBAL WJAG WTIC	z ae ak	500 10000 1000	Dn 1B Dn	Portland, Ore. Baltimore, Md. Norfolk, Neb.	KWJJ Broadcast Co., Inc. Consolidated Gas, Elec. L. & Pwr. Co. Norfolk Daily News
WTIC	ak	50000	1R	Hartford, Conn.	Travelers' Bdctg. Service Corp.
	kilo	cyc1	es	280.2 meters	
CMBG CMCB	z af	225 150		Havana, Cuba Havana, Cuba	John L. Stowers Metropolitan-Radio de Cuba
KJBS WCAZ	ae ae	100 50	D D	San Francisco, Calif. Carthage, Ill.	Julius Brunton & Sons Co. Superior Bdctg. Service, Inc.
WDZ WTAM	ak ak	100 50000	Ď R	Tuscola, Ill.	James L. Bush National Broadcasting Co., Inc.
XEG	z	250	1075	Cleveland, Ohio Mexico City, Mexico	Ricardo Gonzales Montero
	kilo	cycl		277.6 meters	
WBT WCBD	ae ae	25000 5000	CU 1Dn	Charlotte, N. C. Zion, III.	Station WBT, Inc. Wilbur Glenn Voliva
WMBI	ck	5000	1Dn	Chicago, Ill.	Moody Bible Institute
1090	kilo	cycl	es	275.1 meters	
KMOX	ak	50000	С	St. Louis, Mo.	Voice of St. Louis, Inc.
1100	kilo	cycl	es	272.6 meters	
KGDM	ak	250	D	Stockton, Calif.	E. F. Peffer
WLWL WPG	ae ae	5000 5000	IC	New York City Atlantic City, N. J.	Missionary Society of St. Paul Municipality of Atlantic City
1110	kilo	-	es	270.1 meters [
CMJO KSOO	z ae	$\frac{15}{1000}$	Dn(2	Ciego de Avila, Cuba	Rey-Borges Sioux Falls Broadcast Assn., Inc.
WRVA XENT	ae	5000 150000	N 1115	Sioux Falls, So. Dak. Richmond, Va. Neuvo Laredo, Mex.	Larus & Bros. Co., Inc. Compania Industrial Universal, S. A.
1120	kilo	cycl	es	267.7 meters	
CFCA	ak ak	500 100	G EL	Toronto, Ont. Kamloops, B. C.	Toronto Daily Star Review Publishing Co., Ltd.
CFJC CHGS CJOC CMHJ	ce	100	$\tilde{\mathbf{v}}\tilde{\mathbf{x}}$	Summerside, P. E. I.	R. T. Holman, Ltd.
CMHJ	ak ae	100 4 0	1125	. Lethbridge, Alta. Cienfuegos, Cuba	Harold R. Carson Victorino Lopez (Hotel Bristol)
KFIO KFSG	ae ak	100 500	D	Spokane, Wash.	Spokane Broadcasting Corp.
KRKD	aeh	500	8 8	Los Angeles, Calif. Los Angeles, Calif.	Echo Park Evangelistic Assn. Fireside Broadcasting Co.
KRSC KTRH	ak ak	100 500	D 2C	Seattle, Wash. Houston, Tex.	Radio Sales Corp. (Wash, Ath. Club)
WDEL	aj	250	(.5) 1C	Wilmington, Del.	KTRH Broadcasting Co. (Rice Hotel) WDEL, Inc.
WHAD WISN	ak	250 250	1C 1C	Wilmington, Del. Milwaukee, Wis. Milwaukee, Wis.	Marquette University American Radio News Corp.
WTAW	ae	500	2	College Station, Texas	Agricultural & Mech. College
1130	kilo			265.3 meters 📋	
KSL W.I.D	ae ze	50000 20000	C Dn	Salt Lake City, Utah	Radio Service Corp. of Utah
WJJD WOV	ae	1000	D	Chicago, Ill. New York City	WJJD, Inc. (Palmer House) International Broadcasting Corp.
XEH	ak	250	1132	Monterrey, Mexico	Tarnava & Cia
1140			es	263.0 meters 🗀	
CMBJ CMCD	z aeh	150 250		. Havana, Cuba Havana, Cuba	Emilio Perera Angel Bertematy y Garcia
KVOO	ae	5000	iN	Tulsa, Okla.	Southwestern Sales Corp.
WAPI XETA	aj Z	5000 250	1N	Birmingham, Ala. Mexico City, Mexico	WAPI Broadcasting Corp. Manuel Espinosa Tagle
1150	kilo	cycle	es	260.7 meters 🗌	
CMJH WHAM	ak	50		. Ciego de Avila, Cuba Rochester, N. Y.	Luis Marauri Mendoza
WHAM XED 10-AT	ae z ak	5000 500 25	BX 1155 1155	Rochester, N. Y. Guadalajara, Mex. Trail, B. C.	Stromberg-Carlson Tel. Mfg. Co. International Broadcasting Co. Trail Amateur Radio Assn.
				5503	

INDEX BT FREQUENCIES AND DIAL NUMBERS						
1160	kild	ocycl	es	258.5 meters		
WOWC		10000			Main Auto Supply Co.	jų.
WWVA	ae	5000	1C 1C	Fort Wayne, Ind. Wheeling, W. Va.	West Virginia Broadcasting Corp.	
1170	kilo	ocycl	es	256.3 meters [1
СМЈЕ	z	50	1175		Manuel Fernandez	
WCAU	ае	50000	C	Philadelphia, Pa.	WCAU Broadcasting Co.	
1180	kild	ocycl	es	254.1 meters [
	z	250	1185	Havana, Cuba	Rafael Rodriquez	7
CMCJ KEX	ak	5000	2N 2	Portland, Ore.	National Broadcasting Co.	
KOB WDGY	ae ak	20000 1000	Dn	Albuquerque, N. M. Minneapolis, Minn.	George W. Young	
WINS	ae	500		New York City	American Radio News Corp.	
WMAZ		500		Macon, Ga.	Southeastern Broadcasting Co.	
1190	kilo	ocycl	es	252.0 meters		
WOAI VONF	aeh z	50000 500	N 1195	San Antonio, Texas St. John's, N. F.	Southern Equipment Co. Dominion Brdestg. Co., Ltd.	
1200	kilo	ocycl	es	249.9 meters [
CHCH	z	100	2	Montreal, Que.	Montreal Radio Corp.	
CHLP	Z	100	2	Montreal, Que.	La Patrie, Ltd.	
CKOV CMGB	ak z	100 30	1205	Kelowna, B. C. Matanzas, Cuba	Okanagan Broadcasters, Ltd. Jose Anorga	
KBTM	ak	100	D CT	Matanzas, Cuba Paragould, Ark. Bakersfield, Calif.	Beard's Temple of Music	
KERN KF IB	ak ak	100 100	(.25)	Marshalltown, Iowa	Bee Bakersfield Broadcasting Co. Marshall Electric Co., Inc.	
KFJB KFWF	ak	100	(.25) 5	St. Louis, Mo.	St. Louis Truth Center, Inc.	KCYS.
KFXD KFX J	ae ak	100 100		Nampa, Idaho Grand Junction, Col	lo. Western Slope Brdcstg. Co.	1210
KGDE	ae	100	(.25)	Fergus Falls, Minn.	Jaren Drug Co.	
KGDY KGEK	ak ak	100 100	ġ	Huron, S. D. Yuma, Colo.	Voice of South Dakota, Inc. Beehler Electrical Equipment Co.	MTRS.
KGEW	ak	100	ý	Ft. Morgan, Colo.	City of Fort Morgan Ben. S. McGlashan	24 7.8
KGF J KGH I	ae ak	100 100		Los Angeles, Calif.	Ben. S. McGlashan O. A. Cook	DIAL
KGVO	ak	100	1111	Missoula, Mont.	Mosby's, Inc.	DIAL
KMLB KVOS	ae z	100 100	• • • • •	Monroe, La. Bellingham, Wash.	Liner's Broadcasting Station, Inc. KVOS, Inc.	
KWG	ak	100	CT	Stockton, Calif.	McClatchy Newspapers	
WABI WABZ	ak ak	100 100	i"	Bangor, Maine New Orleans, La.	First Universalist Society Samuel D. Reeks	
WBBZ	ak	100		Ponca City, Okla.	C. L. Carrell (R/C various cities) Radio Station WBHS, Inc.	1
WBHS WCAT	ak ak	100 100	4 D	Huntsville, Ala. Rapid City, S. D.	State School of Mines	1
WCAX	ak	100		Burlington, Vt.	Burlington Daily News	1
WCLO	ak ae	100 100	3	Janesville, wis.	WCLO Radio Corp. (R/C Beloit) Keystone Broadcasting Corp.	
WCOD WFAM	ak	100	8C	South Bend, Ind.	Keystone Broadcasting Corp. South Bend Tribune (WSBT)	
WFBC WFBE	z ak	100 100	(.25) (.25)	4 Greenville, S. C.	News-Piedmont Co. Radio Station WFBE, Inc.	1
WHBC	ak	10		Canton, Ohio	Edward P. Graham	1
WHBY WIBX	ak z	100 100	(.3)	Green Bay, Wis. Utica, N. Y.	Edward P. Graham WHBY, Inc. WIBX, Inc.	ŀ
WIL	ae	100	5(.25	5) St. Louis, Mo.	Missouri Broadcasting Corp.	
WJBC	ae ae	100 100	6	LaSalle, Ill. Decatur, Ill.	Kaskaskia Broadcasting Co. Commodore Broadcasting, Inc.	:
WJBL WJBW	ak	100	1	New Orleans, La	C. C. Carlson	
WKJC WLAP	ae ae	100 100	3 (.25)	Lancaster, Pa. Louisville, Ky.	Lancaster Bdctg. Service, Inc. American Broadcasting Corp. of Ky.	
WNBO	aeh	100		Washington, Pa. Carbondale, Pa.	Spriggs Symplex	
WNBW WORC	z ak	10 100	(.1) CH	Carbondale, Pa. Worcester, Mass.	Spriggs Symplex WNBW, Inc. A. F. Kleindienst	
WPHR	ae	100	(.25)	Petersburg, Va Columbus, Ga.	WLBG, Inc.	
WRBL WWAE	ak aeh	100 100	8	Columbus, Ga. Hammond, Ind.	WRBL Radio Station, Inc. Hammond-Calumet Bdctg. Corp.	
10-AB	ak	25			Moose Jaw Radio Assn.	
10-AK 10-BI	ak ak	15 25	****	Stratford, Ont. Prince Albert, Sask.	Moose Jaw Radio Assn. M. I. Higgins Elec. & Radio Co. Prince Albert Radio Club	
10-BP	ak	25	1199	Wingham, Ont. Brantford, Ont.	W. T. Cruickshank	
10-BQ 10-BU	ak z	15 15		Brantford, Ont. Canora, Sask.	Tom Brown & Harold Brown Canora Radio Assn.	
	_				Carlot a Resolution	
1210 efnb		ocycl	es E	247.8 meters Fredericton, N. B.	James S. Neill & Sons, Ltd.	
GLIND	ae	100	L	rrederictor, IV. D.	James G. Mem & Sons, Dia.	

		INDE.	A DI	rkeQuencies kin	DIAL NUMBERS		
CJOR	ak	500	E	Vancouver, B. C.	George C. Chandler		
CJOR CKMC	ak	100	8	Cobalt, Ont.	R. L. McAdam		
KASA	ak	100		Elk City, Okla.	E. M. Woody (Casa Grande Hotel)		
KDLR KFJI	ak	100 100		Devils Lake, N. Dak.	KDLR, Inc. KFJI Broadcasters, Inc.		
KFOR	ak ak	100	(.25)	Klamath Falls, Ore. Lincoln, Neb.	Howard A. Shuman		
KFPW	ak	100		Fort Smith, Ark.	Southwestern Hotel Co.		
KFPW KFVS	ae	100	6	Fort Smith, Ark. Cape Girardeau, Mo.	Oscar C. Hirsch		
KFXM	ak	100	9	San Bernardino Calif	J. C. & E. W. Lee		
KGCR	ah ak	100 100		Watertown, S. Dak. Dodge City, Kans. Olympia, Wash.	Greater Kampeska Radio Corp.		
KGNO KGY	ak	100		Olympia Wash	Dodge City Broadcasting Co. KGY, Inc. (Capitol Park Bldg.) Harold H. Hanseth		
KIEM	z	100	ĎP	Eureka, Calif.	Harold H. Hanseth		
KPPC	ak	50	9	Pasadena, Calif.	Pasadena Presbyterian Church		
KWEA	z	100		Shreveport, La.	Hello World Broadcasting Corp.		
WALR	ae ae	100 100	1	Zanesville, Ohio Wilkes-Barre, Pa.	WALR Broadcasting Corp. John H. Stenger, Jr. (Morris Bldg. Grace Covenant Pres. Church		
WBBL	ak	100	7S	Richmond, Va.	Grace Covenant Pres. Church		
WCBS	ak	100	2	Springfield, Ill.	WCBS, Inc.		
WCRW	ae	100	4	Chicago, Ill.	Clinton R. White		
WEBQ	ae	100	6	Harrisburg, III. Chicago, III. White Plains, N. Y. Freeport, N. Y.	Harrisburg Broadcasting Co.		
WFAS	z ak	100 100	4	White Plains N Y	Emil Denemark, Inc. Westchester Broadcasting Corp.		
WGBB	ae	100	3	Freeport, N. Y.	Harry H. Carman		
WGCM	ae	100		Gulfport, Miss. Chester Twp., N. Y. Rock Island, Ill.	Great Southern Land Co.		
WGNY		50	P	Chester Twp., N. Y.	Peter Goelet (Orange County)		
WHBF	ae	100		Rock Island, Ill.	Rock Island Broadcasting Co		
WHBU	aj ak	100 100	Ď	Anderson, Ind. Troy, Ala.	Anderson Broadcasting Corp. Troy Broadcasting Co.		
WIBU	ae	100	<i>D</i>	Poynette, Wis.	Wm. C. Forrest		
WIBU WJBI WJBU	ak	100	3	Red Bank, N. J.	Monmouth Broadcasting Co., Inc.		
WJBU	ae	100	1	Lewisburg, Pa.	Monmouth Broadcasting Co., Inc. Bucknell University		
WJBY	aeh	100	B	Gadsden, Ala.	Ingrams Broadcasting Co.		
WIW.	aeh ae	100 100	D	Hagerstown, Md. Akron, Ohio	W.I.W. Inc.		
WJEJ WJW WKFI	ak	100		Greenville, Miss.	A. V. Tidmore WJW, Inc. J. Pat Scully		
WMBG	aj	100	7C	Greenville, Miss. Richmond, Va.	Havens & Martin, Inc.		
WOCL	ak	50		Jamestown, N. I.	A. E. Newton		
WOMT	ae ak	100 100	. v	Manitowoc, Wis. Providence. R. I.	Francis Mangin Kadow Cherry & Webb Broadcasting Co.		
WPRO	ak	100	aY aY	Providence, R. I.	Cherry & Webb Broadcasting Co.		
WQDX	z	100		Thomasville, Ga.	Stevens Luke		
WSBC	z,	100	4	Chicago, Ill.	WSBC, Inc.		
WSEN	ak ae	100 100	******	Columbus, Ohio	638 Tire & Vulc Co. (P/C WI W)		
WSOC	ae	100		Springfield, Tenn. Gastonia, N. C.	WSOC. Inc.		
WTAX	ae	100	ż	Springneia, III.	Columbus Bdctg, Corp. (Seneca Hotel) 638 Tire & Vulc. Co. (R/C WLW) WSOC, Inc. WTAX, Inc.		
XEX	z	500		Mexico City, Mexico	Excelsior, Cia Editorial S. A.		
1220	1,:10	ovol.	20 2/	15.8 meters			
1220	KHU	Cych		is.6 meters			
CMHK	z	15	1225	Cruces, Cuba	V. Villaneuva		
KFKU	ae	500	a 2S	Lawrence, Kans.	University of Kansas		
KTW	z ae	1000 1000	2(2)	Seattle, Wash.	First Presbyterian Church State College of Washington		
WSC WCAD	ak	500	D	Pullman, Wash. Canton, N. Y.	St. Lawrence University		
WCAE	ae	1000	R	Pittsburgh, Pa.	WCAE, Inc. and Sun-Telegraph		
WDAE	ak	1000	C_	Tampa, Fla.	Tampa Daily Times (Tampa Terrace)		
WREN	ak	1000	aB	Lawrence, Kans.	Jenny Wren Co.		
1230	kilo	cvc1	20 24	3.8 meters	2		
CMBY	z	350	1235	Havana, Cuba	Callejas-Estefani		
KEOD	z aj	150 250	1235	Havana, Cuba Anchorage, Alaska	Manuel Cruz		
	.,	250	(.5)	Albuguerque, N. M.	Anchorage Radio Club, Inc. New Mexico Broadcasting Co.		
KGGM	ak		Ň	San Francisco, Calif.	Pacific Broadcasting Co.		
KFOD KGGM KYA	ae	1000	1.7				
/KYA	ae aeh	1000	(.5) N 1C	Indianapolis, Ind.	Indianapolis Power & Light Co.		
WFBM WNAC	ae aeh ae	1000 1000	CH	Indianapolis, Ind. Boston, Mass.	Indianapolis Power & Light Co. Shepard Broadcasting Service, Inc.		
/KYA	ae aeh	1000	IC CH IC	Indianapolis, Ind.	Indianapolis Power & Light Co.		
WFBM WNAC	ae aeh ae	1000 1000	CH	Indianapolis, Ind. Boston, Mass.	Indianapolis Power & Light Co. Shepard Broadcasting Service, Inc.		
WFBM WNAC WSBT	ae aeh ae ak	1000 1000 500	IC IC	Indianapolis, Ind. Boston, Mass. South Bend, Ind.	Indianapolis Power & Light Co. Shepard Broadcasting Service, Inc.		
WSBT	ae aeh ae ak	1000 1000 500	es 24	Indianapolis, Ind. Boston, Mass. South Bend, Ind.	Indianapolis Power & Light Co. Shepard Broadcasting Service, Inc. South Bend Tribune (WFAM)		
WFBM WNAC WSBT	ae aeh ae ak kilo	1000 1000 500 cycle	es 24	Indianapolis, Ind. Boston, Mass. South Bend, Ind.	Indianapolis Power & Light Co. Shepard Broadcasting Service, Inc. South Bend Tribune (WFAM) Jose Silvera		
WSBT	ae aeh ae ak	1000 1000 500	es 24	Indianapolis, Ind. Boston, Mass. South Bend, Ind.	Indianapolis Power & Light Co. Shepard Broadcasting Service, Inc. South Bend Tribune (WFAM)		

KTAT KTFI WACO WKAO WXYZ XEFW	ak ak ak ae ak z	1000 500 1000 1009 1000 70	iC	Fort Worth, Texas Twin Falls, Idaho Waco, Texas San Juan, P. R. Detroit, Mich. Tampico, Mex.	KTAT Broadcast Co., Inc. Radio Broadcasting Corp. of Idaho Central Texas Broadcasting Co. Radio Corp. of Porto Rico Kunsky-Trendle Broadcasting Corp. Jose Expedito Martinez	
1250	kilo	cyc1	es 23	9.9 meters		
KFMX KFOX WAAM WCAL WDSU WGCP WLB WODA WRHM XEFA	aj ae ae ak ak ak	1000 1000 1000 1000 1000 250 1000 1000 500	2 CT 1(2.5) 2 C 1 2 1 2	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	kilo	cycl	es 23	8.0 meters 🗌		
CMJI KOIL KRGV KVOA KWWG WLBW WNBX WTOC	ak ak ac ak	5 1000 500 500 500 500 250 500	B 1 1 C(1) D 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.	
1270	kilo	cycl	es 23	6.1 meters	16 4	
CMBC CMJN KGCA KOL KVOR KWLC WASH WFBR WJDX WOOD	aeh z ak ae ak ak ae ak ak	150 50 100 1000 1000 100 500 500 1000 500	D2 CT C D2 a R N	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.	KYC8.
1280	kilo	cycl	es 23	4.2 meters		1300
KFBB WCAM WCAP WDOD WIBA WOAX WRR	ae ae ae ae aeh aeh	1000 500 500 1000 500 500 500	(2.5) 1 1C C(2.5) N(1) 1 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 Dallas (Hilton Hotel)	230.6 DIAL
1290	kilo	cycl	es 23	2.4 meters 🗌		
CMHL KDYL KFUL KLCN KTSA WEBC WJAS WNBZ	z ak ak z ak ae ak z	20 1000 500 50 1000 1000 1000 50	N 1 D 1C(2.5) N(2.5) C(2.5) 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 & Me ce	
1300	kilo	cycle	es 230	0.6 meters 🗀		
CMKJ KALE KFAC KFH KFJR WBBR WEVD WFAB WHAZ WIOD WOQ	z ak aj ae aej ae z ae aeh ae	20 500 1000 1000 500 1000 500 1000 1000	3C C 1 3 1 1 1 1 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 Christianiny	

1310	kilo	cycle	es 22	8.9 meters	/
CMJP	z	7.5		Moron, Cuba	Cesar Canals
CMJP KCRJ	ak	100	D	Jerome, Arizona	Chas. C. Robinson
KFBK	ak	100	C	Sacramento, Calif.	Jas. McClatchy Co.
KFGQ KFPL	ak ck	100	7	Boone, Iowa	Boone Biblical College C. C. Baxter
KEPM	ae	100 15		Dublin, Texas	New Furniture Co-
KFPM KFXR KFYO	ak	100	(.25)_	Greenville, Texas Oklahoma City, Okla. Lubbock, Texas	Exchange Ave. Baptist Church
KFYÔ	ak	100	(.25)Z	Lubbock, Texas	Kirksey Brothers
KGBX	ae	100		Springfield, Mo. Wolf Point, Mont.	KGBX, Inc.
KGCX	ak	100	(.25)	Wolf Point, Mont.	First State Bank of Vida
KGEZ	aj	100		Kalispell, Mont. Kearney, Neb.	Donald C. Treloar
KGFW	ah	100		Kearney, Neb.	Central Nebraska Ductg. Corp.
KIFH KIT	z ak	100 100		Juneau, Alaska Yakima, Wash. Medford, Ore.	Juneau Broadcasting Co. Valley Broadcasters, Inc. Mrs. W. J. Virgin
KMED	ak	100		Medford, Ore.	Mrs. W. I. Virgin
KRMD	ak	100		Shreveport, La.	KRMD, Inc. (Jefferson Hotel)
KTSM	z	100	8	El Paso, Texas	Tri-State Broadcasting Co., Inc.
KXRO	ak	100		Aberdeen, Wash.	KXRO, Inc. (Hotel Morck) Southland Radio Corp.
WAML	z	100		Laurel, Miss.	Southland Radio Corp.
WBEO	z.	100		Marquette, Mich.	Lake Superior Broadcasting Co. Banks of Wabash, Inc.
WBOW WBRE	ak	100 100		Terre Haute, Ind. Wilkes-Barre, Pa.	Louis G. Baltimore
WCLS	z ae	100	 b	Joliet, Ill.	WCLS, Inc.
WDAH	z	100	a	El Paso. Texas	Tri-State Broadcasting Co., Inc.
WEBR	ae	100	Q(.25)	El Paso, Texas Buffalo, N. Y.	Howell Broadcasting Station
WEXL WFBG	ak	50		Royal Oak, Mich.	Royal Oak Broadcasting Co.
	ae	100	3	Altoona, Pa.	The Gable Broadcasting Co.
WFDF	ae	100		Flint, Mich.	Frank D. Fallain (Union Ind. Bldg.)
WGAL	ae	100	5	Lancaster, Pa. Newport News, Va.	WGAL, Inc. (Lancaster Newsp. Bldg. Hampton Roads Broadcasting Corp.
WGH What	ae	100 100	4	Philadelphia, Pa.	Independence Broadcasting Co
WIAS	ak ak	100	7	Ottumwa, Iowa	Iowa Bdctg. Co. (Hotel Ottumwa)
WJAC	ae	100	ź	Johnstown, Pa.	Iowa Bdctg. Co. (Hotel Ottumwa) WJAC, Inc.
WKAV	ae	100		Laconia, N. H.	Laconia Radio Ciub
WKBB	ae	100	bYZ	Joliet, Ill.	Richard W. Hoffman
WKBC	z	100		Birmingham, Ala.	R. B. Broyles Furniture Co.
WLBC	ak	50	6	Muncie, Ind. Auburn, N. Y.	D. A. Burton—A. J. Marriott
WMBO	ak	100	11/ 35	Auburn, N. Y.	D. A. Burton—A. J. Marriott WMBO, Inc. (Masonic Temple) New Bedford Bdctg. Co. (N. B. Hotel)
-WNBH -WOL	ae ae	100 100	H(.25)	New Bedford, Mass. Washington, D. C.	American Broadcasting Co.
WRAW	ak	100	5X	Reading, Pa.	Reading Broadcasting Co.
WROL	ak	100		Knoxville, Tenn.	Reading Broadcasting Co. Stuart Bdctg. Co. (Farragut Hotel)
WSAJ	ae	100		Grove City, Pa.	Grove City College Winston-Salem Journal Co.
WSAJ WSJS	ae	100	С	Grove City, Pa. Winston-Salem, N. C.	Winston-Salem Journal Co.
WTEL	ae	100	4	Philadelphia, Pa.	Foulkrod Radio Eng. Co., Inc.
WTJS	ak	100	(.25)	Jackson, Tenn.	Sun Publishing Co. (Sun Bldg.)
WTRC XEFB	ak ak	50 100	6 (.1)	Elkhart, Ind.	Elkhart Daily Truth
XEI	ak ak	150	1315	Monterrey, N. L., Mex. Morelia, Mexico	Quintanilla y Stevenson Carlos Gutierrez M.
ALI	ak	130		Morena, Mexico	Carlos Guerrez IVI.
1320	kilo	cvcl	20 21	7 1	
		Cy CI		27.1 meters 🗌	
CMBF	z.	150	1325	Havana, Cuba	Ramon Bardales
CMCY			1325 1325	Havana, Cuba	M. D. Autran
CMCY KGHF	z ak ak	150 1000 250	1325 1325	Havana, Cuba Havana, Cuba Pueblo, Colo.	M. D. Autran C. P. Ritchie & J. E. Finch
CMCY KGHF KGMB	z ak ak ak	150 1000 250 250	1325 1325 (.5)	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co.
CMCY KGHF KGMB KID	z ak ak ak ae	150 1000 250 250 250	1325 1325 (.5)	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc.
CMCY KGHF KGMB	z ak ak ak	150 1000 250 250	1325 1325	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co.
CMCY KGHF KGMB KID WADC WSMB	z ak ak ak ae ae	150 1000 250 250 250 250 1000 500	1325 1325 (.5) C (.5) C (.5)	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La.	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons
CMCY KGHF KGMB KID WADC WSMB	z ak ak ak ae ae ae	150 1000 250 250 250 250 1000 500	1325 1325 (.5) C (.5) C (.5) N	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La.	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc.
CMCY KGHF KGMB WADC WSMB	z ak ak ak ae ae ae	150 1000 250 250 250 250 1000 500	1325 1325 (.5) C (.5) C (.5)	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La.	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc.
CMCY KGHF KGMB KID WADC WSMB	z ak ak ak ae ae ae	150 1000 250 250 250 250 1000 500 cycle	1325 1325 (.5) C (.5) C N	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 25.4 meters San Diego, Calif,	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc. Don Lee Broadcasting System KMO, Inc. (Hotel Winthrop)
CMCY KGHF KGMB KID WADC WSMB	z ak ak ak ae ae ae kilo ae ak ah	150 1000 250 250 250 1000 500 cycl 1000 250 1000	1325 1325 (.5) C (.5) C (.5) C N	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 25.4 meters San Diego, Calif. Tacoma, Wash. Sioux City, Iowa	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc. Don Lee Broadcasting System KMO, Inc. (Hotel Winthrop) Perkins Bros. Co.
CMCY KGHF KGMB KID WADC WSMB	z ak ak ak ae ae ae ae kilo	150 1000 250 250 250 1000 500 cycl 1000 250 1000 500	1325 1325 (.5) C (.5) C N es 22 CT	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 25.4 meters San Diego, Calif, Tacoma, Wash. Sioux City, Iowa Hartford, Conn.	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc. Don Lee Broadcasting System KMO, Inc. (Hotel Winthrop) Perkins Bros. Co. WDRC, Inc.
CMCY KGHF KGMB KID WADC WSMB	z ak ak ak ae ae ae kilo ae ak ah	150 1000 250 250 250 1000 500 cycl 1000 250 1000	1325 1325 (.5) C (.5) C (.5) C N	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 25.4 meters San Diego, Calif. Tacoma, Wash. Sioux City, Iowa	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc. Don Lee Broadcasting System KMO, Inc. (Hotel Winthrop) Perkins Bros. Co.
CMCY KGHF KGMB KID WADC WSMB 1330 KGB KMO KSCJ WDRC WSAI WTAQ	z ak ak ak ae ae ae ae ak ah ae ae	150 1000 250 250 250 1000 500 Cycl 1000 250 1000 500 500	1325 1325 (.5) (.5) (.5) (.7) (.7) (.7) (.7) (.7) (.7) (.7) (.7	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 25.4 meters San Diego, Calif. Tacoma, Wash. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis.	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc. Don Lee Broadcasting System KMO, Inc. (Hotel Winthrop) Perkins Bros. Co. WDRC, Inc. The Crosley Radio Corp.
CMCY KGHF KGMB KID WADC WSMB 1330 KGB KMO KSCJ WDRC WSAI	z ak ak ak ae ae ae ae ak ah ae ae	150 1000 250 250 250 1000 500 Cycl 1000 250 1000 500 500	1325 1325 (.5) (.5) (.5) (.7) (.7) (.7) (.7) (.7) (.7) (.7) (.7	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 25.4 meters San Diego, Calif. Tacoma, Wash. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc. Don Lee Broadcasting System KMO, Inc. (Hotel Winthrop) Perkins Bros. Co. WDRC, Inc. The Crosley Radio Corp.
CMCY KGHF KGMB KID WADC WSMB 1330 KGB KMO KSCJ WDRC WSAI WTAQ	z ak ak ak ae ae ae ae ak ah ae ae	150 1000 250 250 250 1000 500 Cycl 1000 250 1000 500 500	1325 1325 (.5) C (.5) C (.5) C N es 27 1C(2.5) C CH R(1) 1C	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 25.4 meters San Diego, Calif, Tacoma, Wash. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis.	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc. Don Lee Broadcasting System KMO, Inc. (Hotel Winthrop) Perkins Bros. Co. WDRC, Inc. The Crosley Radio Corp. The Gillette Rubber Co. Symons Bdctg. Co. (Symons Bldg.)
CMCY KGHF KGMB KID WADC WSMB 1330 KGB KMO KSCJ WDRC WSAI WTAQ	z ak ak ak ae ae ae ae kilo	150 1000 250 250 250 1000 500 250 1000 250 1000 500 1000 cycl	1325 1325 (.5) (.5) (.5) (.7) (.7) (.7) (.7) (.7) (.7) (.7) (.7	Havana, Cuba Havana, Cuba Pueblo, Colo. Honolulu, Hawaii Idaho Falls, Idaho Akron, Ohio New Orleans, La. 25.4 meters San Diego, Calif. Tacoma, Wash. Sioux City, Iowa Hartford, Conn. Cincinnati, Ohio Eau Claire, Wis.	M. D. Autran C. P. Ritchie & J. E. Finch Honolulu Broadcasting Co. KID Broadcasting Co., Inc. Allan T. Simmons WSMB, Inc. Don Lee Broadcasting System KMO, Inc. (Hotel Winthrop) Perkins Bros. Co. WDRC, Inc. The Crosley Radio Corp.

1350 kilocycles 222.1 meters KIDO ak 1000 Boise, Idaho KWK ae 1000 B St. Louis, Mo. WAWZ ae 250 I Zarephath, N. J

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DY

250 la

250

500

250

WBNX

WCDA

WEHC

WMSG

ae

80

ae

ae

St. Louis, Mo.
Zarephath, N. J.
New York City
New York City
Emory, Va.
New York City

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

1360 kilocycles 220.4 meters

1000 Long Beach, Calif. KGIR WCSC WFBL ŊJ 500 ak Butte, Mont. Charleston, S. C. Syracuse, N. Y. Chicago, Ill. 500 ae C(2.5)1000 ak WGES 500 1(1) ae WJKS WOBC agj ak 1000 1Ż Gary, Ind. Vicksburg, Miss. Mexico City, Mexico 500 P XEFH 250

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 218.8 meters

CMCR	z	150	1375	Havana, Cuba
CMGE	z	30	1375	Cardenas, Cuba
KCRC	ak	100	2(.25)	Enid, Okla.
KFBL	ai	50	3	Emo, Okia.
				Everett, Wash.
KFJM	zk	100		Grand Forks, N. Da
KFJZ KFLX	ae	100		Fort Worth, Texas
	z	100	(25)	Galveston, Texas
KGAR	ae	100	(.25)	Tucson, Arizona
KGDA	ak	100	. · · · · · · ×	Mitchell, S. Dak.
KGFG	bk	100	2	Oklahoma City, Ok
KGFL	zk	100	4	Santa Fe, N. Mex.
KGKL	ak	100	20000	San Angelo, Texas
KICA	z.	100	4	Clovis, N. Mex.
KMAC	ak	100	5	San Antonio, Texas
KONO	ak	100	5	San Antonio, Texas
Koos	ae	100		Marshfield, Ore.
KRE	ak	100		Berkeley, Calif.
KSO	z	100	B(.25)	Des Moines, Iowa
KUJ	ak	100	D	Walla Walla, Wash
KVĹ	z	100	3	Seattle, Wash.
KWKC	z	100		Kansas City, Mo.
WBTM	ak	100	7	Danville, Va.
WCBM	ae	100	Z(.25)	Baltimore, Md.
WDAS	aeh	100	(.25)	Philadelphia, Pa.
WGLC	z	50	(.1)	Hudson Falls, N. Y.
WGL	aeh	100	č"	Fort Wayne, Ind.
WHBD	bk	100		Mount Orab, Ohio
WHBO	ak	100		Memphis, Tenn.
WHDF	ak	100	(.25)	Calumet Mich
WIBM	aeh	100	ì	Calumet, Mich. Jackson, Mich.
WJBK	ae	100	îQ	Detroit, Mich.
WJEO	z	100	6P	Williamsport, Pa.
WITL	ae	100	OI	Atlanta, Ga.
WLEY	aeh	100	(25)	
WLVA	ck		(.25)	Lexington, Mass.
WMBR	ek ak	100 100	/	Lynchburg, Va.
WPFB				Tampa, Fla.
	ak	100		Hattiesburg, Miss.
WQDM	ae	100	Ď	St. Albans, Vt.
WRAK	ak	100	6	Williamsport, Pa.
WRAM	ae	100		Wilmington, N. C.
WRDO	ae	100		Augusta, Maine
WRJN	ae	100		Racine, Wis.
WSVS	ak	50		Buffalo, N. Y.
XEFV	z	5 0		Juarez, Mexico

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.

kla. Oklahoma Broadcasting Co., Inc.
KGFL, Inc.
KGKL, Inc. (St. Angelus Hotel)
Southwest Broadcasting Co. Walmac Co., Inc. (Blue Bonnet Stud.) waimac 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. WDAS Bdctg. Sta., Inc. (Elks Hot el)
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. WRDO, Inc. (Augusta House)

1380 kilocycles 217.3 meters

1382 150 Camaguey, Cuba Reno, Nevada CMJC z KOH ak 500 Pittsburgh, Pa. LaCrosse, Wis. Dayton, Ohio KOV WKBH WSMK ak 500 2 ĩC 1000 aj ak 200 2 XETB 125 Torreon, Coah., Mex.

Feliciano Isaac McClatchy Newspapers KQV Bdctg. Co. (Investment Bldg.) WRBH, Inc. (Radio Bldg.) Stanley M. Krohn, Jr. Jose A. Berumen

Racine Bdctg. Corp. (Hotel Racine) Seneca Vocational School Jose Onofre Meza KCYS. 1380 MTRS. 217.3

DIAL

1200	4 • •	. 1	_	1157	
				215.7 meters	
CMCH CMCM	ak z	50 15	1395 1395	Havana, Cuba Havana, Cuba	Wifredo & Hum. Fontanals Sanchez Aurelio Balino
CMDB	z	40	1395	Havana, Cuba	Julio Powers
KLRA KOY	ac ac	1000 500	1C C(1)	Little Rock, Ark. Phoenix, Arizona	Arkansas Broadcasting Co. Nielson Radio & Sporting Goods Co.
KUOA WHK	bk	1000	1	Fayetteville, Ark.	Southwestern Hotel Co. (Ft. Smith)
WHK	ae	1000	C(2.5)	Cleveland, Ohio	Radio Air Service Corp. (Higbee Store)
1400	kilo	cycle	es 2	214.2 meters	
KLO	ac	500	,	Ogden, Utah	Interstate Bcg. Corp.
KOCW WBAA	z ak	250 500	(.5) 1	Chickasha, Okla Lafayette, Ind. Brooklyn, N. Y.	J. T. Griffin Purdue University
WBBC	ae	500	2	Brooklyn, N. Y.	Brooklyn Broadcasting Corp. United States Broadcasting Corp.
WCGU WFOX	ak ak	500 500	2	Brooklyn, N. Y. Brooklyn, N. Y.	Paramount Broadcasting Co.
WKBF	ak	500	1 W	Indianapolis, Ind. Brooklyn, N. Y.	Indianapolis Broadcasting, Inc.
WLTH	ae	500	2	Brooklyn, N. I.	Voice of Brooklyn, Inc.
1410	kilo	cycle	es 2	212.6 meters 🗌	
KFLV	ak	500	4	Rockford, Ill.	Rockford Broadcasters, Inc. E. B. Gish
KGRS WAAB	ae ae	1000 5 0 0	I CH	Amarillo, Texas Boston, Mass.	Bay State Broadcasting Corp.
WBCM	ae	500	С	Bay City, Mich. Amarillo, Texas	James E. Davidson
WDAG WHBL	ae ae	1000 500	1	Sheboygan, Wis.	National Radio & Bdctg. Corp. The Press Publishing Co.
WHIS	ak	250	2	Sheboygan, Wis. Bluefield, W. Va.	Daily Telegraph
WODX WRBX	ea ae	500 250	3CU 2	Mobile, Ala. Roanoke, Va.	Mobile Broadcasting Corp. Richmond Development Corp.
WSFA	ak	500	šС	Montgomery, Ala.	Montgomery Broadcasting Co., Inc.
1420	kilo	cvcl	es 2	211.1 meters	
KABC	ak	100		San Antonio, Texas	Alamo Bctg. Co., Inc. (Texas Theatre)
KBPS KCMC	aj ak	100 1 00	4	Portland, Ore. Texarkana, Ark.	Student Body Benson Polytech. School Texarkana Gazette & Daily News
KFIZ	ak	100		Fond du Lac, Wis.	Reporter Printing Co.
KGFF	ak ak	100 100		C F	KGFF Bdctg. Co. (Aldridge Hotel) Golden Gate Broadcasting Co.
KGGC	ak	100	1	Trinidad, Colo.	Leonard E. Wilson
KGIW KGIX KGKX	ak z	100 100		Las Vegas, Nevada	J. M. Heaton Sand Point Broadcasting Co.
KICK	z		Y	Lewiston, Idaho	
KIDW		100	1	Red Oak, Iowa	Red Oak Radio Corp.
KODE	ak	100	1	Lamar, Colo.	Red Oak Radio Corp.
KORE	aeh	100 100		Lamar, Colo.	Red Oak Radio Corp.
KORE KUMA KWCR	aeh ak ae	100 100 100 100	1 B(.25)	Red Oak, Iowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa	Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtic G. Phillips Dr. Albert H. Schermann Cedar Rapids Broadcast Co.
KORE KUMA KWCR KXL	aeh ak ae ae	100 100 100 100 100	1	Ked Oak, Iowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore.	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)
KORE KUMA KWCR KXL WAGM WAMC	aeh ak ae ae af ae	100 100 100 100 100 100 100	B(.25)	Red Oak, Towa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala	Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtir G. Phillips Dr. Albert H. Schermann Cedar Rapids Broadcast Co. KXL Broadcasters (Hotel Multnomah) Aroostook Broadcasting Corp. Raymond C. Hammett (Alabama Hot.
KORE KUMA KWCR KXL WAGM WAMC WAZL	aeh ak ae ae af ae z	100 100 100 100 100 100 100	B(.25)	Red Oak, Towa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa.	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.
KORE KUMA KWCR KXL WAGM WAGM WAZL WEHS WELL	aeh ak ae ae af ae z ak z	100 100 100 100 100 100 100 100 100 50	B(.25) 4	Red Oak, Iowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich.	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. WEHS, Inc. Enquirer-News Co.
KORE KUMA KWCR KXL WAGM WAGM WAZL WEHS WELL WENC	aeh ak ae ae af ae z ak z ak	100 100 100 100 100 100 100 100 50	B(.25) 4	Red Oak, Iowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga.	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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co.
KORE KUMA KWCR KXL WAGM WAMC WAZL WEHS WELL WENC WERE WHDL	ach ak ac ac af ac z ak z ak ac	100 100 100 100 100 100 100 100 50 100 10	B(.25) 4 2 a D	Red Oak, Iowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y.	Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtir 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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp.
KORE KUMA KWCR KXL WAGM WAMC WAZL WEHS WELL WENC WERE WHDL WHFC	aeh ak ae ae af ae z ak z ak ae aeh	100 100 100 100 100 100 100 100 50 100 10	B(.25) 4 2 a D	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill.	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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc.
KORE KUMA KWCR KXL WAGM WAZL WEHS WELL WENC WERE WHDL WHFC WILM WJBO	ach ak ac ac af ac z ak z ak ac	100 100 100 100 100 100 100 100 50 100 10	B(.25) 4 2 a D	Red Oak, fowa Lamar, Colo. Bugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La.	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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdcstg. Co., Inc.
KORE KUMA KWCR KXL WAGM WAZL WEHS WENC WERE WHOL WILM WJBO WJBO WJMS	aeh ak ae af ae z ak z ae ae ae ae	100 100 100 100 100 100 100 100 50 100 10	B(.25) 4 2 a D	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La. Ironwood, Mich.	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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdcstg. Co., Inc.
KORE KUMA KWCR KXL WAGM WAZL WEHS WELL WENC WERE WHDL WHFC WILM WJBO	aeh ak ae af ae z ak z ak ae aeh ae	100 100 100 100 100 100 100 100 50 100 10	B(.25) 4 D a 2 D a	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La. Ironwood, Mich. Cicero, Ill.	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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdcstg. Co., Inc. WJMS, Inc. (St. James Hotel) WKBI, Inc. WLBF Bdctg. Co. (Aladdin Hotel)
KORE KUMA KWCR KXL WAMC WAMC WEHS WELL WENC WERE WHDL WHDL WILM WJBO WJBO WKBI WLBF WKBI WKBI WKBI WKBI	aeh ak ae af ae ak aeh ae ae ak ae	100 100 100 100 100 100 100 100 50 100 10	B(.25) 4 2 a D D a 2 D a CH	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La. Ironwood, Mich. Cicero, Ill. Kansas City, Kans. Springfield, Mass.	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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdcstg. Co., Inc. WJMS, Inc. (St. James Hotel) WKBI, Inc. WLBF Bdctg. Co. (Aladdin Hotel) WMAS, Inc.
KORE KUMA KWCR KXL WAGM WAZL WEHS WEHS WEHS WERE WHFC WILM WJMS WKBI WLBF WMAS	aeh ak ae af z ak ae aeh ae z ak ae ae ae ae	100 100 100 100 100 100 100 100 50 100 10	B(.25) 4 D D a 2 D CCH (.25)	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La. Ironwood, Mich. Cicero, Ill. Kansas City, Kans. Springfield, Mass.	Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtir 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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdcstg. Co., Inc. WJMS, Inc. (St. James Hotel) WKBI, Inc. WLBF Bdctg. Co. (Aladdin Hotel) WMAS, Inc. Michigan Broadcasting Co W. M. Robertson
KORE KUMA KWCR KXL WAGM WAMC WEHS WEHS WEHS WHFC WILM WJMS WLBF WMAS WMBC WMBH	aeh ak ae af az ak ae ae ak ae k ae k ae k ae k ae k	100 100 100 100 100 100 100 100 100 100	B(.25) 4 D a 2 D a CH (.25) (.25)	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La. Ironwood, Mich. Cicero, Ill. Kansas City, Kans. Springfield, Mass. Detroit, Mich. Joplin, Mo. Paducah, Ky.	Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtir 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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdcstg. Co., Inc. WJMS, Inc. (St. James Hotel) WKBI, Inc. WLBF Bdctg. Co. (Aladdin Hotel) WMAS, Inc. Michigan Broadcasting Co W. M. Robertson
KORE KUMA KWCR KXL WAMC WAMC WELL WERE WHDL WERE WHDL WILM WJMS WKBI WMBS WMBS WMBS WMBC	aeh ak ae ae ae z ak ae ae ae ak ak ak	100 100 100 100 100 100 100 100 100 100	B(.25) 4 D D a 2 D CCH (.25)	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La. Ironwood, Mich. Cicero, Ill. Kansas City, Kans. Springfield, Mass. Detroit, Mich. Joplin, Mo.	Red Oak Radio Corp. Lamar Broadcasting Co. Frank L. Hill & Curtir 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. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdestg. Co., Inc. WJMS, Inc. (St. James Hotel) WKBI, Inc. WLBF Bdctg. Co. (Aladdin Hotel) WMAS, Inc. Michigan Broadcasting Co.
KORE KUMA KWCR KXL WAGM WAMC WEHS WEHS WEHS WIFC WILM WJMS WJMS WJMS WMBH WLBF WMBH WMBC WMBH WPAD WSPA WTBO	ach ake ace ace ace ace ace ace ace ace ace ac	100 100 100 100 100 100 100 100 100 100	B(.25) 4 D D a 2 D CH (.25) (.25) (.25)	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La. Ironwood, Mich. Cicero, Ill. Kansas City, Kans. Springfield, Mass. Detroit, Mich. Joplin, Mo. Paducah, Ky. Spartanburg, S. C. Cumberland, Md.	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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdcstg. Co., Inc. WJMS, Inc. (St. James Hotel) WKBI, Inc. WLBF Bdctg. Co. (Aladdin Hotel) WMAS, Inc. Michigan Broadcasting Co W. M. Robertson Paducah Bdctg. Co. (Ritz Hotel) The Voice of South Carolina
KORE KUMA KWCR KXL WAMC WAMC WEHS WEHS WENC WIERE WILM WJBO WJMS WJBO WJMS WMBC WMBC WMBC WMBC WMBC WMBC WMBC	ach ak ac	100 100 100 100 100 100 100 100 100 100	1 B(.25) 2 a D D a 2 D CH (.25) (.25) (.25) (.25)	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La. Ironwood, Mich. Cicero, Ill. Kansas City, Kans. Springfield, Mass. Detroit, Mich. Joplin, Mo. Paducah, Ky. Spartanburg, S. C. Cumberland, Md.	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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdcstg. Co., Inc. WJMS, Inc. (St. James Hotel) WKBI, Inc. WLBF Bdctg. Co. (Aladdin Hotel) WMAS, Inc. Michigan Broadcasting Co W. M. Robertson Paducah Bdctg. Co. (Ritz Hotel) The Voice of South Carolina Associated Brdcstg. Corp.
KORE KUMA KWCR KXL WAGM WAMC WEHS WEHS WEHS WIFC WILM WJMS WJMS WJMS WMBH WLBF WMBH WMBC WMBH WPAD WSPA WTBO	ach ake ace ace ace ace ace ace ace ace ace ac	100 100 100 100 100 100 100 100 100 100	B(.25) 4 D D a 2 D CH (.25) (.25) (.25)	Red Oak, fowa Lamar, Colo. Eugene, Ore. Yuma, Arizona Cedar Rapids, Iowa Portland, Ore. Presque Isle, Maine Anniston, Ala Hazleton, Pa. Cicero, Ill. Battle Creek, Mich. Americus, Ga. Erie, Pa. Tupper Lake, N. Y. Cicero, Ill. Wilmington, Del. New Orleans, La. Ironwood, Mich. Cicero, Ill. Kansas City, Kans. Springfield, Mass. Detroit, Mich. Joplin, Mo. Paducah, Ky. Spartanburg, S. C. Cumberland, Md.	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. WEHS, Inc. Enquirer-News Co. Americus Broadcast Co. Erie Broadcasting Corp. Tupper Lake Broadcasting Co., Inc. WHFC, Inc. Delaware Broadcasting Co. Baton Rouge Brdcstg. Co., Inc. WJMS, Inc. (St. James Hotel) WKBI, Inc. WLBF Bdctg. Co. (Aladdin Hotel) WMAS, Inc. Michigan Broadcasting Co W. M. Robertson Paducah Bdctg. Co. (Ritz Hotel) The Voice of South Carolina

WFEA WHEC WHP WNBR	ae ae ak ak	500 500 500 500 500	IC CH C IC(1	Columbus, Ohio Manchester, N. H. Rochester, N. Y. Harrisburg, Pa. Memphis, Tenn.	Commercial Radio Service Co. New Hampshire Broadcasting Co. WHEC, Inc. (Roch. Sav. Bank Bldg.) WHP, Inc. (Harrisburg Telegraph) Memphis Bdctg. Co. (WGBC)	
WOKO	ae	500	Ċ	Memphis, Tenn. Albany, N. Y.	WOKO, Inc. (Hotel Ten Eyck)	
1440	Kil	ocycl	es	208.2 meters		
CMBL CMBN KDFN KLS KXYZ WBIG WCBA WMBD WSAN WTAD	ak ak ae ak ae ah ae z ak	20 30 500 250 500 500 250 500 250 500	1444 1444 D C(1) a 3C(1 a 3	Havana, Cuba Casper, Wyo. Oakland, Calif. Houston, Texas Greensboro, N. C. Allentown, Pa.	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	ocycl	es	206.8 meters		
KTBS WGAR WHOM WNJ WSAR WTFI	ae ak	1000 500 250 250 250 250 500	N B(1.) 1 1	Shreveport, La. Cleveland, Ohio Jersey City, N. J. Newark, N. J. Fall River, Mass.	Tri-State Bdctg. System, Inc. WGAR Broadcasting Co., Inc. New Jersey Broadcasting Corp. Radio Investment Co., Inc. Doughty & Welch Electric Co., Inc. Liberty Broadcasting Co.	
1460	kilo	ocycl	es	205.4 meters		
KSTP WJSV	ae 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	204.0 meters		
KGA WLAC	ak ae	5000 5000	B C	Spokane, Wash. Nashville, Tenn.	Northwest Broadcasting System Life & Casualty Insurance Co.	
1 400	1 .1					
1480	Kilo	ocyclo	es	202.6 meters		
CMBK KOMA WKBW	K1IC z ak ae	15 5000 5000	es 1485 C C	202.6 meters Havana, Cuba Oklahoma City, Ok Buffalo, N. Y.	Alberto Alvarez la. National Radio Mfg. Co. Buffalo Broadcasting Corp.	
CMBK KOMA WKBW	z ak ae	15 5000	1485 C C	Havana, Cuba	Alberto Alvarez la. National Radio Mfg. Co. Buffalo Broadcasting Corp.	
CMBK KOMA WKBW	z ak ae	15 5000 5000	1485 C C	Havana, Cuba Oklahoma City, Ok Buffalo, N. Y.	Alberto Alvarez la. National Radio Mfg. Co. Buffalo Broadcasting Corp. L. B. Wilson, Inc. (Mabley & Carew)	
CMBK KOMA WKBW 1490 WCKY 1500	kilo	15 5000 5000 ocycle 5000	1485 C C es N	Havana, Cuba Oklahoma City, Ok Buffalo, N. Y. 201.2 meters Covington, Ky. 199.9 meters	la. National Radio Mfg. Co. Buffalo Broadcasting Corp. L. B. Wilson, Inc. (Mabley & Carew)	
CMBK KOMA WKBW 1490 WCKY	z ak ae kilo ae	5000 5000 5000 5000	1485 C C C S	Havana, Cuba Oklahoma City, Ok Buffalo, N. Y. 201.2 meters Covington, Ky. 199.9 meters Havana, Cuba Santa Barbara, Cal Corpus Christi, Tex 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.	L. B. Wilson, Inc. (Mabley & Carew) Tomas Basail if. Santa Barbara Broadcasters, Ltd.	KCYS. 1500 MTRS. 199.9 DIAL

ALABAMA Anniston O-21 tr Birmingham O-21 Gadsden O-21 Huntsville N-21 c Mobile Q-20 Montgomery P-21 Troy P-21 rc ALASKA Anchorage Juneau Ketchikan ARIZONA	Watts 100 5000 500 100 100 100 100 500 100 250 100 500 100	WAMC WAPI WBRC WKBC WJBY WBHS WODX WSFA WHET KFOD KIFH KGBU	ZC CC	Ccys. 1420 1140 930 1310 1210 1200 1410 1410 1210	San Jose J-1 Santa Ana M-3 Santa Barbara M-2 Stockton J-2 COLORADO Colorado Springs K-1 Denver K-11	500 500	KQW KREG KDB KGDM KWG KVOR KFEL KFXF KLZ	c c	1010 1500 1500 1500 1100 1200
Anniston O-21 tr Birmingham O-21 Gadsden O-21 Huntsville N-21 c Mobile Q-20 Montgomery P-21 Troy P-21 rc ALASKA Anchorage Juneau Ketchikan ARIZONA	100 5000 100 100 100 500 500 100 500 100 500 100	WAPI WBRC WKBY WBHS WODX WSFA WHET	XC C	1420 1140 930 1310 1210 1200 1410 1410	Santa Ana M-3 Santa Barbara M-2 Stockton J-2 COLORADO Colorado Springs K-1	100 100 250 100 100 1 1000 500 500	KREG KDB KGDM KWG KVOR KFEL KFXF	c c	1500 1500 1100 1200 1270 920
Birmingham O-21 Gadsden O-21 Huntsville N-21 c Mobile Q-20 Montgomery P-21 Troy P-21 rc ALASKA Anchorage Juneau Ketchikan ARIZONA	5000 500 100 100 500 500 100 250 100 500	WAPI WBRC WKBY WBHS WODX WSFA WHET	c	930 1310 1210 1200 1410 1410	Santa Barbara M-2 Stockton J-2 COLORADO Colorado Springs K-1	100 250 100 1 1000 500 500	KDB KGDM KWG KVOR KFEL KFXF	c c	1500 1100 1200 1270 920
Huntsville N-21 c Mobile Q-20 Montgomery P-21 Troy P-21 rc ALASKA Anchorage Juneau Ketchikan ARIZONA	100 100 100 500 500 100 250 100 500	WKBC WJBY WBHS WODX WSFA WHET	c	1310 1210 1200 1410 1410	Stockton J-2 COLORADO Colorado Springs K-1	250 100 1 1000 500 500	KGDM KWG KVOR KFEL KFXF	c c	1100 1200 1270 920
Huntsville N-21 c Mobile Q-20 Montgomery P-21 Troy P-21 rc ALASKA Anchorage Juneau Ketchikan ARIZONA	100 100 500 500 100 250 100 500	WJBY WBHS WODX WSFA WHET KFQD KIFH	c c	1210 1200 1410 1410	COLORADO Colorado Springs K-1	100 1 1000 500 500	KWG KVOR KFEL KFXF	С	1270 1270 920
Huntsville N-21 c Mobile Q-20 Montgomery P-21 Troy P-21 rc ALASKA Anchorage Juneau Ketchikan ARIZONA	100 500 500 100 250 100 500	WBHS WODX WSFA WHET KFQD KIFH	C C	1200 1410 1410	Colorado Springs K-1	500 500	KFEL KFXF		920
Mobile Q-20 Montgomery P-21 Troy P-21 rc ALASKA Anchorage Juneau Ketchikan ARIZONA	500 100 250 100 500	WSFA WHET KFQD KIFH	C	1410		500 500	KFEL KFXF		920
Troy P-21 rc ALASKA Anchorage Juneau Ketchikan ARIZONA	250 100 500	WHET KFQD KIFH	C			500 500	KFXF	_	
ALASKA Anchorage Juneau Ketchikan ARIZONA	250 100 500	KFQD KIFH						_	420
Anchorage Juneau Ketchikan ARIZONA	100 500	KIFH		- 1					560
Juneau Ketchikan ARIZONA	100 500	KIFH				1000 12500	KOA	C	830
Ketchikan ARIZONA	100			1230	l	500	KPOF		880
ARIZONA	100	KGBU		1310	Fort Morgan J-11 Grand Junction K-9	100 lc 100	KGEW KFXJ		1200 1200
u ·				900	Greeley I-11	500	KFKA		880
T M 6				ļ	Greeley J-11 Lamar L-12 lc	100	KIDW		1420
Jerome M-6	EAA	KCRJ		1310	Pueblo L-11	250 100	KGHF KGIW		1320 1420
Phoenix N-6		KOY	Ç	1390	Trinidad L-11 Yuma J-12	100	KGEK		1200
Prescott M-6	500 100	KTAR	Ν	620 1500					
Tucson O-7	100	KPJM KGAR		1370	CONNECTICU				
	500	KVOA		1260	Bridgeport H-27	250	WICC	C	600
Yuma O-5 tl	100	KUMA		1420	Hartford H-27	500 50000	WDRC WTIC	Ř	1330 1060
ARKANSAS					Storrs H-28	250	WCAC	•	600
Blytheville M-19	50	KLCN		1290					
Fayetteville M-16	1000	KUOA		1390	DELAWARE				
Fort Smith N-16	100 10000	KFPW KTHS	NT	1210 1040	Wilmington J-26	250	WDEL		1120
Hot Springs N-17 Little Rock N-17	250	KARK	1.4	890		100	WILM		1420
	100	KGHI	_	1200	DISTRICT OF	COLU	MBIA		
D	1000 100	KLRA KBTM	С	1390 1200	Washington J-26	10000	WJSV	С	1460
Paragould M-18 Texarkana O-17 bl	100	KCMC		1420	Washington J-20	250	WMAL		630
						500	WRC	Ν	950
CALIFORNIA			_			100	WOL		1310
Bakersfield L-2 br	100 100	KERN KRE	С	1200 1370	FLORIDA				
Berkeley J-2 Beverly Hills M-3 bl	500	KMPC		710	Clearwater R-24	1000	WFLA	Ň	620
Burbank M-3	500	KELW		780	Gainesville Q-24 Jacksonville Q-24	5000 1000	WRUF WJAX	C	830 900
El Centro N-4	100 100	KXO KIEM		1500 1210	Miami T-25	1000	WIOD	ZZ	1300
Eureka H-1 tc Fresno K-2	500	KMJ	С	580		1000	WQAM	c	560
Glendale M-3	100	KIEV		850	Orlando R-24 Pensacola Q-21	250 500	WĎBO WCOA	C	580 1340
Hollywood M-3	500 25000	KMTR KNX		570 1050	St. Petersburg S-24	1000	WSUN	Ν	620
Long Beach M-3	1000	KFOX	С	1250	Tampa R-24	1000	WDAE	С	1220 1370
_	1000	KGER		1360	ononor.	100	WMBR		13/0
Los Angeles M-3	1000 1000	KECA KFAC	Ν	1430 1300	GEORGIA				
	50000	KFI	N	640	Americus P-22 c	100	WENC		1420
	500	KFSG		1120	Athens N-23 bc Atlanta O-22	500 250	WTFI WGST	С	1450 890
	250 1000	KFVD KFWB		1000 950	Atlanta 0-22	100	WJTL WSB		1370
	100	KGFJ		1200		5000	WSB	N	740
	1000	KHJ	С	900	Augusta O-23 Columbus O-22	100 100	WRDW WRBL		1500 1200
	500	KRKD KTM		1120 780	LaGrange O-22 1	100	WKEU		1500
Oakland J-1	500 250	KLS		1440	Macon O-23	500	WMAZ		180
Oakiano y	500	KLX		880	Rome N-22	100 500	WFDV WTOC	С	1500 1260
n	500	KROW		930	Savannah O-24 Thomasville Q-22	100	WQDX	_	1210
Pasadena M-3 Sacramento J-2	50 100	KPPC KFBK	С	1210 1310			•		
San Bernardino M-3	100	KFXM		1210	HAWAII			_	
San Diego N-3	1000	KFSD	Ň	600	Honolulu	250 1000	KGMB KGU	C	1320 750
San Francisco J-1	1000 1000	KGB KFRC	ć	1330 610	IDAHO	1000	NGO	14	/30
Dan Flancisco jei	500	KFWI	_	930		1000	KIDO		1350
	100	KGGC	N. 7	1420	Boise G-5 Idaho Falls G-7	250	KID		1320
	7500 100	KGO KJBS	N	790 1070	Nampa G-5	100	KFXD		1200
	5000	KPO	Ν	680	Pocatello H-7 Lewiston E-5 rc	250 100	KSEI KGKX		890 1420
	1000 1000	KTAB KYA	N	560 1230	Twin Falls H-6	500	KTFI		1240
	1000	KIA	14	1230					

ILLINOIS	Watts Keys	KANSAS	Watts Kcys.
Carthage J-18 Chicago I-20	50 WCAZ 107 10000 KFKX 102 10000 KYW N 102 500 WAAF 92 25000 WBBM C 77	Abilene K-15 bl Coffeyville M-15 tr Dodge City L-13 Kansas City K-16	5000 KFBI 1050 500 KGGF 1010 100 KGNO 1210 100 WLBF 1420
	1500 WCFL R 97 100 WCRW 121 100 WEDC 121 50000 WENR N 87 500 WGES 136	Manhattan K-15 Topeka K-16 Wichita L-15	500 KFKU 1220 1000 WREN B 1220 500 KSAC 580 1000 WIBW C 580 1000 KFH C 1300
	25000 WGN C 720 1000 WIBO 560	DENTITION V	
	20000 WJJD 113 50000 WLS N 87 5000 WMAQ N 67 5000 WMBI 108	Covington K-22 Hopkinsville M-20 Louisville L-21	5000 WCKY N 1490 1000 WFIW C 940 25000 WHAS C 820 100 WLAP 1200
	500 WPCC 560 100 WSBC 1210	Paducah M-19	100 WPAD 1420
Cicero I-20	100 WEHS 1420 100 WHFC 1420	I LOUISIANA	
Decatur K-19 Harrisburg L-19 Joliet I-19	100 WKBI 1420 100 WJBL 1200 100 WEBQ 1210 100 WCLS 1310	New Orleans R-19	100 KMLB 1200 100 WABZ 1200 1000 WDSU C 1250 100 WJBO 1420
La Salle J-19 Peoria J-19 Quincy K-18 Rockford I-19 Rock Island I-18	100 WKBB 1310 100 WJBC 1200 500 WMBD C 1440 500 WTAD 1440 500 KFLV 1410 100 WHBF 1210	Shreveport P-17	100 WJBW 1200 500 WSMB N 1320 10000 WWL 850 100 KRMD 1310 1000 KTBS N 1450 100 KWEA 1210
Springfield K-19	100 WCBS 1210 100 WTAX 1210	! [[10000 KWKH 850
Tuscola K-20 Urbana J-20 Zion I-20	100 WDZ 1070 250 WILL 890 5000 WCBD 1080	MAINE	100 WRDO 1370 100 WABI 1200
INDIANA		Portland F-28 Presque Isle D-29 Ic	100 WABI 1200 500 WLBZ C 620 1000 WCSH R 940 100 WAGM 1420
Anderson J-21 Connersville K-21 Elkhart I-21 bc Evansville L-20	100 WHBU 1210 100 WKBV 1500 50 WTRC 1310 500 WGBF 630	Baltimore J-26	10000 WBAL B 1060 250 WCAO C 600
Fort Wayne J-21 Gary I-20 Hammond I-20 bc Indianapolis J-21	100 WGL C 1370 10000 WOWO C 1160 1000 WJKS 1360 100 WWAE 1200 1000 WFBM C 1230	Cumberland J-25 Hagerstown J-25 rc	100 WCBM 1370 500 WFBR R 1270 100 WTBO 1420 100 WJEJ 1210
Lafayette J-20 Muncie J-21 South Bend I-20	500 WKBF 1400 500 WBAA 1400 50 WLBC 1310 100 WFAM C 1200	MASSACHUSI Babson Park G-28 Boston G-28	500 WBSO 920 500 WAAB C 1410
Terre Haute K-20	500 WSBT C 1230 100 WBOW 1310		25000 WBZ B 990 1000 WEEI R 590 1000 WHDH 830 100 WLOE 1500 1000 WNAC C 1230
IOWA		Fall River H-28	250 WSAR 1450
Ames I-17 Boone I-17 Cedar Rapids I-18 Council Bluffs J-16	5000 WOI 640 100 KFGQ 1310 100 KWCR B 1420 1000 KOIL B 1260	Springfield H-27	100 WLEY 1370 100 WNBH 1310 1000 WBZA B 990 100 WMAS 1420
Davenport I-18 Decorah H-18	5000 WOC R 1000 100 KGCA 1270	Wordester G-28	100 WORC C 1200 250 WTAG R 580
Des Moines I-17	100 KWLC 1270 100 KSO B 1370	MICHIGAN	
Iowa City I-18 Marshalltown I-17 Ottumwa J-17 Red Oak J-16	5000 WHO R 1000 500 WSUI 880 100 KFJB 1200 100 WIAS 1310 100 KICK 1420	Battle Creek I-21 Bay City H-22 Calumet E-19 Detroit H-22	50 WELL 1420 500 WBCM C 1410 100 WHDF 1370 100 WJBK 1370 10000 WJR B 750
Shenandoah J-16 Sioux City I-15 Waterloo I-17	500 KFNF 890 500 KMA 930 1000 KSCJ C 1330 500 WMT C 600	East Lansing H-21	100 WMBC 1420 1000 WWJ R 920 1000 WXYZ 1240 1000 WKAR 1040

			18				
	Watts	К	cys.	NEVADA	Watts		Kcys.
Flint H-22			1310	Las Vegas L-5	100	KGIX	1420
Grand Rapids H-21	500 WA	OOD :	1270 1270	Reno I-3	500	кон с	1380
Ironwood F-18 rc	100 W.	IMS :	1420	NEWLITANADOLI	TDE		
Jackson I-21 Kalamazoo I-21 tl	100 WI 1000 WI	KZO	1370 590	NEW HAMPSH	100	WKAV	1310
Lapeer H-22	100 W	MPC	1500	Laconia G-28 Ic Manchester G-28	500	WFEA C	1430
Ludington H-20 Marquette F-19		KBZ BEO	1500 1310	Portsmouth G-28 tc	250	WHEB	74 0
Royal Oak H-22			1310	NEW JERSEY			
MINNESOTA				Asbury Park I-27	500	WCAP C	1280
Fergus Falls F-15	100 KC	GDE	1200	Atlantic City J-27	5000	WCAP C WPG C WCAM	
Minneapolis G-17	50000 W	cco c	810	Camden I-26 Jersey City I-27	500 300	WAAT	1280 940
		LR	1180 1250		250	WHOM	1450
	1000 WI	RHM	1250	Newark I-27	1000 250	WAAM WGCP	1250 1250
Moorhead F-15 Northfield G-17	100 KC 1000 KF	GFK FMX	1500 1250		250	WNJ WOR	1450 710
		CAL	1250	Paterson I-27	5000 1000	WODA	1250
St. Paul G-17	10000 KS	STP N	1460	Red Bank I-27	100	WJBI WOAX	1210
MISSISSIPPI				Trenton I-26 Zarephath I-27	500 250	WAWZ	1280 1350
Greenville O-18			1210	Zurepriden 1 2			
Gulfport Q-19		GCM PFB	1210 1370	NEW MEXICO			
Hattiesburg Q-19 Jackson P-19	1000 W	JDX N	1270	Albuquerque N-7	250	KGGM	1230 1180
Kosciusko U-19 bc	100 WI 100 W	HEF AML	1500 1310	Clovis O-11 tr	20000 100	KOB KICA	1370
Laurel P-19 br Meridian P-20	500 W	COC	880	Santa Fe M-10	100	KGFL	1370
Vicksburg P-18	500 W	QBC	1360	NEW YORK			
MISSOURI				NEW YORK	500	wоко (1430
Cp. Girardeau L-19	100 KI		1210	Albany G-27 bl Auburn H-25	100	WMBO	1310
Columbia K-17	100 K	FRU GIZ	630 1500	Binghamton H-26	100 500	WNBF WBBC	1500 1400
Grant City J-16 Jefferson City L-17	500 W	os	630	Brooklyn 1-27	1000	WBBR	1300
Joplin M-16	100 W	MBH	1420 950		500 500	WCGU WFOX	1400 1400
Kansas City K-16		WKC	1370		500	WLTH	1400
		DAF R HB	610 860		100 100	WMBQ WMII	1500 1500
	1000 W	OQ	1300	Buffalo H-24	1000	WMIL WBEN F	900
St. Joseph K-16 St. Louis L-18	2500 KI 500 KI	FEQ FUO	680 550		100 1000	WEBR WGR (1310
St. Louis L-10	100 KI	FWF	1200		5000	WKBW (1480
		MOX C SD R	1090 550	Canton F-26	50 500	WSVS WCAD	1370 1220
	1000 K	WK B	1350	Chester Twp.	50	WGNY	1210
	1000 W	EW IL	760 1200	Elmira H-25 c Freeport I-27	1000 100	WESG WGBB	1040 1210
Springfield M-17	100 K	GBX	1310	Hudson Falls G-27	50	WGLC	1370
MONTANA				Jamestown H-24 New York City I-27	50 50000	WOCL WABC C	1210 860
	1000 K	GHL N	950	New York City 125	250	WBNX	1350
Billings F-9 Butte F-7	500 K	GIR N	1360		50000 250	WBOQ WCDA	860 1350
Great Falls E-8	1000 KI 100 K	FBB GEZ	1280 1310		50000	WEAF F	₹ 660
Kalispell D-7 Missoula E-7	100 KG	GVO	1200		500 1000	WEVD WFAB	1300 1300
Wolf Point E-11	100 K	GCX	1310	N.	500	WINS	1180
NEBRASKA					250 50000	WHN WJZ I	1010 3 760
Clay Center J-14	1000 KI	MMJ	740		5000	WĽWL	1100 570
Kearney J-14 bc	100 KG 5000 KJ	GFW FAB C	1310 770	((500 250	WMCA WMSG	1350
Lincoln J-15	100 K	FOR	1210		500	WNYC	570
Norfalls I 15	500 W 1000 W	CAJ IAG	590 1060		1000 250	WOV WPAP	1130 1010
Norfolk I-15 North Platte J-13	500 K	JAG GNF	1430	0.	500	WPCH	810
Omaha J-15	500 W	AAW	660 590		250 250	WQAO WRNY	1010 1010
Scottsbluff I-11	100 K	ĠKY	1500	Rochester G-25	5000	WHAM I	
York J-15	500 K	GBZ	930		500	WHEC (. 1430

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	Watts		Ксуз.		Wassa			1.7
Samuel Later E 26					Watts		_	Kcys.
Saranac Lake F-26	50		1290	Portland E-3	500		Ç	1300
Schenectady G-27	50000		R 790	H:	5000	KEX	Ν	1180·
Syracuse G-25	1000 250		C 1360	!	100	KBPS		1420
	250 250		570 B 570	#	500	KFJR		1300
Teou G-27	500	WSYR WHAZ	B 570 1300	li	1000	KGW	Ň	620
Troy G-27 Tupper Lake F-26	100	WHDL		l	1000	KOIN	С	940
Utica G-26	100	WIBX	1420 1200	[]	500	KWJJ		1060
Woodside I-27	100	WWRL	1500		100	KXL		1420
White Plains H-27 bl	100	WFAS	1210	l .				
· · · · · · · · · · · · · · · · · · ·	100	WIAG	1210	PENNSYLVAN	I A			
						WCD.		
NORTH CARO	LINA			Allentown I-26	250 250	WCBA		1440
		NUMBER OF	N 550	Altoona I-25	100	WSAN WFBG		1440
Asheville M-23 Charlotte M-24	1000 25000	WWNC	N 570 C 1080	Carbondale H-26	100	WNBW		1310- 1200
Gastonia M-24	100	WBT WSOC		Erie H-24	100	WERE		1420
Greensboro M-24	500	WBIG	1210 C 1440		500	WLBW	С	1260
Raleigh M-25	1000	WPTF	N 680	Glenside I-26 rc	25	WIBG	_	930
Wilmington N-26	100	WRAM	1370	Grove City I-24	100	WSAJ		1310
Winston-Salem M-24	100	WSJS	C 1310	Harrisburg I-25	500	WBAK		1430
William Salein Will 37	-00	11 0,70	0 1010		100	WCOD		1200
				1	500	WHP	С	1430
NORTH DAKO	ТА			Hazleton I-26 lc	100	W 4 7.1		1420
				Johnstown J-24	100	WJAC		1310
Bismarck F-13	1000	KFYR	N 550	Lancaster I-26	100	WGAL		1310
Devils Lake E-14	100	KDLR	1210		100	WKJC		1200·
Fargo F-15	1000	WDAY	N 940	Lewisburg I-26	100	wjbu		1210
Grand Forks E-15	100	KFJM KGCU	1370	Philadelphia I-26	50000	WCAU	С	1170
Mandan F-13 Minot E-13	250 250	KLPM	1240		100	WDAS	_	1370
Minot E-13	230	KLPM	1240		500	WFI	R	560
					100	WHAT	_	1310
OHIO					500	WIP	č	610
Akron I-23	1000	RIADO		1	500 100	WLIT WPEN	R	560
Akron 1-23	1000	WADC			250	WRAX		1500
Canton I-23	100 10	WJW WHBC	1210		100	WTEL		1020°
Cincinnati K-22	100	WFBE	1200 1200	Pittsburgh J-24	50000	KDKA	В	1310 980
Circiniati IC-22	1000	WKRC	C 550	1 1003501811 3-21	500	KDKA KQV WCAE	ь	1380
	50000	WLW	N 700		1000	WCAE	R	1220
	500	WSAI	R 1330		1000	WJAS	ĉ	1290
Cleveland I-23	500	WGAR			100	WWSW	_	1500
	1000	WHK	C 1390	Reading I-26	1000	WEEU		830-
	500	WJAY	610	_	100	WRAW		1310
	50000	WJAY WTAM	R 1070	Scranton H-26	250	WGBI		880-
Columbus J-22	500	WAIU	640	l	250	WQAN		880
	500		C 1430	Washington J-24	100	WNBO		1200
	1000	WEAO	570	Wilkes-Barre I-26	100	WBAX		1210
D . T.00	100	WSEN	1210	502:10: I 25	100	WBRE		1310
Dayton J-22 Mount Orab K-22	200	WSMK	1380	Williamsport I-25	100	WRAK		1370
Toledo I-22	100 1000	WHBD	1370	York J-25 tr	100 1000	WJEQ WORK		1370-
		WSPD	C 1340 C 570	1018 3-25 11	1000	WORK		1000
Youngstown I-23 Zanesville J-23	500							
Zanesvine J-23	100	WALR	1210	PHILIPPINES				
			i					
OKLAHOMA				Cebu	500	KZRC		937.5
Chickasha N-14	250	KOCW	1400	Manila	1000	KZKA		1110
Elk City N-13	100	KASA	1210		50000	KZRM	(618.5
Enid M-14	100	KCRC	1370	DODTO DICO				
Norman N-15	500	WNAD	1010	PORTO RICO				
Oklahoma N-15	100	KFXR	1310	San Juan W-34	1000	WKAO		1240
	100	KGFG	1370					
	5000	KOMA	C 1480					
	1000	WKY	N 900	RHODE ISLAN	D			
Ponca City M-15	100	WBBZ	1200	Providence H-28	250	WEAN	С	780
Shawnee N-15	100	KGFF	1420	1 TOVIGENCE 11-20	250	WIAD	Ř	890
Tulsa M-15	5000	KVOO	N 1140		100	W JAR WPAW	К	1210
					100	WPRO		1210
OREGON					100	WINO		1210
=		•••	_	SOUTH CAROI	INA			
Corvallis E-2	1000	KOAC	550					
Eugene F-2	100	KORE	1420	Charleston O-25	500	WCSC		1360
Klamath Falls G-3 c	100	KFJI	1210	Columbia N-24	500	WIS	Ν	1010
Marshfield F-1	100	KOOS	1370	Greenville N-23 tc	100	WFBC		1200
Medford G-2	100	KMED	1310	Spartanburg N-23	100	WSPA		1420
			1					

		II .	
SOUTH DAKO	TAWatts Kcys	VIRGINIA	Watts Kcys.
Brookings H-15	1000 KFDY 550	Arlington J-25	1000 NAA 690
Huron H-14	100 KGDY 1200	Danville L-25	100 WBTM 1370
Mitchell H-14	100 KGDA 1370		500 WEHC 1350
Pierre G-13	200 KGFX 630 100 WCAT 1200		100 WLVA 1370 100 WGH 1310
Rapid City H-12 Sioux Falls H-15	1000 WCA1 1200		500 WTAR C 780
Vermillion I-15	500 KUSD 890		100 WPHR 1200
Watertown G-15	100 KGCR 1210	Portsmouth L-26 tc	500 WPOR 780
Yankton I-15	1000 WNAX C 570	Richmond K-26	100 WBBL 1210 100 WMBG C 1210
		1	100 WMBG C 1210 5000 WRVA N 1110
TENNEGGEE		Roanoke L-24	250 WDBJ C 930
TENNESSEE		H	250 WRBX 1410
Bristol L-23	100 WOPI 1500		. T
Chattanooga N-21 Jackson M-19 br	1000 WDOD C 128 100 WTJS 1310 1000 WNOX C 560	"""	
Knoxville M-22	1000 WNOX C 560	Aberdeen D-2	100 KXRO 1310 100 KVOS 1200
	100 WROL 1310	Bellingham C-3	100 KVOS 1200 50 KFBL 1370
Memphis N-19	100 WHBQ 1370	Everett C-3 Olympia D-3 tl	50 KFBL 1370 100 KGY 1210
	500 WMC N 780 500 WNBR 143	II Delitara D E	100 KGY 1210 1000 KWSC 1220
			5000 KIR N 970
Nashville M-21	5000 WLAC C 1470		1000 KOL C 1270 1000 KOMO N 920
	50000 WSM N 65		100 KPCB 650
Springfield M-20	100 WSIX 121	'1	100 KRSC 1120
		11	1000 KTW 1220
TEXAS		1	100 KVL 1370
Amarillo N-12	1000 KGRS 141	Spokane D-5	250 KXA 760 100 KFIO 1120
Amarillo N-12	1000 KGRS 141		1000 KFPY C 1340
Austin O-14	100 KNOW 150) 	5000 KGA B 1470
Beaumont R-17	500 KFDM 56		1000 KHO N 590
Brownsville U-15	500 KWWG 126		250 KMÖ 1330 500 KVI C 570
College Sta. Q-15 Corpus Christi S-14	500 WTAW 112 100 KGFI 150	Walla Walla E-5	500 KVI C 570 100 KUJ 1370
Dallas P-15	10000 KRLD C 104		100 KPO 1500
	50000 WFAA N 80	Yakima D-4	100 KIT 1310
D 111 D 14	500 WRR C 128		TT A
Dublin P-14 El Paso P-9	100 KFPL 131 100 KTSM 131		
Li i aso i - 9	100 WDAH 131	Bluefield L-24	250 WHIS 1410
Fort Worth P-15	100 KFJZ 137	Charleston K-23	250 WOBU 580 250 WMMN 890
	1000 KTAT 124		250 WSAZ 580
Galveston R-16	50000 WBAP N 80 100 KFLX 137		5000 WWVA C 1160
Gaiveston K-10	500 KFUL 129		
Greenville O-15	15 KFPM 131	III MISCONSIN	
Harlingen T-14	500 KRGV 126	II Dad Clare 0-10	1000 WTAQ C 1330
Houston R-16	1000 KPRC N 92 500 KTRH C 112	III I ONE GO DOG II II	100 KFIZ 1420
	500 KXYZ 144	Green Bay G-19 Janesville I-19	100 WHBY 1200 100 WCLO 1200
Lubbock O-12 tr	100 KFYO 131	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 137	. 11	500 WIBA N 1280
	100 KONO 137	Milwaukee H-19	100 WOMT 1210 250 WHAD C 1120
	1000 KTSA C 129	Willwaukee 11-17	250 WISN C 1120
m. n.	50000 WOAI N 119	. 11	1000 WTMJ N 620
Tyler P-16 rc	100 KGKB 150 1000 WACO C 124		100 WIBU 1210
Waco Q-15 Wichita Falls O-14	250 KGKO 57	II Itacinic I-20	100 WRJN 1370 500 WHBL 1410
		Sheboygan H-20 Stevens Point G-19	2000 WLBL 900
IITAU		Superior F-17	1000 WEBC N 1290
UTAH	F00 TF1 0	1	
Ogden I-7	500 KLO 140 1000 KDYL N 129		
Salt Lake City I-7	1000 KDYL N 129 50000 KSL C 113	Casper H-10	500 KDFN 1440
	DUDU ROL C 113		
VERMONT		CA	NADA
Burlington F-27	100 WCAX 120	.]]	_
Rutland G-27	100 WSYB 150	ALDERIA	
St. Albans F-27	100 WQDM 137		500 CFAC 690
Springfield G-27 Waterbury F-27 c	250 WNBX 126 500 WDEV 55		10000 CFCN 985 500 CJCJ 690
Waterbury F-27 C	300 WDE# 35	'	000 0,0,

	Watts	Kcys.		Watts		Ксуз.
Edmonton A-8	250 CHMA	580	Quebec D-27	100	CHRC	645
	500 CJCA 500 CKUA	745 580		100 100	CKCI CKCV	645 880
Lethbridge C-8	100 CJOC	1120		100	CKCV	000
Red Deer A-8	1000 CKLC	840	SASKATCHEW	AN		
BRITISH COL			Canora B-13 tl	15 1000	10-BU CJRW	1200
Chilliwack B-3	100 CHWK 100 CJFC	665 1120	Fleming C-13 Moose Jaw C-11	500	CJRM	665 665
Kamloops B-5 Kelowna C-6 tl	100 CJFC 100 CKOV	1200		25	10-AB	1200
Trail C-6 c	25 10-AT	1155	Prince Albert A-11 rc Regina C-12	25 500	10-BI CHWC	1200 960
Vancouver B-3	100 CHLS 500 CJOR 100 CKCD	730 1210	_	500	CKCK	960
	100 CKCD 50 CKFC	730 730	Saskatoon B-11 Yorkton B-13	500 500	CFOC CJGX	910 630
	100 CKMO	730				
	100 CKWX 500 CNRV	730 1030	NEWFOL			
Victoria C-3	500 CFCT	630	St. Johns A-35	200 500	VOAS VOGY	810 860
MANITOBA			1	100	VONA	950
Brandon D-14	500 CKX	930		500 750	VONF VOWR	1195 750
Winnipeg D-15	5000 CKY	780	Wabana A-35	400	VOGT	893
NEW BRUNSW	ICK		CENTRAL	A N /	EDICA	
Fredericton D-29	100 CFNB	1210	CENTRAL COSTA RICA	ALVI	EKICA	
Moncton D-30	700 CNRA 500 CFBO	630 890	1	50	TICR	011
St. John D-30	JUU CI BO	0,0	San Jose FF-23	30	IICK	911
NOVA SCOTIA			SALVADOR			
Glace Bay C-32 Halifax E-31	2000 VAS 500 CHNS	685 815	Salvador CC-19 br	500	RUS	664
101	500 CNRH	815	ME	XICO	1	
Sydney C-32 Wolfville D-31	100 CJCB 50 CKIC	880 1010	AGUASCALIEN		•	
	• • • • • • • • • • • • • • • • • • • •		AGUASCALIEN Aguascalientes W-11 b		XFC	805
ONTARIO	15 10 BO	1200			11. 0	000
Brantford H-23 tr Chatham H-22	15 10-BQ 250 CFCO	1200 1010	BAJA CALIFO			
Cobalt E-23	100 CKMC	1210	Tiajuana N-3 bc	300	XEFD	1020
Ft. William E-19 bl Hamilton H-24	100 CKPR 50 CHML	890 880	CHIHUAHUA			
	1000 CKOC	635	Chihuahua R-9	100	XEFI	1000
Kingston G-25 London H-23	50 CFRC 5000 CJGC	930 595	Juarez P-9	250 5000	XFF XEAN	915 750
North Bay F-23 c Ottawa F-25	100 CFCH	930 890	Juanes 1 = 7	50	XEFV	1370
Ottawa F-25	100 CKCO 500 CNRO	600	COALITIE	100	XEJ	1000
Prescott F-25	100 CFLC 100 CKPC	915 880	COAHUILA		XEPN	585
Preston H-23 St. Catherines H-24 tl		635	Piedras Negras S-12 tr Saltillo, Coah. U-12	10	XEL	1000
Stratford H-23 tc	15 10-AK	1200	Torreon U-11 tl	125	XETB XER-XEF	1380
Toronto G-24	500 CFCA 10000 CFRB	C 690	Villa Acuna R-12 c	75000	AER-AEF	735
	5000 CHNC 500 CKCL	840 580	D. F. Coyoacan Y-13	100	XEFZ	1500
	500 CKCL 5000 CKGW	N 840	Mexico City Y-13	1000	XEB	1030
	500 CKNC	960 840	-	500 250	XEFA XEFH	1250 1360
Waterloo G-23	5000 CPRY 100 CKCR	645	j	250	XEG	1075
Windsor I-22 tc	5000 CKOK	C 540 1199	Ì	100 1000	XEK XEN	990 711
Wingham G-23	25 10-BP	1199		5000	XEFO	940
PRINCE EDWA		E00		1000 250	XEP XETA	780 1140
Charlottestown C-31	500 CFCY 100 CHCK	580 960		1000	XETR	610
Summerside C-31	100 CHGS	1120		500 5000	XETW XEW	830 910
QUEBEC				500	XEX	1210
Montreal E-26	500 CFCF 100 CHCH	N 1030 1200		2000 1000	XFG XFI	638 818
	100 CHLP	1200		5000	XFO	940
	5000 CHYC 5000 CKAC	C 730	Toluca Y-12	500 50	XFX XEC	860 1000
	JUUU CRAC	5 /30				

Pachuca Y-13 rc							
Pachuca Y-13 rc	HIDALGO	Watı		Keys		Watts	Keys.
JALISCO					Guantanamo X-28 tc	20 CMKJ	1300
Guiadalajura, Ja. X-10				0,0	Havana W-23		680
MICHOACAN Morelia, Mich. Y-12 125 XEI 1310 150 CMBJ 1325 CMBJ 1325 CMBJ 1325 CMBJ 1326		100	XEA	1000	1		
Morelia, Mich. Y-12 125 XEI 1310 150 CMBG 107	3 maranajara, 3 m. 12 13				l	150 CMBD	965
Morelia, Mich. Y-12	MICHOACAN			i			1325
NEUVO LEON	Morelia, Mich. Y-12	125	XEI	1310	ĺ		1140
Monterrey, N. L. U-13	NEUVO LEON					15 CMBK	1485
100 XEFJ 1000 250 XEH 1132 150 CMBS 788 788 789 790		100	XEFB	1315			
PUEBLA Puebla Z-13	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	100	XEFJ	1000			1500
PUEBLA Puebla Z-13							780
Puebla Z-13	DUEDLA	300	ALI	050	1		1235
QUERETARO Queretaro X-12 br 40 XEFS 1000 TAMAULIPAS Matamoros U-14 tr 150000 XETM 845 N. Laredo S-13 100 XEFE 1000 Reynosa, Tams. T-14 10000 XEAW 965 Tampico, Tams. W-14 70 XEFW 1240 VERA CRUZ Jalapa Y-14 100 XETC 1000 YUCATAN Merida, Yuc. X-19 10 XEFC 1055 L05 XEY 546.8 WEST INDIES CUBA Caibarien W-25 250 CMHD 950 CMJF 930 So CMJE 1382 CHARD 1000 XEY 1155 CMCM 1395 Add 1395 Ad		***	300001	0.40	l	150 CMBZ	1010
QUERETARO Queretaro X-12 br 40 XEFS 1000 TAMAULIPAS Matamoros U-14 tr 150000 XETM 845 N. Laredo S-13 100 XEFE 1000 Reynosa, Tams. T-14 10000 XEAW 965 Tampico, Tams. W-14 70 XEFW 1240 VERA CRUZ Jalapa Y-14 100 XETC 1000 Jalapa Y-14 100 XETC 1000 Jalapa Y-14 100 XETC 1000 Vera Cruz, Ver. Z-14 500 XETF 630 Vera Cruz, Ver. Z-14 500 XEF 630 Vera Cruz, Ver. Z-14 500 XEF 630 Vera Cruz, Ver. Z-19 10 XEFC 1050 I05 XEY 546.8 WEST INDIES CUBA Caibarien W-25 250 CMHD 500 CMJC 1375 COMJE 1175 200 CMJF 930 500 CMJK 790 500 CMJK 1050 South 1050 South 1050 South 1050 South 1050 South 1050 Moron 7.5 CMJP 1310 Cardenas W-24 30 CMGE 1025 Santiago X-28 150 CMKC 1034 Tuinucu W-25 rc 250 CMHC 790 DOMINICAN REPUBLIC Santo Domingo X-31 1000 HIX 920 Cardenas W-24 100 CMGA 834 Celego de Avila W-26 50 CMHJ 1155 CMJI 11260 COION W-24 100 CMGA 834	Puebla 2-13	100	XEIH	840	l		
TAMAULIPAS Matamoros U-14 tr 150000 XETM 845 N. Laredo S-13 1000 XEFE 1000 N. Laredo S-13 150000 XENT 1115 Reynosa, Tams. T-14 10000 XENT 1115 Reynosa, Tams. W-14 70 XEFW 1240 VERA CRUZ Jalapa Y-14 100 XETC 1000 Jalapa Y-14 500 XETF 630 Vera Cruz, Ver. Z-14 500 XETF 630 VERA CRUZ Jalapa Y-14 100 XETC 1000 VERA CRUZ Jalapa Y-14 500 XETF 630 VERA CRUZ Jalapa Y-14 100 XEU 1010 YUCATAN Merida, Yuc. X-19 10 XEFC 1050 105 XEY 546.8 WEST INDIES CUBA Caibarien W-25 250 CMHD 500 CMJC 1382 SOUTH AMERICA Cardenas W-24 300 CMJF 930 300 CMJK 790 50 CMJ 1050 50 CM 1050 50 CM 1050 50 CMC 1050	QUERETARO					150 CMCB	1070
TAMAULIPAS Matamoros U-14 tr 150000 XETM N. Laredo S-13 100 XEFE 1000 150000 XENT 1115 150000 XEAW 965 Tampico, Tams. W-14 70 XEFW 1240 150 CMCR 1375 VERA CRUZ Jalapa Y-14 100 XETC 1000 XET 1000 XEU 1010 XEU 1010 XEU 1010 XEU 1010 XEU 1010 XEU 1010 XET 1000 XE	Oueretaro X-12 br	40	XEFS	1000	ř		1140
TAIMAULIFAS Matamoros U-14 tr 150000 XETM 845 N. Laredo S-13 100 XEFE 1000 150000 XENT 1115 150000 XENT 1200 XES	•						1395
N. Laredo S-13		150000	YETM	845		250 CMCJ	1185
Reynosa, Tams. T-14 10000 XEAW 965 Tampico, Tams. W-14 70 XEFW 1240 VERA CRUZ Jalapa Y-14 100 XETC 1000 Vera Cruz, Ver. Z-14 500 XFB 840 Vera Cruz, Ver. Z-14 500 XEFF 630 100 XEU 1010 YUCATAN Merida, Yuc. X-19 10 XEFC 1050 105 XEY 546.8 WEST INDIES CUBA Caibarien W-25 250 CMHD 250 CMJE 1175 200 CMJF 930 50 CMJE 1175 200 CMJF 930 50 CMJE 1175 200 CMJF 930 50 CMJK 790 50 CMJK 1000 Moron 7.5 CMJP 1310					l .		
Tampico, Tams. W-14 70 XEFW 1240 VERA CRUZ 1055 VERA CRUZ 150 XES 1055 150 CMCW 965 VERA CRUZ 150 XEFK 150 CMCX 1010 CMCY 1325 CMCX 1010 CMCM 150 CMCW 150 CMCM 150 CMCM 150 CMDD 588 CMDE 150 C	D				ŀ		780
VERA CRUZ Jalapa Y-14 100 XETC 1000 Vera Cruz, Ver. Z-14 500 XFB 840 Vera Cruz, Ver. Z-14 500 XETF 100 XEU 1010 YUCATAN Merida, Yuc. X-19 105 XEY 105 XEY 546.8 WEST INDIES CUBA Caibarien W-25 Camaguey W-26 150 CMJC 150 CMCX 1000 CMCY 1325 150 CMCX 1010 150 CMCX 1010 150 CMCX 1010 150 CMCX 1010 150 CMCY 1325 150 CMCX 1010 150 CMCX 1010 150 CMCX 1010 150 CMCX 1010 150 CMDB 1395 150 CMJD 150 CMJD 150 CMDE 1325 150 CMCX 1010 150 CMD 150 CMJC 1325 150 CMCX 1010 150 CMCX 1010 150 CMCX 1010 150 CMC 1325 150 CMCX 1010 100 CMCX 100 100 CMCX 1	Reynosa, Iams, 1-14 Tampico, Tams, W-14						1375
VERA CRUZ Jalapa Y-14		250					
Vera Cruz, Ver. Z-14 500 XETF 630 150 CMDD 588 150 CMCD 580 150 CMCD 580 150 CMCD 580 CMC 730	VERA CRUZ			- 1			1010
Vera Cruz, Ver. Z-14 500 XETF 630 100 XEU 1010 250 CMDD 250 CMDE 925 YUCATAN Merida, Yuc. X-19 10 XEFC 1050 14400 CMW 588 500 CMX 890 CMBA 250 CMG 820	Jalapa Y-14		XETC				1325
YUCATAN Merida, Yuc. X-19 100 XEV 1010 XEFC 1050 105 XEY 546.8 WEST INDIES CUBA Caibarien W-25 Camaguey W-26 150 CMJC 50 CMJE 150 CMJE 1175 200 CMJF 930 50 CMJK 790 50 CMJK 790 50 CMJK 790 50 CMJN 1270 50 CMJH 1150 Cardenas W-24 100 CMGE 100 100 CMGE 100 Moron 7.5 CMJI 100 Moron 7.5 CMJP 1310 Moron 7.5 CMJP 1310 Moron 7.5 CMJP 1310 Moron 7.5 CMJP 1310 CMAB 1249 Santa Clara W-25 Santo Domingo X-31 1000 HIX 630 HAITI Port au Prince X-30 1000 HHK 920 SOUTH AMERICA	Vara Cruz Var 7-14						
Merida, Yuc. X-19	vera Cruz, ver. 2-14					250 CMDE	925
Merida, Yuc. X-19	YUCATAN			- 1			
WEST INDIES CUBA Caibarien W-25 Camaguey W-26 Dominor of the principle o	Merida, Yuc. X-19					1400 CMW	585
CUBA Caibarien W-25 Camaguey W-26 150 CMJC 1382 50 CMJE 1175 200 CMJF 930 50 CMJG 1050 300 CMJK 790 50 CMJL 960 50 CMJN 1270 50 CMJN 1270 50 CMJN 1270 50 CMJH 1150 50 CMJH 1150 50 CMJH 1150 15 CMJI 1100 Cienfuegos W-25 40 CMHJ 11250 Colon W-24 100 CMGA 834 Moron 7.5 CMJP 130 Pinar del Rio W-22 20 CMAB 1249 Santa Clara W-25 30 CMHI 1030 Santiago X-28 Tuinucu W-25 rc 250 CMHC 790 DOMINICAN REPUBLIC Santo Domingo X-31 1000 HIX 630 HAITI Port au Prince X-30 1000 HHK 920 SOUTH AMERICA		105	XEY	546.8			890
CUBA Caibarien W-25 Camaguey W-26 150 CMHD 150 CMJC 1387 50 CMJE 1175 200 CMJF 930 50 CMJG 1050 300 CMJK 790 50 CMJL 960 50 CMJN 1270 50 CMJH 1150 50 CMHL 1270 South Clearfuegos W-25 40 CMHL 1290 COIon W-24 100 CMGR 384	WEST	IND	IES	1	Matanzas W-24		
Caibarien W-25 250 CMHD 950 CMJC 1382 50 CMJC 1382 50 CMJE 175 200 CMJF 930 CMJK 790 50 CMJL 960 50 CMJL 960 50 CMJL 960 50 CMJH 1270 50 CMJH 1270 1270 Cardenas W-24 30 CMGE 1375 CMJH 1260 55 CMJH 1260 15 CMJH 1260 15 CMJH 1260 15 CMJH 1260 15 CMJD 1110 Cienfuegos W-25 40 CMHJ 1290 COlon W-24 100 CMGA 834 CMHD 200 CM						100 CMGF	987
Camaguey W-26		250	CMHD	950	M		
200 CMJF 930 50 CMJG 1050 300 CMJK 790 50 CMJL 960 50 CMJN 1270 50 CMJN 1270 50 CMJH 1350 50 CMJH 1150 50 CMJH 1260 50 CMJH 1290 50 CMJH 1260 50 CMJH 1260 50 CMJH 1260 50 CMHL 1290 50 CM		150	CMJC	1382			1249
Solid CMJG 1050 1							1030
300 CM]K 790 50 CM]L 960 50 CM]N 1270 50 CMJN 1270 50 CMJN 1270 50 CMJH 1375 50 CMJH 1360 15 CMJI 1260 15 CMJI 1260 15 CMJI 1150 15 CMJI 1150 115 1150					Santiago X-28		
Cardenas W-24 50 CMJN 1270 Santo Domingo X-31 1000 HIX 630 CMGE 1375 CMJH 1150 FCMJI 1260 15 CMJI 1150 CMJO 1110 Cienfuegos W-25 40 CMHJ 11250 CMHL 1290 COIN W-24 100 CMGA 834 CMJ 100 CMGA 834		300	CMJK				,,,,
Cardenas W-24 30 CMGE 1375 CMJH 1150 CMJH 1150 Santo Domingo X-31 1000 HIX 630 CMGE 1375 CMJH 1150 CMJH 1150 CMJH 1150 CMHJ 1125 CMJO 1110 Cienfuegos W-25 40 CMHJ 1125 20 CMHL 1290 CMGA 834 COlon W-24 100 CMGA 834 CMJH 100 CMGA							
5 CMJ1 1260 15 CMJO 1110 Cienfuegos W-25 40 CMHJ 1125 20 CMHL 1290 Colon W-24 100 CMGA 834		30	CMGE	1375	Santo Domingo X-31	1000 HIX	630
15 CMJO 1110 Port au Prince X-30 1000 HHK 920	Ciego de Avila W-26				HAITI		
Cienfuegos W-25 40 CMHJ 1125 20 CMHL 1290 SOUTH AMERICA Colon W-24 100 CMGA 834 SOUTH AMERICA			CMIO		Port au Prince X-30	1000 HHK	920
Colon W-24 100 CMGA 834 C	Cienfuegos W-25	40	CMHJ	1125			
	Colon W-24				SOUTH A	AMERICA	
					Caracas Venz. DD-31	5000 YV1BC	960

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, tc 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

Cra	C INDEX BY	CALL	LETTERS AND SATUR	10/11	TIME TERROR
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.	CKAC	7:30-10 p.m. 730 Montreal, Que., EST.	CMCF	Noon-3 p.m.; 8 p.mmid. 890 Hayana, Cuba, EST.
CFBO	m.; 4:30-6 p.m. 890 St. John, N. B.		7:30 a.mmid.		5-8 p.m.
CFCA	1120 Toronto, Ont., EST. 7:15-noon; 1:00 p.m11:30	CKCD	730 Vancouver, B.C. 645 Quebec, Que., <i>EST</i> .	CMCH	1395 Havana, Cuba, <i>EST</i> . 5-9 p.m.
CFCF	1030 Montreal, Que., EST.		1-1:30 p.m.	CMCJ	1185 Havana, Cuba.
CFCH	8 a.mmid. 930 North Bay, Ont., EST.	CKCK	960 Regina, Sask., MST. 9-10 a.m.; 11 a.mnoon; 1-3:30.	CMCM CMCN	925 Havana, Cuba.
	Noon-1 p.m.; 5-8.	CKCL	580 Toronto, Ont., EST.	CMCQ CMCR	780 Havana, Cuba. 1375 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.	CMCU	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. 6 p.mmid.
CFCT	Silent. 630 Victoria, B. C., PST.	CKCV	880 Quebec, Que., EST.	CMCX	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.		Silent.	CMDB CMDD	1395 Havana, Cuba 588 Havana, Cuba.
	AST. 11:30 a.mnoon; 4:30-8 p.m.	CKGW	840 Toronto, Ont., EST. 6:45 a.mmid.	CMDE	925 Havana, Cuba.
CFJC	1120 Kamloops, B. C., PST.	CKIC	1010 Wolfville, N. S., AST. 7:30-8:30 a.m.; 12:15-1:15 p.m.;	CMGA CMGB	834 Colon, Cuba. 1205 Matanzas, Cuba.
	7:30-9:30 a.m.; noon-2 p.m.; 5:30-7 p.m.		6-7 p.m.	CMGC	820 Matanzas, Cuba.
CFLC	915 Prescott, Ont., EST. 8-10 a.m.; noon-2 p.m.; 5-7:30	CKLC	840 Red Deer, Alta., MST. 8 a.m8 p.m.	CMGE	1375 Cardenas, Cuba, EST. Noon-2; 8-10 p.m.
	p.m.	CKMC	1210 Cobalt, Ont., EST.	CMGF CMGH	987 Matanzas, Cuba. 1040 Matanzas, Cuba
CFNB	1210 Fredericton, N. B., AST. 8:30-9:30 a.m.; 12:30-2 p.m.	СКМО	Silent. 730 Vancouver, B. C.	CMHC	790 Tuinueu, Cuba
CFQC	910 Saskatoon, Sask.	CKNC	960 Totonto, Ont., EST. 8 a.m12:30 p.m.:5-11:15 p.m.	CMHD	950 Caibarien, Cuba 1030 Santa Clara, Cuba, EST.
CFRB	690 Toronto, Ont., EST. 8 a.mmid.	CKOC	635 Hamilton, Ont., EST.		11 a.m1 p.m.; 8-10 p.m.
CFRC CHCH	930 Kingston, Ont. 1200 Montreal, Que.	CKOK	8 a.m10:30 p.m. 540 Windsor, Ont., EST.	CMHJ	1125 Cienfuegos, Cuba, EST. 11 a.m1 p.m.; 7-9 p.m.
CHCK	960 Charlottetown, P. E. I.	CKOV	7:30 a.mmid. 1200 Kelowna, B. C., PST.	CMHK CMHL	1225 Cruces, Cuba 1290 Cienfuegos, Cuba.
CHGS	Noon-2 p.m.; 5-7:30 p.m., AST. 1120 Summerside, P. E. I.	CKUT	8-9 a.m.; 11:30 a.m2 p.m.;	CMJC	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. 880 Preston, Ont., EST.	CMJE CMJF	1175 Camaguey, Cuba. 930 Camaguey, Cuba.
CHLS	730 Vancouver, B. C., PST. 7:30-8:30 p.m.; 8:50-11:30 p.m.		4 p.m11 p.m.	CMJG	1050 Camaguey, Cuba. 1150 Ciego de Avila, Cuba.
CHMA	7:30-8:30 p.m.; 8:50-11:30 p.m. 580 Edmonton, Alta., MST.	CKPR	890 Ft. William, Ont., EST. 10 a.m2 p.m.; 6-8 p.m.	CMJH	10 a.m2 p.m.; 5-10 p.m., EST.
	Silent. 880 Hamilton, Ont., EST.	CKTB	635 St. Catharines, Ont., 1:30-5 p.m.; 6-10 p.m., EST.	CMJI	1260 Ciego de Avila, Cuba. 10 a.m1:30 p.m.; 6-10, EST.
CHML	9 a.m2 p.m.	CKUA	580 Edmonton, Alta., M.S.I.	CMJK	790 Camaguey, Cuba
CHNC	840 Toronto, Ont. 815 Halifax, N. S., AST.	CKWX	Silent. 730 Vancouver, B. C., PST.	CMJL CMJN	960 Camaguey, Cuba. 1270 Camaguey, Cuba.
	6 p.mmid.	•••••	8-8:30 a.m.; 10:30 a.mnoon; 4:30-7:30; 11:30-mid.	CMJ0 CMJP	1110 Ciego de Avila, Cuba. 1310 Moron, Cuba.
CHRC	645 Quebec, Que., EST. 9 a.m2 p.m.; 5 p.mmid.	CKX	930 Brandon, Man., CST.	CMK	730 Havana, Cuba, EST.
CHWC	960 Regina, Sask., MST.	CKY	8:30-9:30 a.m. 780 Winnipeg, Man., CST.	CMKC	10 a.mnoon; 6 p.mmid. 1034 Santiago, Cuba.
	7-9 a.m.; 10-11 a.m.; noon-1 p. m.; 3:30-mid.		8:30 a.m4 p.m.; 7-10:45 p.m.	CMKJ	1300 Guantanamo, Cuba. 630 Havana, Cuba.
CHWK	665 Chilliwack, B. C., PST.	CMAB Cmaf	1249 Pinar del Rio, Cuba. 680 Havana, Cuba, EST.	CM Q CM W	585 Havana, Cuba, EST.
CHYC	Noon-8 p.m. 730 Montreal, Que.	CMAY	5-11:30 p.m. 965 Havana, Cuba.	CMX	7:30 a.m11:30 p.m. 890 Havana, Cuba, EST.
CJCA	745 Edmonton, Alta., MST.	CMBC	1270 Hayana, 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. 965 Havana, Cuba	CNRA	630 Moneton, N. B., AST. 12:30-2 p.m. 815 Halifax, N. S., AST.
CJCB	880 Sydney, N. S., AST.	CMBF	1325 Havana, Cuba 1070 Havana, Cuba.	CNRH	815 Halifax, N. S., AST. Silent.
CICI	10 a.m2 p.m.; 6-9 p.m. 690 Calgary, Alta., MST.	CMBG CMBJ	1140 Havana, Cuba.	CNRO	600 Ottawa, Ont., EST.
	9-11:30 a.m.; 1:45-3 p.m.; 6-7	CMBK CMBL	 1485 Havana, Cuba. 1444 Havana, Cuba, EST. 	CNRV	Noon-1 p.m.; 6-8:30 p.m. 1030 Vancouver, B. C., PST.
CJGC	p.m. 595 London, Ont., EST.		3-5 p.m. 1444 Havana, Cuba, EST.	CPRY	2-3:30 p.m.; 5:30-8:30 p.m. 840 Toronto, Ont., EST.
	Silent.	CMBN	2-3 p.m.; 9:15-11 p.m.		1-1:30 p.m.
ClGX	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.
0100	m.; 11:25-noon; 7:15-8 p.m.	CMBW	925 Havana, Cuba.	KABC	Silent. 1420 San Antonio, Tex., CST.
C10C	8:45-10 a.m.; noon-1:15 p.m.;	CMBY CMBZ	1235 Havana, Cuba 1010 Havana, Cuba, EST.		6:45 a.m1:30 p.m.; 4-mid.
CIOB	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	1300 Portland, Ore., PST. 7-10:30 a.m.; 2:30-5; 6-7 p.m.;
CJOR	7:30 a.m1 p.m.; 4-7:30; 10:30-	CMC	840 Havana, Cuba.	KADE	8-mid. 890 Little Rock, Ark., CST.
CJRM	1 a.m. 665 Moose Jaw, Sask., MST.	CMCA CMCB	1235 Havana, Cuba 1070 Havana, Cuba, EST.	KARK	7:30 a.m9 p.m.
CJRM	8-10:30 a.m.; noon-2:30 p.m.;	-,400	11:30 a.m1 p.m.; 5-6 p.m.;	KASA	1210 Elk City, Okla., CST. 7 a.m9 p.m.
	10-mid.		7:30-10 p.m.		/ a.m9 p.m.

KBPS	1420 Portland, Ore., PST.	KFLV	1410 Rockford, Ill., CST.	KGCA	1270 Decorah, Iowa, CST. 8:30-9:45 a.m.; 10:45-11:30 a.
KBTM	Silent. 1200 Paragould, Ark., CST.		10 a.m12:30 p.m.; 3-6 p.m.; 8-10 p.m.		m.; 12:30-2:30 p.m.
KCMC	7:30 a.m3 p.m.	KFLX KFMX	1370 Galveston, Texas. 1250 Northfield, Minn., CST.	KGCR	1210 Watertown, S. D., CST. 6:30 a.m3 p.m.; 5-9.
	1420 Texarkana, Ark., CST. 6:45 a.m9 p.m.		10:15-10:35 a.m.	KGCU	1240 Mandan, N. D., MST.
KCRC	1370 Enid, Okla., CST. 10 a.m2 p.m.; 3:45-7:45 p.m.	KFNF	890 Shenandoah, Iowa, CST. 5-8 a.m.; 9-10 a.m.; 12:15-5	KGCX	Noon-5 p.m.; 6:45-9 p.m. 1310 Wolf Point, Mont., MST.
KCRJ	1310 Jerome, Ariz., MST.	KEOD	p.m; 6-10 p.m.	KGDA	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.		8 a.m4:30 p.m.; 5:30-9.
KDB	1500 Santa Barbara, Calif.	KFOX	1250 Long Beach, Calif., PST. 6 a.mmid.	KGDE	1200 Fergus Falls, Minn. 7 a.m9 p.m., CST.
KDFN	8 a.mmid., <i>PST</i> . 1440 Casper, Wyo., <i>MST</i> .	KFPL	1310 Dublin, Texas, CST.	KGDM	1100 Stockton, Calif., PST.
₩DK A	9 a.m. 9 p.m. 980 Pittsburgh, Pa., EST.	KFPM	6 a.m10:30 p.m. 1310 Greenville, Texas, CST.	KGDY	6 a.msunset. 1200 Huron, S. D., CST.
	7 a.m12:30 a.m. next day.		7:45-9 a.m.; 1-2:45 p.m.; 6-9. 1210 Fort Smith, Ark., CST.	KGEK	7 a.m2 p.m.; 4-9 p.m. 1200 Yuma, Colo., MST.
KDLR	1210 Devils Lake, N. D., CST. 7 a.m3 p.m.; 5:30-9:30 p.m.	KFPW	6:30 a.m2 p.m.; 5-10:30 p.m.		11:30 a.mmid.
KDYL	1290 Salt Lake City, Utah.	KFPY	1340 Spokane, Wash., PST. 7 1.m12:30 a.m. next day.	KGER	1360 Long Beach, Calif., PST. 6 a.m1:15 a.m.
KECA	6:30 a.m1 a.m., <i>MST</i> . 1430 Los Angeles, Calif., <i>PST</i> .	KFQD	1230 Anchorage, Alaska.	KGEW	1200 Ft. Morgan, Colo., MST.
KELW	9 a.m11 p.m. 780 Burbank, Calif., PST.	KFRC	6 p.mmid. (Zone 6) 610 San Francisco, Calif.	KGEZ	Silent. 1310 Kalispell, Mont., MST.
	10 a.m1 p.m.; 5-8 p.m.	KFRU	7 a.m 1 a.m., PST	KGFF	8 a.m9 p.m. 1420 Shawnee, Okla, CST.
KERN	1200 Bakersfield, Calif., PST. 7:30 a.mmid.		630 Columbia, Mo., CST. 6:30-9 a.m.; 2-9 p.m.		7:30 a.m9 p.m.
KEX	1180 Portland, Ore., PST. 7 a.mnoon; 1 p.mmid.	KFSD	600 San Diego, Calif., <i>PST</i> . 7:30 a.mmid.	KGFG	1370 Oklahoma City, Okla. 7:15-10 a.m.; 3-3:45 p.m.; 7:45-
KFAB	770 Lincoln, Neb., CST.	KFSG	1120 Los Angeles, Calif., PST.	KOFI	9:15 p.m., CST.
KFAC	6 a.m10:30 p.m. 1300 Los Angeles, Calif., <i>PST</i> .	KFUL	1:30-3 p.m.; 7:30-mid. 1290 Galveston, Texas, CST.	KGFI	1500 Corpus Christi, Texas. 7 a.m3 p.m.; 6-10 p.m., CST.
	7 a.mmid.		8-9:30 a.m.; 11 a.m1 p.m.; 2:30- 4 p.m.; 5:30-8p.m.; 10:15-mid.	KGFJ	1200 Los Angeles, Calif. 24 hours daily.
KFBB	1280 Great Falls, Mont., MST. 8 a.m3 p.m.; 5-10 p.m.	KFUO	550 St. Louis, Mo., CST.	KGFK	1500 Moorhead, Minn., CST.
KFBI	1050 Abilene, Kans., CST. 5 a.m9 p.m.	KFVD	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.		6 a.m6:45 p.m.; 10 p.mmid.		9-10 a.m.; 11 a.m3 p.m.; 4-5:30
KFBL	7 a.m11 p.m. 1370 Everett, Wash., PST.	KFVS	1210 Cape Girardeau, Mo. 9 a.mnoon; 4-7:30; 9-mid.,	KGFW	p.m.; 7:30-9. 1310 Kearney, Neb., CST.
KFDM	1370 Everett, Wash., <i>PST</i> . 8:30 a.mnoon;3-6 p.m.;3-6 a.m. 560 Beaumont, Tex., <i>CST</i> .	KFWB	CST. 950 Los Angeles, Calif., PST.	KGFX	7:30 a.m1:30 p.m.; 5-10:30 p.m. 630 Pierre, S. D.
	7 a.m2 p.m.; 4:30-10:30 p.m.		7:30 a.mmid.	KGGC	1420 San Francisco, Calif.
KFDY	550 Brookings, S. D., CST. 12:30-2 p.m.	KFWF	1200 St. Louis, Mo., CST. Silent.	KGGF	9 a.m9 p.m., <i>PST</i> 1010 Coffeyville, Kans., <i>CST</i> .
KFEL	920 Denver, Colo., MST.	KFWI	930 San Francisco, Calif. 7-8 a.m.; 9 a.m1 p.m.; 6-7:30	KGGM	7:30 a.m2 p.m.; 5-10:30. 1230 Albuquerque, N. M.
	7-8:30 a.m.; 10 a.m12:30 p.m.; 3-4:30 p.m.; 6-7:30 p.m.		p.m.; 11-1 a.m, PST.		8 a.m2 p.m.; 4-10 p.m., MST.
KFEQ	680 St. Joseph, Mo., CST. 6 a. m7:45 p.m.	KFXD	1200 Nampa, Idaho, MST. 7 a.m9 p.m.	KGHF	1320 Pueblo, Colo., MST. 7 a.m1 p.m.; 4-10 p.m.
KFG Q	1310 Boone, Iowa, CST.	KFXF	920 Denver, Colo., MST.	KGHI	7 a.m1 p.m.; 4-10 p.m. 1200 Little Rock, Ark., CST. 8:30 a.m1:30 p.m.; 5-9. mid-
KFH	6-7:30 a.m.; 1:30-2:30 p.m. 1300 Wichita, Kans., CST.		8:30-10 a.m.; 12:30-3; 4:30-6; 7:30-mid.		3 a.m.
	7-8:30 a.m.; 9-11 a.m.; 11:30	KFXJ	1200 Grand Jet., Colo., MST. 8 a.m2 p.m.; 6-9 p.m.	KGHL	950 Billings, Mont., MST. 7:30 a.m4 p.m.; 5:30-11.
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	1210 San Bernardino, Calif.	KGIR	1360 Butte, Mont., MST.
KF10	6:30 a.mmid. 1120 Spokane, Wash., PST.	KFXR	7 a.mmid. PST. 1310 Oklahoma City, Okla.	KGIW	7 a.mmid. 1420 Trinidad, Colo., MST.
KFIZ	6 a.msunset. 1420 Fond du Lac, Wis., CST.	KFY0	7:30 a.m2 p.m.; 4-10, CST. 1310 Lubbock, Texas, CST.	KGIX	6-8 a.m.; 10-2 p.m.; 5-8 p.m. 1420 Las Vegas, Nev., PST.
	10 a.m1 p.m.; 4-10 p.m.		6 a.m2 p.m.; 4-10 p.m.		6-9 a.m.; noon-3 p.m.; 6-9 p.m.
KFJB	1200 Marshalltown, Iowa. 6-9 a.m.; noon-3 p.m.; 6-9 p.m.	KFYR	550 Bismarck, N. D., CST. 6:30 a.m12:30 p.m.; 2-11 p.m.	KGIZ	1500 Grant City, Mo., CST. 7-11 a.m.; noon-5 p.m.; 6-9 p.m.
KFJI	1210 Klamath Falls, Ore.	KGA	1470 Spokane, Wash., PST.	KGKB	1500 Tyler, Texas, CST. 7 a.m2 p.m.; 4-10 p.m.
KFJM	7:30 a.m9 p.m., <i>PST</i> . 1370 Grand Forks, N. D.	KGAR	6 a.mmid. 1370 Tucson, Ariz., MST.	KGKL	1370 San Angelo, Texas, CST.
Vr ID	7 a.m9 p.m., <i>CST</i> .	KGB	7 a.m1:30 p.m.; 4-11. 1330 San Diego, Calif., <i>PST</i> .	KGKO	8 a.m11:30 p.m. 570 Wichita Falls, Texas.
KFJR	1300 Portland, Ore., PST. 10:30 a.m2:30 p.m.; 5-6 p.m.;	KGBU	7 a.mmid.	KGKX	1420 Lewiston, Idaho.
KFJZ	7-8 p.m. 1370 Fort Worth, Texas, CST.	KUBU	900 Ketchikan, Alaska. (Zone 8), 10 a.m3 p.m.; 5-7;	KGKY	1500 Scottsbluff, Neb., MST. 6:30 a.m2 p.m.; 4:30-9.
	7 a.m11 p.m.	KGBX	10 p.m3 a.m. 1310 Springfield, Mo., CST.	KGMB	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)
	8-11 p.m.	KGBZ	4-10 p.m. 930 York, Neb., CST.	KGNF	1430 North Platte, Neb.
KFKU	1220 Lawrence, Kans., CST. 2:30-3 p.m.; 6-6:15 p.m.		7:30-9:30 a.m.; 11 a.m12:30 p. m.; 2-3:30 p.m.; 5-6:30 p.m.;	KGNO	7 a.msunset, MST. 1210 Dodge City, Kans.
KFKX	1020 Chicago, Ill.		8:30-10 p.m.		7:30 a.m3:30 p.m.; 5-9, MST.

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KGO	790	San Francisco, Calif.	KNX	1050 Hollywood, Calif., PST.	KSO	1380 Des Moines, Iowa.
Kone	7 a.m	12:30 a.m., PST.	KOA	6:30 a.m1 a.m. next day. 830 Denver, Colo., MST.	KSOO	1110 Sioux Falls, S. D., <i>CST</i> , 6 a.m8 p.m.
KGRS	6-8 a	Amarillo, Texas, CST. .m.; 10 a.m12:30 p.m.;		7 a.mmid.	KSTP	1460 St. Paul, Minn., CST.
K 6 U	3-4	:30, 6-7:30; 9-10 p.m.	KOAC	550 Corvalis, Ore., <i>PST</i> . 6:30 a.m4 p.m.; 6-8:30 p.m.	KTAB	6:30 a.m12:30 a.m. next day. 560 San Francisco, Calif.
KGU	6:15-1	Honolulu, Hawaii. 10:30 a.m.; noon-1 p.m.;	ков	1180 Albuquerque, N. M.		6:45 a.m1 a.m., PST.
	3:1	0:30 a.m.; noon-1 p.m.; 5-11 p.m. (Zone 5)	KOCW	7 a.m9 p.m., MST.	KTAR	620 Phoenix, Ariz., MST. 7 a.m11:15 p.m.
KGVO	6 a.m	Missoula, Mont., MST.	KOH	1400 Chickasha, Okla.1380 Reno, Nev., PST.	KTAT	1240 Ft. Worth, Texas.
KGW	620	Portland, Ore., PST.	KOIL	8 a.mmid. 1260 Council Bluffs, Ia., CST.		7-9 a.m.; noon-1:30 p.m.; 4-7 p.m.; 9-mid.
KGY	1210	a.mmid. Olympia, Wash., PST.	KUIL	6 a.m1 a.m.	KTBS	1450 Shreveport, La., CST.
	6 a.m	mid.	KOIN	940 Portland, Ore., PST.	KTFI	6 a.mmid. 1240 Twin Falls, Idaho, MST.
KHJ		Los Angeles, Calif., PST1 a.m. next day.	KOL	6 a.m1 a.m. next day. 1270 Seattle, Wash., PST.		6:30 a.mmid.
KHQ	590	Spokane, Wash., PST.		6:45 a.mmid.	KTHS	1040 Hot Springs, Ark., CST. 9-10 a.m.; 11 a.m12:30 p.m.;
KICA	7 a.m.	mid. Clovis, N. M.	KOMA	1480 Oklahoma City, Okla, 7 a.m11 p.m., CST.		4:30-5:30; 7-9:30 p.m.
KICK	1420	Red Oak, Iowa.	KOMO	7 a.m11 p.m., CST. 920 Seattle, Wash., PST.	KTM	780 Los Angeles, Calif., PST. 6-10 a.m.; 1-5 p.m.; 8 p.m4
KID	Silent 1320	Idaho Falls, Idaho, MST.	KONO	6:55 a.m12:30 a.m. next day. 1370 San Antonio, Tex., CST.		a.m. next day.
	9 a.m	mid. Boise, Idaho, MST.		1370 San Antonio, Tex., <i>CST</i> . 8:30-10 a.m.; 11 a.mnoon; 1:30-4 p.m.; 6-7 p.m.; 8-10.	KTRH	1120 Houston, Texas, CST. 6:30-11 a.m.; noon-11:30 p.m.
KID0	7 a.m	Boise, Idaho, MST.	KOOS	1:30-4 p.m.; 6-7 p.m.; 8-10. 1370 Marshfield, Ore., PST.	KTSA	1290 San Antonio, Tex., CST.
KIDW	1420	Lamar, Colo., MST.		9 a.m9 p.m.		6-8 a.m.; 9:30-11:30 a.m.; 3-5 p.m.; 7-10 p.m.
KIEM	6-8 a.	m.; 2-6 p.m.; 8-10. Eureka, Calif., <i>PST</i> .	KORE	1420 Eugene, Ore., <i>PST</i> . 7:45 a.m8:30 p.m.	KTSM	1310 El Paso, Texas. 1220 Seattle, Wash.
KIEV	859	Glendale, Cahf., PST.	KOY	1390 Phoenix, Ariz., MST.	KTW KUJ	1220 Seattle, Wash. 1370 Walla Walla, Wash.
KIFH	6 a.m	-sunset. Juneau, Alaska.	KPCB	7 a.m10 p.m. 650 Seattle, Wash., PST.		6 a.msunset, PST. 1420 Yuma, Ariz., MST.
KIT	1310	Yakima, Wash., PST.		5:30 a.m8 p.m.; 10 p.m4 a.m.	KUMA	1420 Yuma, Ariz., MST. 7-9 a.m.; noon-3 p.m.; 6-9 p.m.
KJBS	7 a.m	mid. San Francisco, Calif.	KPJM	1500 Prescott, Ariz., MST. 9 a.m2 p.m.; 4-11 p.m.	KUOA	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., <i>CST</i> .
KJR		Seattle, Wash., PST.	KPOF	7:30 a.mmid., PST. 880 Denver, Colo., MST.		Silent.
KLCN	1290	Blytheville, Ark.		7:30-9 a.m.; 2:30-4:30 p.m.; 0-8	KVI	570 Tacoma, Wash., PST. 6:30 a.m1 a.m.
KLO	8:30 :	Ogden, Utah. a.m10:30 p.m., MST.	KPPC	p.m. 1210 Pasadena, Calif., PST.	KVL	1370 Seattle, Wash.
KLPM	1240	Minot, N. D., CST.	KPQ	Silent. 1500 Wenatchee, Wash., PST.	KVOA	1260 Tucson, Ariz. 6-9 a.m.; noon-3 p.m.; 6-9 p.m.
	11:	1 p.m.; 6-7:45 p.m.; 10- 30 p.m.		7 a.m10 p.m.	KV00	1140 Tulsa, Okla., <i>CST</i> .
KLRA	1390	Little Rock, Ark., CST. .m.; 1-5 p.m.; 6:30-11 p.m.	KPRC	920 Houston, Texas, CST. 6:30 a.mmid.	KVOR	7 a.m1:30 p.m.; 3-7:45; 9-mid. 1270 Colorado Springs, Colo.
KLS	1440	Oakland, Calif., PST.	ΚQV	1380 Pittsburgh, Pa., EST.		7 a.m10 p.m., MST.
KLX	8:30 a	.m7:30 p.m. Oakland, Calif., <i>PST</i> .	KQW	8:30 a.m1 p.m.; 2-11 p.m. 1010 San Jose, Calif., PST.	KVOS KWCR	1200 Bellingham, Wash.1420 Cedar Rapids, Ia., CST.
	7 a.m	11 p.m.	•	7 a.m3 p.m.; 4:30-10 p.m.	KWEA	6:30 a.mmid.
KLZ	6-30 ·	Denver, Colo., MST. n.m11:30 p.m.	KRE	1370 Berkeley, Calif., PST. 6:30-9:30 a.m.; noon-3 p.m.;	KWG	1210 Shreveport, La. 1200 Stockton, Calif., PST.
KMA	930	Shenandoah, Iowa, CST.		6-9 p.m.	KWJJ	7 a.mmid. 1060 Portland, Ore.
	6-7:30) a.m.; 9:30-11 a.m.; 12:30- .m.; 3:30-5 p.m.; 6:30-8:30	KREG	1500 Santa Ana, Calif., <i>PST</i> . 9 a.m11 p.m.	KWK	1350 St. Louis, Mo., CST.
	p.n	1.	KRGV	1260 Harlingen, Texas, CST.	KK0	6:55 a.m12:15 a.m. next day.
KMAC		San Antonio, Tex., CST.) a.m.; 10-11 a.m.; noon-	KRKD	7-9:30 a.m.; 12:30-3:30 p.m. 1120 Los Angeles, Calif., PST.	KWKC KWKH	1370 Kansas City, Mo. 850 Shreveport, La., CST.
	1:3	0 p.m.; 4-6 p.m.; 7-8 p.m.;	KRLD	6 a.m1:30 p.m.: 3-7:30 p.m.		8:30 p.mmid.
КМВС	950	p.m2 a.m. Kansas City, Mo., CST.	KNLD	1040 Dallas, Texas, CST. 6-7:15 a.m.; 7:45-9 a.m.; 10-11	KWLC	1270 Decorah, Iowa, CST. 6:30-8:30 a.m.; 9:45-10:45;
	6:15 a	n.mmid.		a.m.; 12:30-4:30; 5:30-7; 9:30- mid.		11:30 a.m12:30 p.m.
		Medford, Ore., PST9:30 p.m.	KRMD	1310 Shreveport, Ia., CST.	KWSC	1220 Pullman, Wash., PST. 6:45-8 a.m.; 10:30 a.m9:30 p.m.
KMJ	580	9:30 p.m. Fresno, Calif., PST.	KROW	7 a.m1 p.m.; 2-5 p.m. 930 Oakland, Calif., PST.	KWWG	1260 Brownsville, Texas.
KMLB	1200	mid. Monroe, La., CST.		8-9 a.m.; 1-6 p.m.; 7:30-11 p.m.	KXA	760 Seattle, Wash., PST.
кммј	7 a.m	10 p.m. Clay Center, Neb., CST.	KRSC	1120 Seattle, Wash., PST. Sunrise to local sunset.	KXL	7 a.msundown; 9 p.mmid. 1420 Portland, Ore., PST.
••••	5:45 a	.msunset.	KSAC	580 Manhattan, Kans., CST		7 a.mmid.
KMO		Tacoma, Wash., PST.		8-9 a.m.; 10-10:30 a.m.; 12:30- 1:30 p.m.	KXO	1500 El Centro, Calif.
кмох	1090	St. Louis, Mo., CST.	KSCJ	1330 Sioux City, Iowa, CST.	KXRO	1310 Aberdeen, Wash., <i>PST</i> . 7:30 a.mmid.
KMPC	6:45 a	n.m1 a.m. Beverly Hills, Calif.	KSD	6:30 a.m11 p.m. 550 St. Louis, Mo., CST.	KXYZ	1440 Houston, Texas, CST.
	6:30	a.m5:15 p.m.; 8-1 a.m.		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	PS	T. Hollywood, Calif., PST.	KSEI	11 p.m. 890 Pocatello, Idaho, MST.	KYA	1230 San Francisco, Calif.
	~ 1 ~			8 a.m11 p.m.		7:30 a.mmid., <i>PST</i> .
	6:30 a	a.mmid. Austin, Texas, CST.	KSL	1130 Salt Lake City, Utah.	KYW	1020 Chicago, Ill., CST.

WCLO 1200 Janesville, Wis., CST. KZRM 618.5 Manila, P. I. 6:30-7:30 a.m.; 12:15-1:15; 3-WBBR 1300 Brooklyn, N. Y., EST. 7:30 a.m.-3:30 p.m.; 5-9 p.m. Silent. 1310 Joliet, Ill., CST. WCLS 10:30 p.m. WRR7 1200 Ponca City, Okla., CST. 11 a.m.-noon; 3-8 p.m.; 10 p.m.-NAA Arlington, Va. 6 a.m.-10 p.m. 690 WBCM 1410 Bay City, Mich., EST. mid. Salvador. RUS 664 911 San Jose, C. R. 685 Glace Bay, N. S., AST. 1-1:15 p.m.; mid.-12:15 a.m. 810 St. Johns, N. F. WCOA 1340 Pensacola, Fla., CST. TICR 8 a.m.-mid. 9 a.m.-10:30 p.m. VAS WBEN 900 Buffalo, N. Y., EST. WCOC 880 Meridian, Miss., CST. 6:45 a.m.-1 a.m. 7:30 a.m.-2 p.m.; 5-11 p.m **WBEO** 1310 Marquette, Mich., CST. VOAS WCOD 1200 Harrisburg, Pa., EST. 8-11 a.m.; 3-6 p.m.; 8-11 p.m. 11 a.m.-12:30 p.m.; 4-5:30 p.m.; 9:30 a.m.-1:15 p.m.; 5-7 p.m. 1200 Huntsville, Ala., CST. 7:45-10 p.m. (Zone 19) 893 Wabana, N. F. **WBHS** 8 a.m.-2 p.m.; 5-9:30 p.m. 1440 Greensboro, N. C., EST. WCRW 1210 Chicago, Ill., CST VOGT 7-8:30 a.m.; 11:30 a.m.-1:30 WBIG Silent. p.m.; 6-7 p.m.; 9-10 p.m. 1360 Charleston, S. C., EST. 860 St. Johns, N. F. 950 St. Johns, N. F. VOGY 8 a.m.-11 p.m. 1350 New York City, EST. WCSC VONA WBNX 8 a.m.-3 p.m.; 6-11 p.m. 12:30-2 p.m.; 6:30-8 p.m. 9 a.m.-noon; 3-6 p.m. 860 New York City WCSH 940 Portland, Maine, EST. WBO Q (Zone 19) WBOW 1310 Terre Haute, Ind., CST. 7:45 a.m.-1 p.m.; 2:30-11:15 VONE 1195 St. Johns, N. F. Noon-2 p.m.; 6-8 p.m. (Zone 19) 750 St. Johns, N. F. 7 a.m.-2 p.m.; 4-mid. p.m. WDAE 1220 Tampa, Fla., EST. VOWR WBRC 930 Birmingham, Ala., CST. 8 a.m.-mid. 7 a.m.-11 p.m. 1310 Wilkes Barre, Pa. Silent. 610 Kansas City, Mo., CST. WDAF WAAB 1410 Boston, Mass., EST. WBRE 920 Babson Park, Mass., 6:26 a.m.-mid WBSO 7:45 a.m.-mid. 7 a.m.-5 p.m., EST WDAG 1410 Amarillo, Texas, CST. 920 Chicago, Ill., CST. WAAF a.m.; 12:30-3; 4:30-6; 1080 Charlotte, N. C., EST. 8-10 6 a.m.-local sunset. WRT 7:30-9; 10-mid 1250 Newark, N. J., EST. WAAM 7 a.m.-mid. WDAH 1310 El Paso, Texas. WDAS 1370 Philadelphia, Pa., EST. WBTM 1370 Danville, Va., EST. 7-9 a.m.; 10 a.m.-noon; 2-4:30; 11 a.m.-1 p.m.; 6-6:30; 7-10:30 6-9 p.m. 9 a.m.-10:30 p.m. 940 Jersey City, N. J., EST. WAAT p.m. WBZ 990 Boston, Mass., EST. WDAY 940 Fargo, N. D., CST. 6 a.m.-6 p.m. 6 a.m.-11 p.m. 660 Omaha, Neb., CST. WAAW 7 a.m.-mid. 990 Springfield, Mass., EST. WDBJ 930 Roanoke, Va., EST. WBZA 6 a.m.-6 p.m. 860 New York City, EST. 7:30 a.m.-2 a.m. next day. WABC 7 a.m.-mid. 8 a.m.-mid. 580 Orlando, Fla., EST. **WDBO** WCAC 600 Storrs, Conn., EST. 1200 Bangor, Maine, EST. 9 a.m.-2 p.m.; 6-10 p.m. 1200 New Orleans, La., CST. WABI Silent. 7 a.m.-mid. WDEL 1120 Wilmington, Del., EST WCAD 1220 Canton, N. Y., EST 12:30-1:20 p.m. WABZ 9 a.m.-10 p.m. 1220 Pittsburgh, Pa., EST. WDEV 550 Waterbury, Vt., EST. Noon-4 p.m.; 8 p.m.-mid. 1240 Waco, Texas, CST WCAE 9:30-11 a.m.; noon-2 p.m. WACO 6:45 a.m.-mid. 6-7 a.m.; 9-noon; 1:30-4 p.m.; 7-9 p.m. WDGY 1180 Minneapolis, Minn WCAH 1430 Columbus, Ohio, EST. 6:30 a.m.-8:15 p.m., CST 7:45 a.m.-mid. WADC 1320 Akron, Ohio, EST. WCAJ 590 Lincoln, Neb., CST. WDOD 1280 Chattanooga, Tenn 7:30 a.m.-11 p.m., *CST* 10-10:45 a.m.; noon-12:30 p.m. 8:30 a.m.-mid. 1250 Northfield, Minn., CST. WDRC 1330 Hartford, Conn., EST. WAGM 1420 Presque Isle, Me., EST. WCAL 10 a.m.-1 p.m.; 4:30-9:30 p.m. 8 a.m.-mid. 9:45-10:15 a.m. WDSU 1250 New Orleans, La., CST. 1280 Camden, N. J., EST. WAIU 640 Columbus, Ohio. EST. WCAM 7 a.m.-11:45 p.m. 1070 Tuscola, Ill., CST 7 a.m.-sunset Silent. 1210 Zanesville, Ohio, EST. WCAO 600 Baltimore, Md., EST. WDZ WALR. 9 a.m.-10 p.m. 7 a.m.-4:30 p.m. 7 a.m.-mid. 1280 Asbury Park, N. J., EST. WEAF 660 New York City, EST. WAMC 1420 Anniston, Ala., CST. WCAP 9 a.m.-noon; 2-7:30 p.m. 1200 Rapid City, S. D., CST. 6:45 a.m.-1 a.m. next day. 7-10:30 a.m.; noon-9 p.m. 780 Providence, R. I., EST WEAN WAML 1310 Laurel, Miss. WCAT 1:30-2:30 p.m. 7:30 a.m.-1 a.m. next day 1140 Birmingham, Ala., CST. WAPI 1170 Philadelphia, Pa., EST. 8 a.m.-1 a.m. next day. 570 Celumbus, Ohio, EST. WEAO WCAU 6 a.m.-9 p.m. 1 p.m.-mid. WASH 1270 Gd. Rapids, Mich., EST. 1290 Superior, Wis., CST. WCAX 1200 Burlington, Vt., EST. WEBC a.m.-mid 7 a.m.-11 p.m. Noon-1 p.m. WAWZ 1350 Zarephath, N. J., EST. 1070 Carthage, Ill., CST. WEBO 1210 Harrisburg, Ill., CST WCAZ 7:45-8:45 a.m. 6-9 a.m.; noon-1 p.m.; 7:30-1:30 p.m.-2 p.m. WAZL 1420 Hazelton, Pa., EST. 9 p.m. WCBA 1440 Allentown, Pa., EST 1310 Buffalo, N. Y., EST. WBAA 1400 Lafayette, Ind., CST 7:30 a.m.-1 p.m. 1080 Zion, Ill., CST. WEBR 7 a.m.-2 a.m. next day. Silent. WCBD 1210 Chicago, Ill. 590 Boston, Mass., EST. WEDC WBAK 1430 Harrisburg, Pa., EST. 7:30-10:30 a.m.; 4 p.m.-4:45 WEEL 10:30-11:30 a.m. p.m. WCBM 1370 Baltimore, Md., EST 6:45 a.m.-mid. WBAL 1060 Baltimore, Md., EST. 830 Reading, Pa., EST. 7 a.m.-1:30 p.m.; 5-11 p.m. 1210 Springfield, Ill., CST. WEEU 7 a.m.-mid. WCBS 8 a.m.-8 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. WRAP 11:15 a.m.-3 p.m.; 6:45-8:30 **WEHC 1350** Emory, Va., EST. 6-8 a.m.; 11 a.m.-2 p.m.; 4-7. p.m. 810 Minneapolis, Minn. 6:45 a.m.-12:30 a.m., CST **WCCO** 1420 Cicero, Ill., CST. WEHS WBAX 1210 Wilkes Barre, Pa., EST. 4-6 p.m. :30-noon; 6-11 p.m. 1350 New York City, EST. WCDA WELL 1420 Battle Creek, Mich WBBC 1400 Brooklyn, N. Y., EST. 6 p.m.-mid. 1420 Americus, Ga., EST. 7 a.m.-11; 7:30 p.m.-9 p.m. WENC WCFL 970 Chicago, Ill., CST. 7 a.m.-2 p.m.; 4 p.m.-sunset. WRBL 1210 Richmond, Va., EST. 6 a.m.-mid. 1400 Brooklyn, N. Y., EST 870 Chicago, Ill., CST. WENR Silent. WCGU 10:15-11:45 a.m.; 3:30-7 p.m.; 770 Chicago, Ill., CST. 3:45 p.m.-6; 10:30 p.m.-2 a.m. WBBM mid.-1:30 a.m. 6:45 a.m.-10 p.m.; 11:30 p.m.-WCKY 1490 Covington, Ky., CST. 2 a.m. Mid.-mid. WERE 1420 Erie, Pa., EST.

WESG	1040 Elmira, N. Y.	WHA	940 Madison Win CCT	WINE	4400 M M A T A T A T T T T T T T T T T T T T
WEVD	Variable.		940 Madison, Wis., CST. 10 a.m2 p.m.	WINS	1180 New York City, EST. 7 a.m10:15 p.m.
MEAD	1300 New York City, EST. 8-9 a.m.; 10-noon; 3-9; 10.		1120 Milwaukee, Wis., CST. 9:30-10:15 a.m.; 8:30-9:30 p.m.	WIOD	1300 Miami, Fla., EST. 7 a.m1 a.m. next day.
WEW	11 p.m. 760 St. Louis, Mo., CST.		1150 Rochester, N. Y., EST. 7:45 a.m1 a.m.	WIP	610 Philadelphia, Pa., EST 9 a.mmid.
WEXL	8 a.m11 a.m. 1310 Royal Oak, Mich., EST.	WHAS	7 a.mmid	WIS	1010 Columbia, S. C., EST. 7 a.m2 p.m.; 5:30-11 p.m.
WFAA	8 a.m11 p.m. 800 Dallas, Texas, CST.		1310 Philadelphia, Pa., EST.	WISN	1120 Milwaukee, Wis., CST. 9:30 a.m.; 10:15 a.m8:30 p.m.
	6:45-8:30 a.m.; 10:30-1; 3-5; 5:30-6; 9-11:30 p.m.	₩HAZ	1300 Troy, N. Y., EST. Silent.	WJAC	9:30-mid.
WFAB	1300 New York City, EST.	WHB	860 Kansas City, Mo., CST.	WJAC	1310 Johnstown, Pa., EST. 8:30-10:30 a.m.; 4:30-6:15 p.m.
WFAM		WHBC	6 a.m. sunset. 1200 Canton, Ohio, EST.	WJAG	9:15 p.mmid. 1060 Norfolk, Neb., CST.
WFAS	7:30 a.m3 p.m.; 5:30-8 p.m. 1210 White Plains, N. Y.	WHBD	6-9 a.m.; noon-3 p.m.; 6-9 p.m. 1370 Mt. Orab, Ohio, EST.	WJAR	6 a.msunset. 890 Providence, R. I., EST
WFBC	10 a.mnoon; 3-5; 7-10 p.m. 1200 Greenville, S. C.		7-11 a.m.; noon-5 p.m.; 6-9 p.m. 1210 Rock Island, Ill., CST.	WJAS	8 a.mmid. 1290 Pittsburgh, Pa., EST.
WFBE	1200 Cincinnati, Ohio, EST. 7 a.m11 p.m.	₩HBL	10 a.m4 p.m.; 5-mid. 1410 Sheboygan, Wis., CST.	WJAX	7:30 a.m11:30 p.m. 900 Jacksonville, Fla., EST.
WFBG	1310 Altoona, Pa. 10:30 a.m2:30 p.m.; 6:15-	WHBO	7-10 a.m.; 12:30-3 p.m.; 6-8 p.m. 1370 Memphis, Tenn., CST.	WJAY	7 a.mmid.
WFBL	9:15 p.m. 1360 Syracuse, N. Y., EST.	WHBU	7:55 a.m10:30 p.m. 1210 Anderson, Ind., CST.		610 Cleveland, Ohio, EST. 6 a.msunset.
	7:30 a.mmid.		7 a.m1 p.m.: 3-9 p.m.	WJBC	1200 LaSalle, Ill., CST. 8-9 a.m.: 10 a.m12:30 p.m.
WFBM	1230 Indianapolis, Ind., CST. 7:30-10:15 a.m.; noon-3 p.m.;		1200 Green Bay, Wis., CST. 7 a.m10 p.m.	WJBI	3:30-6:30 p.m. 1210 Red Bank, N. J., EST.
WFBR	5:30 p.mmid. 1270 Baltimore, Md., EST.		1370 Calumet, Mich., CST. Silent till May 1	WJBK	5 p.m7 p.m. 1370 Detroit, Mich., EST.
WFDF	7 a.mmid. 1310 Flint, Mich., EST.	WHDH	830 Boston, Mass., EST. 8 a.m12:45 p.m.; 2:45-7:15.	WJBL	7 a.m1 a.m. 1200 Decatur, Ill., CST.
	7 a.m11 p.m. 1500 Rome, Ga., CST.		1420 Tupper Lake, N. Y., EST. 7:45 a.m1 p.m.; 3-7:45 p.m.		6:30-8 a.m.; 9-10 p.m.; 12:30-3; 6:30-11 p.m.
WFEA	6-9 a.m.; noon-3 p.m.; 6-9 p.m. 1430 Manchester, N. H., EST.	₩HEB	740 Portsmouth, N. H., EST. 10 a.msunset.	W JBO	1420 New Orleans, La. 1210 Lewisburg, Pa., EST.
WFI	9 a.m11 p.m. 560 Philadelphia, Pa., <i>EST</i> .	WHEC	1430 Rochester, N. Y., EST. 8 a.mmid.	WJBW	Noon-6 p.m. 1200 New Orleans, La., CST.
	6:45-9 a.m.; 9:45-11 a.m.; 1-2 p.m.; 3-4:30 p.m.; 6-mid.	WHEF	 1500 Koseiusko, Miss. 1210 Troy, Ala., CST. 	WJBY	8 a.mnoon; 4-8 p.m. 1210 Gadsden, Ala., CST.
WFIW	940 Hopkinsville, Ky., CST. 6 a.m3 p.m.; 5 p.mmid.		6-8 a.m.; 11 a.m5 p.m. 1420 Cicero, Ill., CST.	MIDX	6 a.m12:10 next day.
WFLA	620 Clearwater, Fla., EST. 7:15 a.mmid.	WHIS	7 a.m1:30 p.m.; 6 p.m1 a.m. 1410 Bluefield, W. Va., EST.	WJEJ	1270 Jackson, Miss. CST. 6:15-10 a.m.; 11:30 a.m10 p.m.
WFOX	1400 Brooklyn, N. Y., EST.	₩HK	8-9 a.m.; noon-2 p.m.; 6-8 p.m. 1390 Cleveland, Ohio, EST.		1210 Hagerstown, Md. 7 a.m5 p.m.
WGAL	1:30-3:45 p.m.; 9-10:30 p.m. 1310 Lancaster, Pa., EST.		7 a.mmid.	M11D M1Ed	1370 Williamsport, Pa. 1130 Chicago, Ill., CST.
WGAR	10 a.mnoon; 1:30-11 p.m. 1450 Cleveland, Ohio, EST.	WHO	1010 New York City, EST. 1:30 p.m4 p.m. 1000 Des Moines, Iowa.	WJKS	6 a.m8:30 p.m. 1360 Gary, Ind., CST.
WGBB	6 a.m3 a.m. 1210 Freeport, N. Y., EST.	₩HOM	1450 Jersey City, N. J., EST.	WJMS	12:30-6:15 p.m.; 8-11 p.m. 1420 Ironwood, Mich., CST.
WGBF	Silent. 630 Evansville, Ind., CST.	WHP	8-10 a.m.; 3-6 p.m.; 9-mid. 1430 Harrisburg, Pa., EST.		7 a.m2;30 p.m.; 4:30 p.msun- set.
	6:30 a.m3:30 p.m.; 4-7; 9-11:30 p.m.		8:30-10:30 a.m.; 11:30 a.m 1 a.m.	WJR	750 Detroit, Mich., EST. 6:00 a.m1 a.m. next day.
WGBI	880 Scranton, Pa., EST. 9:30 a.m12:30 p.m.; 1:30-4:30	WIAS	1310 Ottumwa, Iowa, CST. 7:30 a.m1:30 p.m.; 4-9 p.m.	MISA	1460 Washington, D. C., ETS. 7:30 a.m1 a.m. next day.
WGCM	p.m.; 5:30-2 a.m. 1210 Gulfport, Miss., CST.	WIBA	1280 Madison, Wis., CST. 6:30 a.m11:30 p.m.	WJTL	1370 Atlanta, Ga., CST. 6:45 a.mmid.
	8 a.m2 p.m.; 3-9 p.m. 1250 Newark, N. J., EST.	WIBG	930 Glenside, Pa., EST. Daybreak to sunset.	M1M	1210 Akron, Ohio, EST. 8 a.m10 p.m.
WGES	Silent. 1360 Chicago, Ill., CST.	WIBM	1370 Jackson, Mich., EST.	WJZ	760 New York City, EST. 7:30 a.m1 a.m. next day.
	8 a.m12:30 p.m.; 6:15-8:30; 11 p.m2 a.m.	WIBO	7:30 a.m8:15 p.m. 560 Chicago, Ill., CST.	WKAQ	1240 San Juan, P. R., AST. 2:30-4:30 p.m.; 7:30-10:30 p.m.
WGH	1310 Newport News, Va.		6:30 a.mmid. 1210 Poynette, Wis., CST.	WKAR	1040 E. Lansing, Mich., EST 11-11:45 a.m.
WGL	7 a.m2 p.m.; 5-11 p.m., EST. 1370 Fort Wayne, Ind., CST. 6:15 a.m9:30 p.m.		9 a.m9 p.m. 580 Topeka, Kans., CST.	WKAV	1310 Laconia, N. H., EST. 9 a.m1 p.m.; 3-8 p.m.
WGLC	1370 Hudson Falls, N. Y., EST.		6 a.mmid.	WKBB	1310 Joliet, Ill., CST. 8-11 a.m.; noon-3 p.m.; 8-10
	720 Chieago, Ill., CST. 7:30 a.m2 a.m.	WIBX	1200 Utica, N. Y. 600 Bridgeport, Conn., EST.	WEDG	p.m.
WGNY WGR			7:30 a.mmid. 1200 St. Louis, Mo., CST.		1400 Indianapolis, Ind., CST.
	7:30 a.mmid.		7 a.mmid.		6:30 a.m1:15 p.m.; 4:15-9;
WGST	890 Atlanta, Ga., <i>CST</i> . 7 a.m11 p.m.	WILL	899 Urbana, Ill., <i>CST</i> . 10 a.m12:15 p.m.		1380 LnCrosse, Wis., CST. 7:30 a.m10 p.m.
WGY	790 Schenectady, N.Y., EST. 6:45 a.m1 a.m. next day.	WILM	1420 Wilmington, Del., EST. 7:30 a.m2 p.m.; 4:30-10 p.m.	WKBI	1420 Cicero, Ill., CST. 1:30-4 p.m.

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WKBN
                                                WMBR 1370 Tampa, Fla., EST.
                                                                                                 WDS
                                                                                                           630 Jefferson City, Mo.
          570 Youngstown, Ohio, EST.
         7 a.m.-1 p.m.
1500 Connersville, Ind., CST.
                                                                                                          9 a.m.-1:10 p.m., CST.
1130 New York City, EST.
                                                         6:45 a.m.-10 p.m.
WKRV
                                                WMC
                                                           780 Memphis, Tenn., CST.
                                                                                                 WOV
10 a.m.-noon; 6-10 p.m.
WKBW 1480 Buffalo, N. Y., EST.
                                                         7 a.m.-11 p.m.
                                                                                                          8 a.m.-6 p.m.
                                                WMCA
                                                           570 New York City, EST.
                                                                                                 wow
                                                                                                           590 Omaha, Neb., CST.
         9:15 a.m.-1 a.m. next day.
                                                         8-11 a.m.; noon-6 p.m.; 8:30
                                                                                                          6:15-10 a.m.; 10:45 a.m.-2:30
WKBZ
                                                p.m.-2 a.m.
WMIL 1500 Brooklyn, N. Y., EST.
         1500 Ludington, Mich., CST.
                                                                                                 WOWO 1160 Fort Wayne, Ind., CST.
         9 a.m.-9:30 p.m.
WKEU 1500 LaGrange, Ga.
                                                                                                          7:30 a.m.-7:45 p.m.; 9:15 p.m.-
                                                         3 p.m.-9 p.m.
WKFL
         1210 Greenville, Miss., CST.
                                                WMMN 890 Fairmont, W. Va., EST.
                                                                                                            mid.
         7 a.m.-2 p.m.; 4-9 p.m.
1200 Lancaster, Pa., EST.
                                                7 a.m.-9 p.m.
WMPC 1500 Lapeer, Mich., EST.
                                                                                                          1420
                                                                                                                Paducah, Ky., CST.
                                                                                                 WPAD
                                                                                                          7-9:30 a.m.; 11 a.m.-2 p.m.;
                                                Silent.
WMSG 1350 New York City, EST.
         11 a.m.-3 p.m.; 6-8 p.m.
                                                                                                             4-mid.
WKRC
          550 Cincinnati, Ohio, EST.
                                                                                                 WPAP
                                                                                                          1010 New York City, EST.
         6:45 a.m.-mid.
                                                          Noon-3 p.m.
                                                                                                          4 p.m.-8 p.m.
          900 Oklahoma City, Okla.
WKY
                                                WMT
                                                           600 Waterloo, Iowa, CST.
                                                                                                 WPAW 1210 Providence, R. I., EST 9 a.m.-1:45 p.m.; 3 p.m.-mid.
         6:30 a.m.-mid., CST
                                                          7 a.m.-11 p.m.
                                                WNAC 1230 Boston, Mass., EST.
WKZO
          590 Kalamazoo, Mich., EST.
                                                                                                 WPCC
                                                                                                           560 Chicago, Ill.
          6:30 a.m.-8:15 p.m
                                                                                                          Silent.
                                                          8 a.m.-1 a.m. next day.
WLAC
                                                WNAD
                                                                                                 WPCH
         1470 Nashville, Tenn., CST.
                                                         1010 Norman, Okla.
                                                                                                           810 New York City, EST.
          7 a.m.-11 p.m.
                                                         Silent.
                                                                                                          8 a.m.-sunset.
                                                          570 Yankton, S. D., CST.
WLAP
         1200 Louisville, Ky., CST.
                                                WNAX
                                                                                                 WPEN
                                                                                                          1500 Philadelphia, Pa., EST.
          6:30 a.m.-11 p.m.
                                                          6 a.m.-mid
                                                                                                           7:30 a.m.-10:30 p.m.
         1250 Minneapolis, Minn.,
WLB
                                                WNBF 1500 Binghamton, N.Y., EST.
                                                                                                 WPFB
                                                                                                          1370 Hattiesburg, Miss., CST.
                                                                                                          7 a.m -2 p.m.; 6-11 p.m.
1100 Atlantic City, N.J., EST.
         8 p.m.-9 p.m., CST.
1310 Muncie, Ind., CST.
                                                7 a.m.-10 p.m.
WNBH 1310 New Bedford, Mass.,
                                                                                                 WPG
WLBC
                                                                                                          8:15 a.m.-6 p.m.; 8 p.m.-1 a.m.
1200 Petersburg, Va., EST.
7-11 a.m.; noon-5 p.m.; 6-9 p.m.
                                                               EST.
           a.m.-6 p.m.
WLBF
         1420 Kansas City, Kans.
                                                          9 a.m.-1:10 p.m.; 3-11 p.m.
                                                                                                 WPHR
          7 a.m.-11 p.m., CST.
900 Stevens Point, Wis.
                                                WNBO 1200 Washington, Pa., EST.
                                                                                                          780 Norfolk, Va.
1210 Providence, R. I., EST.
WLBL
                                                          9 a.m.-noon; 3-6 p.m.; 9 p.m.-
                                                                                                 WPOR
          8 a.m.-3 p.m., CST
                                                            mid
                                                                                                 WPRO
WLBW 1260 Erie, Pa., EST.
                                                WNBR 1430 Memphis, Tenn., CST.
                                                                                                          9 a.m.-1:45 p.m.; 3 p.m.-mid.
680 Raleigh, N. C., EST.
                                                           7:30 a.m.-12:30 p.m.; 3-10:15
1200 Carbondale, Pa.
          8 a.m.-1 a.m. next day.
                                                                                                 WPTF
WLBZ
                                                WNBW 1200
                                                                                                          6:45 a.m.-9:15 p.m.
560 Miami, Fla., EST.
          620 Bangor, Maine, EST.
          8:30 a.m.-mid.
                                                WNBX 1260
                                                                 Springfield, Vt., EST.
                                                                                                 WQAM
         1370 Lexington, Mass., EST.
Noon-3 p.m.; 6-9 p.m.
560 Philadelphia, Pa., EST.
WLEY
                                                          6 a.m.-sunset.
                                                                                                          7 a.m.-mid.
                                                                                                 WQAN 880 Scranton, Pa., EST.
12:30-1:30 p.m.; 4:30-5:30 p.m.
WQAO 1010 New York City, EST
                                                 WNBZ
                                                                 Saranac Lake, N. Y.
Newark, N. J., EST
                                                          1290
                                                          1450
                                                 WNJ
                                                               Knoxville, Tenn., CST.
                                                WNOX
                                                           560
          9-9:45 a.m.; 11 a.m.-1 p.m.; 2-3
p.m.; 4:30-6 p.m.
1500 Boston, Mass., EST.
                                                                                                          Silent.
                                                          6:45 a.m.-11 p.m.
                                                WNYC
                                                           570 New York City, EST.
                                                                                                 WQBC 1360 Vicksburg, Miss., CST.
                                                                                                 7:30 a.m.-2:30 p.m.; 5-11 p.m.
WQDM 1370 St. Albans, Vt., EST.
          10 a.m.-1;30 p.m.; 4:30-9:30
                                                          11 a.m.-noon; 6-8:30 p.m.
                                                          1190 San Antonio, Tex., CST.
                                                WOAL
            p.m
         870 Chicago, Ill., CST.
6-10:15 a.m.; 11:45 a.m.-3:30
p.m.; 7 p.m.-1 a.m.
                                                                                                 8-9 a.m.; 11 a.m.-2 p.m.
WQDX 1210 Thomasville, Ga.
                                                          6:30-9:15 a.m.; 11:15-3 p.m.;
WLS
                                                4:45-10:45 p.m.

1280 Trenton, N. J., EST.
                                                                                                 WRAK 1370
                                                                                                                 Williamsport, Pa., EST.
WLTH 1400 Brooklyn, N. Y., EST.
11 a.m.-1:30 p.m.; 6-7:30 p.m.
                                                          Noon-2 p.m.; 7:30-mid.
580 Charleston, W.Va., EST.
                                                                                                           8:30 a.m.-mid.
                                                 WOBU
                                                                                                 WRAM 1370 Wilmington, N. C., EST.
WLVA
         1370 Lynchburg, Va., EST.
                                                          9 a.m.-noon; 2-4 p.m.; 8:30 p.m.-
                                                                                                           7:30 a.m.-3 p.m.; 6:30-11 p.m.
         8 a.m.-11; 1-6 p.m.
700 Cincinnati, Ohio, EST.
                                                                                                 WRAW 1310 Reading, Pa., EST.
                                                            mid.
WLW
                                                WOC
                                                          1000 Davenport, Iowa, CST.
                                                                                                           7:30-9:30 a.m.
                                                                                                          1020 Philadelphia, Pa., EST.
                                                                                                 WRAX
          6:30 a.m.-1 a.m. next day.
                                                           7 a.m.-11 p.m.
WLWL 1100 New York City.
                                                WOCL
                                                          1210 Jamestown, N. Y., EST.
                                                                                                          7 a.m.-sunset.
1200 Columbus, Ga., CST.
                                                                                                 WRBL
          6-8 p.m., EST.
                                                          Noon-mid.
WMAC
          570 Syracuse, N. Y
                                                 WODA
                                                          1250 Paterson, N. J.
                                                                                                            a.m.-9 p.m.
                                                         1410 Mobile, Ala., CST.
9 a.m.-4 p.m.; 9-11 p.m.
640 Ames, Iowa, CST.
WMAL
               Washington, D. C., EST.
                                                 WODX
                                                                                                 WRBX
                                                                                                          1410 Roanoke, Va., EST.
          630
                                                                                                          9 a.m.-noon; 3-6 p.m.; 8 p.m.-1.
950 Washington, D.C., EST.
         8 a.m.-mid.
WMAQ
         670 Chicago, Ill., CST.
                                                WOI
                                                                                                 WRC
                                                          6:30 a.m.-2:30 p.m.
                                                                                                          6:45 a.m.-1 a.m. next day.
          7 a.m.-1 a.m. next day.
                                                                                                 WRDO 1370 Augusta, Maine, EST.
7-9:30 a.m.; 10:30 a.m.-1:30
p.m.; 3:30-10 p. m.
                                                 WOKO 1430 Albany, N. Y., EST.
WMAS 1420 Springfield, Mass., EST.
          7:45 a.m.-mid
                                                          9 a.m.-1 a.m. next day
                                                WOL 1310 Washington, D. C., EST. 7 a.m.-1 p.m.; 3-9 p.m. WOMT 1210 Manitowoc, Wis., CST.
WMAZ 1180 Macon, Ga., EST.
7 a.m.-9:30 p.m.
WMBC 1420 Detroit, Mich., EST.
                                                                                                 WRDW 1500 Augusta, Ga., EST.
                                                                                                          8 a.m.-2 p.m.; 5-11 p.m.
                                                7 a.m.-9 p.m.

WDOD 1270 Gd. Rapids, Mich., EST.
                                                                                                 WREC 600 Memphis, Tenn.
WREN 1220 Lawrence, Kans., CST.
          7:30 a.m.-mid.
WMBD 1440 Peoria, Ill., CST.
6-9:30 a.m.; 1-2:30 p.m.; 8-mid.
                                                                                                           7 a m -mid
                                                          7 a.m.-mid.
                                                                                                 WRHM 1250 Minneapolis, Minn.
                                                 WOPL
                                                          1500 Bristol, Tenn., EST.
WMBG 1210 Richmond, Va., EST.
                                                                                                          6:15-9:45 a.m.; 10:35 a.m.-1 a.m.
                                                          7 a.m.-2 p.m.; 4-11 p.m.
          7:30 a.m.-1:30 p.m.; 5-11 p.m.
                                                          1300 Kansas City, Mo., CST. 6-7 a.m.; 8:35-9:05 a.m.; 11-
                                                 WOO
                                                                                                             CST.
WMBH 1420 Joplin, Mo., CST.
Noon-2 p.m.; 6-7 p.m.
                                                                                                          1370 Racine, Wis., CST.
                                                                                                 WRJN
                                                                                                          8 a.m.-10:30 p.m.
                                                            11:30 a.m.; 2-3 p.m.; 10-11
WMBI 1080 Chicago, Ill., CST.
                                                                                                 WRNY 1010 New York City.
          7-7:30 a.m.; 10:30-noon; 12:30-
1:30; 2:30-4 p.m.
                                                                                                          1310 Knoxville, Tenn., CST.
                                                                                                 WROL
                                                WOR
                                                           710 Newark, N. J., EST.
                                                                                                           7 a.m.-10 p.m.
                                                          6:45 a.m.-mid.
WMBO 1310 Auburn, N. Y., EST.
                                                 WORC 1200 Worcester, Mass., EST.
                                                                                                 WRR
                                                                                                           1200 Dallas, Texas, CST.
         9 a.m.-9 p.m.
                                                                                                          6:30 a.m.-11 p.m.
                                                          8 a.m.-mid.
WMBQ 1500 Brooklyn, N. Y., EST.
                                                 WORK 1000 York, Pa., EST.
                                                                                                 WRUF
                                                                                                            830 Gainesville, Fla., EST.
         9-11 a.m.
                                                          7:55 a.m.-sunset.
                                                                                                          8 a.m.-8 p.m.
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WRVA	1110 Richmond, Va., EST.	WTRC	1310 Elkhart, Ind., CST.
WSAI	7 a.mmid. 1330 Cincinnati, Ohio, EST.	WWAE	7:30 a.m7:30 p.m.
WSAJ	8 a.m11 p.m. 1310 Grove City, Pa.	WWAL	1200 Hammond, Ind., CST. 7 a.m8:30; 11-1 p.m.; 4-11:30
	Silent.	WWJ	920 Detroit, Mich., EST.
WSAN	1440 Allentown, Pa., EST, 5 p.mmid.	WWL	7:30 a.mmid. 850 New Orleans, La., CST.
WSAR	1450 Fall River, Mass., EST. 8 a.m3:30 p.m.; 5-10 p.m.		8 a.m8:30 p.m.
WSAZ	Jou munificon, w. va.	WWNC	7 a.mmid.
	6-9 a.m.; noon-2 p.m.; 4-8:30	WWRL	1500 Woodside, N. Y., EST.
WSB	740 Atlanta, Ga., CST. 6:25 a.m11 p.m.	wwew	8-9 a.m.; 11 a.mnoon; 2-3 p.m.; mid 3 a.m.
WSBC	1210 Chicago, III., CST.		1500 Pittsburgh, Pa., EST. 8 a.m1:30 p.m.; 3-mid.
	10-11:30 a.m.; 1:30-3:30; 5-6; 8-9; 11-mid.	WWVA	1160 Wheeling, W. Va., <i>EST</i> . 7:30 a.mmid.
WSBT	1230 South Bend, Ind., CST. 6-7:30 a.m.; 3-5:30 p.m.	WXYZ	1240 Detroit, Mich., EST. 7:30 a.mmid.
WSEN	1210 Columbus, Ohio, EST. 8 a.m11 p.m.	XEA	1000 Guadalajara, Mex., CST.
WSFA	1410 Montgomery, Ala., CST.	XEAN	11 a.mnoon; 2-3 p.m.; 5-11, 750 Juarez, Mex., MST.
WSIX	6:30 a.m9 p.m. 1210 Springfield, Tenn., CST.	XEAW	9 a.m2 p.m.; 5-11 p.m. 965 Reynosa, Mex.
WSJS	1210 Springfield, Tenn., CST. 6 a.m3 p.m.; 6-9 p.m. 1310 Winston-Salem, N. C.	XEB	1030 Mexico City, Mex., CST.
WSM	8 a.mmid., EST.	XEC	8 a.mmid. 1000 Toluca, Mex.
	7 a.mmid.	XED Xef	1000 Toluca, Mex. 1155 Guadalajara, Mex. 735 Villa Acuna, Mex.
WSMB	7 a.mmid.	XEFA	24 HOURS GREEN.
WSMK	1380 Dayton, Ohio, EST: 7 a.m 8 p.m.; 10 p.mmid.	XEFB	1250 Mexico City, Mex. 1315 Monterrey, Mex., CST.
WSOC	1210 Gastonia, N. C., EST 8 a.m10 p.m.	XEFC XEFD	11 a.m2 p.m.; 6-10 p.m. 1050 Merida, Mex. 1020 Tijuana, Mex.
WSPA	1420 Spartanburg, S. C., EST. 7:30 a.m11 p.m.	XEFE	1000 Larodo Mov
WSPD	1340 Toledo, Ohio, EST.	XEFH XEFI	1360 Mexico City, Mex. 1000 Chihushua, Mex. 1000 Monterrey, Mex.
WSUI	7:30 a.mmid. 880 Iowa City, Iowa, <i>CST</i> .	XEFJ XEFO	340 Mexico City, Mex., CN7.
WSUN	880 Iowa City, Iowa, <i>CST</i> . 9-10 a.m.; 6-7 p.m. 620 St. Petersburg, Fla., <i>EST</i> .	XEFS	2-3 p.m.; 7-11 p.m. 1000 Queretaro, Mex., CST.
wsvs	1370 Buffalo, N, Y., EST.	XEFV	7-11:30 p.m. 1370 Juarez, Mex.
WSYB	8:30 a.m10 a.m.; 2-3 p.m. 1500 Rutland, Vt., EST.	XEFW XEFZ	1240 Tampieo, Mex.
WSYR	10 a.m1 p.m.; 5-9 p.m. 570 Syracuse, N. Y., EST. 7 a.m3 p.m.; 4-11 p.m.		8-11 nm
	7 a.m3 p.m.; 4-11 p.m.	XEG XEH	1132 Monterrey, Mex., CST.
WTAD	1440 Quincy, Ill., CST. 9:30 a.m1 p.m.; 2:30-8 p.m.	ΧEΙ	1075 Mexico City, Mex. 1132 Monterrey, Mex., CST. 9 a.m1:30 p.m.; 6-10 p.m. 1310 Morelia, Mex., CST. 2-3:30 p.m.; 8:30-10:30 p.m.
WTAG	580 Worcester, Mass., EST. 8 a.m11:15 p.m.	XEJ	2-3:30 p.m.; 8:30-10:30 p.m. 1000 Juarez, Mex., CST.
MATW	1070 Cleveland, Ohio, EST. 6:30 a.m1 a.m. next day.	XEK	11 a.m4 p.m.; 6-11 p.m. 990 Mexico City, Mex.
WTAQ	1330 Eau Claire, Wis., CST. 7 a.m8 p.m.	XEL	1000 Saltillo, Mex., CST.
WTAR	780 Norfolk, Va., EST. 7 a.mmid.	XEN	1000 Saltillo, Mex., CST. 11 a.m1 p.m.; 6-9 p.m. 711 Mexico City, CST.
WTAW	1120 College Station, Texas.	XENT	10 a.mnoon; 2-4 p.m.; 7-mid. 1115 Neuvo Laredo, Mex.
WTAX	Silent. 1210 Springfield, Ill., CST.	XEP Xepn	780 Mexico City, Mex. 585 Piedras Negras, Mex.
WTBO	7 a.m11:15, 3-6:45; 8:30-mid.	XER	735 Villa Acuna, Mex. 24 hours daily.
	1420 Cumberland, Md., <i>EST</i> . 7 a.m1:30 p.m.; 2:30-8 p.m.	XES	1055 Tampico, Mex., CST.
WTEL	1310 Philadelphia, Pa., EST. 7-9 a.m.; 11-1 p.m.; 4-9 p.m.		9-10:30 a.m.; noon-2 p.m.; 5-6; 6:30-10 p.m.
WTFI	1450 Athens, Ga., EST. 8 a.m4 p.m.; 6-10 p.m.	XET	690 Monterrey, Mex., CST 9 a.m2 p.m.; 6-10 p.m.
WTIC	1060 Hartford, Conn., EST.	XETA	1140 Mexico City, Mex.
WTJS	7 a.m4 p.m. 1310 Jackson, Tenn., CST.	XETB Xetc	1380 Torreon, Mex. 1000 Jalapa, Mex.
WTMJ	1310 Jackson, Tenn., CST. 7 a.m1 p.m.; 3-10:30 p.m.	XETF	630 Veracruz, Mex., CST. 7-8 a.m.; noon-2 p.m.; 7 p.m.
	620 Milwaukee, Wis., CST. 6:45 a.m12:30 a.m.	v==	mid.
WTOC	1260 Savannah, Ga., EST. 7 a.mmid.	XETH Xetm	840 Puebla, Mex. 845 Matamoros, Mex.

XETR Mexico City, Mex. **XETU** 890 Pachuca Mex. XETW 830 Mexico City, Mex. XEU 1010 Veracruz, Mex., CST. 7-8 a.m.; 10-11 a.m.; noon-3 p.m.; 6-mid. XEW 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. YFI 818,1 Mexico City, Mex. **XFO** 940 Mexico City, Mex. 860 Mexico City, Mex. XFX YV1BC 960 Caracas, Venz. 11 a.m.-1:30 p.m.; 5:45-10:30 n m 10-AB 1200 Moose Jaw, Sask., MST. 5:30-8:30 p.m. 10-AK 1200 Stratford, Ont., EST. 6-8 p.m. 10AT 1158 Trail, B. C., PST. 9 a.m.-2 p.m.; 5-10 p.m. 10-BI 1200 Prince Albert, Sask. Noon-1 p.m.; 6-8 p.m.; 10-mid. MST 1199 Wingham, Ont., EST. 10-BP 9:30-11 p.m. 10-BQ 1200 Brantford, Ont., EST. 6-7 p.m. 10-BU 1200 Canora, Sask.

ADDITIONAL. DX CALENDAR

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

				В	y C	ities			
Call	Megs.	Mtr	City			Call	Megs.	Mtr	City
WPD0 WPED	$\frac{2.458}{1.712}$	121.97	Akron, Ohio.			WPDL WPET	$\frac{2.442}{1.712}$	$122.77 \\ 175.13$	Lansing, Mich. Lexington, Ky.
WPDY	2.414	175.13 124.20	Arlington, Mass. Atlanta, Ga.			KGPL	1.712	175.13	Los Angeles, Calif.
WPDN	2.458	121.97	Auburn, N. Y.			WPDE	$2.442 \\ 2.470$	122.77 121.40	Louisville, Ky. Memphis, Tenn.
KGPS WPEQ	$\frac{2.414}{1.570}$	124.20 191.08	Bakersfield, Calif. Baton Rouge, La.			WPEL	1.570	191.0 8	Middleboro, Mass. Milwaukee, Wis.
KGPJ	1.712	175.13	Beaumont, Texas Berkeley, Calif.			WPDK KGPB	$\frac{2.450}{2.416}$	122.40 124.09	Milwaukee, Wis. Minneapolis, Minn.
*KSW WEY	$\frac{2.422}{1.558}$	$123.79 \\ 192.43$	DOSLOII, IVIASS.			WPFA	1.712	175.13	Newton, Mass.
WPEE	1.712	$175.13 \\ 122.40$	Brookline, Mass.			WPEK WCF	$\frac{2.430}{1.596}$	$123.45 \\ 187.85$	New York, N. Y.
WRDU	$\frac{2.450}{1.596}$	187.85	Brooklyn, N. Y. Brooklyn, N. Y.			WPEG	2.450	122.40	New 10rk, N. 1.
WPEF WMJ	2.450	122.40	Bronx, N. Y.			WPEW KGPH	$\frac{1.570}{2.450}$	191.08 122.40	Northampton, Mass. Oklahoma City, Okla.
KGOZ	$\frac{2.422}{2.470}$	$123.79 \\ 121.40$	Buffalo, N. Y. Cedar Rapids, Iowa			KGPI	2.470	121.40	Omaha, Neb:
KGZF WPDV	$\frac{2.450}{2.458}$	122.40	Chanute, Kans.			WPDJ WPDJ	$\frac{1.712}{2.414}$	175.13 124.20	Pasadena, Calif.
WPEY	2.470	121.97 121.40	Charlotte, N. C. Chattanooga, Tenn.			WPDP	2.470	121.40 175. <u>1</u> 3	Passaic, N. J. Philadelphia, Pa.
WPDB WPDC	$\frac{1.712}{1.712}$	175.13	Chicago, Ill.			WPDU KGPP	$\frac{1.712}{2.442}$	$175.13 \\ 122.77$	Pittsburgh, Pa. Portland, Ore.
WPDD	1.712	175.13 175.13	Chicago, Ill. Chicago, Ill.			WPEI	1.712	175.13	Providence, R.I.
WKDU WRDH	$\frac{1.712}{2.458}$	175.13	Cincinnati, Ohio			WPDH WPDR	$\frac{2.442}{2.458}$	122.77 121.97	Richmond, Ind.
WPDI	2.430	121.97 123.45	Cleveland, Ohio Columbus, Ohio			WPES	2.442	122.77	Richmond, Ind. Rochester, N. Y. Saginaw, Mich.
KVP KGPN	$\frac{1.712}{2.470}$	175.13	Dallas, Texas			KGPC WPDS	$\frac{1.712}{2.146}$	175.13 124.09	St. Louis, Mo.
WPDM	2.430	121.40 123.45	Davenport, Iowa Dayton, Ohio			KGPW	2.470	121.40	St. Paul, Minn. Salt Lake City San Antonio, Texas
KGPX KGZG	$\frac{2.442}{2.470}$	122.77	Denver, Colo.			KGZE KGZD	$\frac{2.506}{2.430}$	$119.64 \\ 123.45$	San Antonio, Texas San Diego, Calif.
WCK	2.414	$121.40 \\ 121.20$	Des Moines, Iowa Detroit, Mich.			KGPD	1.558	192.43	San Francisco, Calif.
WKDT WPDX	1.596	187.85	Detroit, Mich. Detroit, Mich.			KGPD KGPM	$\frac{2.470}{2.470}$	121.40 121.40	San Francisco, Calif.
WRDS	$\frac{2.414}{1.574}$	124.20 190.48	Detroit, Mich. East Lansing, Mich.			KGPA KGPY	2.414	124.20	San Jose, Calif. Seattle, Wash.
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. Sioux City, Iowa
KGPR	1.712	175.13	Flint, Mich. Fort Wayne, Ind. Fort Worth, Texas			WPEH	1.712	175.13	Somerville, Mass.
WMP KGZA	$\frac{1.574}{2.414}$	190.48	rramingnam, Mass.			WPEA	2.458	121.97	Syracuse, N. Y.
WPEB	2.442	$^{124.20}_{122.77}$	Fresno, Calif. Grand Rapids, Mich.			WRDQ KGZC	$\frac{2.470}{2.422}$	121.40 123.79	Toledo, Ohio Topeka, Kans.
WRDR WMO	$2.414 \\ 2.414$	$124.20 \\ 124.20$	Grosse Pt., Mich. Highland Park, Mich			WPDA	2.414	124.20	Tulare, Calif.
KGPQ	2.450	122.40	Honolulu, Hawaii			KGPO	2.450	122.40	Tulsa, Okla. Vallejo, Calif.
KGZB ₩MDZ	$\frac{1.712}{2.442}$	$175.13 \\ 122.77$	Honolulu, Hawaii Houston, Texas Indianapolis, Ind.			KGPG WPDW	$2.422 \\ 2.422$	123.79 123.79	Washington, D. C.
KGPE	2.422	123.79	Kansas City, Mo.			KGPZ	2.450	122.40	Wichita, Kans.
KGZH WPDT	$\frac{2.442}{2.470}$	122.77 121.40	Klamath Falls, Ore. Kokomo, Ind.			KGZI WPEM	$\frac{1.712}{2.470}$	175.13 121.40	Wichita Falls, Texas Woonsocket, R. I.
WILL	2.770	121.40	Nokomo, ma.	D 0	. ,,	_		121.40	Woolbooker, It. 1.
€ all	Megs.	Mtr	City	By C	all	Letter Call	S Megs.	Mtr	City
KGJX	1.712	175.13	Pasadena, Calif.			KGZD	2.430	123.45	San Diego, Calif.
₭GOZ	2.470	121.40	Cedar Rapids, Iowa			KGZE	2.506	119.64	San Antonio, Texas
KGPA KGPB	2.414	124.20 124.09	Seattle, Wash. Minneapolis, Minn.			KGZF KGZG	$\frac{2.450}{2.470}$	122.40 121.40	Chanute, Kans. Des Moines, Iowa
KGPC	$\frac{2.416}{1.712}$	175.13	St. Louis, Mo.			KGZH	2.442	122.77	Klamath Falls, Ore. Wichita Falls, Texas
KGPD KGPD	1.558 2.470	192.43 121.40	San Francisco, Calif. San Francsico, Calif.			KGZI KSW	$\frac{1.712}{2.422}$	175.13 123.79	Wichita Falls, Texas Berkeley Calif.
KGPE	2.422	123.79	Kansas City, Mo. Vallejo, Calif.			KVP	1.712	175.13	Berkeley, Calif. Dallas, Texas
KGPG KGPH	$\frac{2.422}{2.450}$	123.79 122.40	Vallejo, Calit. Oklahoma City, Okla.			WCF WCK	$\frac{1.596}{2.414}$	$187.85 \\ 124.20$	New YORK N Y.
KGPI	2.470	121.40	Omaha, Neb.			WEY	1.558	192.43	Detroit, Mich. Boston, Mass. Detroit, Mich.
KGPJ KGPK	$\frac{1.712}{2.470}$	175.13 121.40	Beaumont, Texas Sioux City, Iowa			WKDT	$\frac{1.596}{1.712}$	187.85 175.13	Cincinnati, Ohio
KGPL	1.712	175.13	Los Angeles, Calif.			WMDZ	2.442	122.77	Indianapolis, Ind.
KGPM KGPN	$\frac{2.470}{2.470}$	121.40 121.40	San Jose, Calif. Davenport, Iowa			WM0	$\frac{2.422}{2.414}$	$123.79 \\ 124.20$	Buffalo, N. Y. Highland Park, Mich.
KGPO	2.450	122.40	Tulsa, Okla.			WMP	1.574	190.48	Framingham, Mass.
KGPP KGPQ	2.442 2.450	122.77 122.40	Portland, Ore. Honolulu, Hawaii			WPDA WPDB	$\frac{2.414}{1.712}$	124.20 175.13	Tulare, Calif. Chicago, Ill.
KGPR	1.712	175.13	Fort Worth, Texas			WPDC	1.712	175.13	Chicago, Ill. Chicago, Ill.
KGPS KGPW	$\frac{2.414}{2.470}$	$124.20 \\ 121.40$	Fort Worth, Texas Bakersfield, Calif. Salt Lake City, Utah			WPDD WPDE	$\frac{1.712}{2.442}$	175.13 122.77	Chicago, III. Louisville, Ky.
KGPX	2.442	122.77	Denver, Colo.			WPDF	2.442	122.77	Flint, Mich.
KGPY KGPZ	$\frac{1.574}{2.450}$	190.48 122.40	Shreveport, La. Wichita, Kans.			WPDH WPDI	$\frac{2.442}{2.430}$	122.77 123.45	Richmond, Ind. Columbus, Ohio
KGZA KGZB	2.414	124.20	Wichita, Kans. Fresno, Calif.			WPDJ WPDK	2.414	124.20	Columbus, Ohio Passaic, N. J.
KGZB	$\frac{1.712}{2.422}$	175.13 123.79	Houston, Texas Topeka, Kans.			WPDK	$\frac{2.450}{2.442}$	122.40 122.77	Milwaukee, Wis. Lansing, Mich.
						_			J.

Call	Megs.	Mtr	City		Call	Megs.	Mtr	City
WPDM	2.430	123,45	Dayton, Oh	i.	WPEG	2.450	122.40	New York, N. Y.
WPDN		121.97	Auburn, N.		WPEH	1.712	175.13	Somerville, Mass.
WPDO		121.97	Akron, Ohio		WPEI	1.712	175.13	
WPDP		121.40			WPEJ			Providence, R. I.
WPDR	2.470		Philadelphia			1.712	175.13	Brookline, Mass.
		121.97	Rochester,		WPEK	2.430	123.45	New Orleans, La.
WPDS	2.416	124.09	St. Paul, M		WPEL	1.570	191.08	Middleboro, Mass.
WPDT	2.470	121.40	Kokomo, lr		WPEM	2.470	121.40	Woonsocket, R. I.
WPDU	1.712	175.13	Pittsburgh,		WPEQ	1.570	191.08	Baton Rouge, La.
WPDV	2.458	121.97	Charlotte, 1		WPES	2.442	122.77	Saginaw, Mich.
WPDW		123.79	Washington		WPET	1.712	175.13	Lexington, Ky.
WPDX		124.20	Detroit, Mi		WPEW	1.570	191.08	Northampton, Mass.
WPDY		124.20	Atlanta, Ga		WPEY	2.470	121.40	Chattanooga, Tenn.
WPDZ		121.40	Fort Wayne		WPFA	1.712	175.13	Newton, Mass.
WPEA		121.97	Syracuse, N		WRDH	2.458	121.97	Cleveland, Ohio
WPEB		122.77	Grand Rapi	ds, Mich	WRDQ	2.470	121.40	Toledo, Ohio
WPEC		121.40	Memphis, T	enn.	WROR	2.414	124.20	Grosse Pointe, Mich.
WPED		175.13	Arlington, M	Aass.	WRDS	1.574	190.48	E. Lansing, Mich.
WPEE	2.450	122.40	Brooklyn, N	I. Y.	WRDU	1.596	187.85	Brooklyn, N. Y.
WPEF	2.450	122.40	Bronx, N. Y					
					By Frequencies	3		
	BY FRI	EOUENC	IES	2.414		3	2450	meas. 122.40 meters
1,558		EQUENC			megs. 124.20 meters	3		megs. 122.40 meters Oklahoma City Okla
	megs.	192.43 m	eters	KGPA	megs. 124.20 meters Seattle, Wash.	3	KGPH	Oklahoma City, Okla.
KGPD	San Fr	1 92.43 m incisco, C	eters	KGPA KGPS	megs. 124.20 meters Seattle, Wash. Bakersfield, Calif.	3	KGPH KGPD	Oklahoma City, Okla. Tulsa, Okla.
KGPD WEY	San Fr: Boston	19 2.43 m incisco, C , Mass.	eters Calif.	KGPA KGPS KGZA	megs. 124.20 meters Seattle, Wash. Bakersfield, Calif. Fresno, Calif.	3	KGPH KGPD KGPQ	Oklahoma City, Okla. Tulsa, Okla. Honolulu. Hawaii
KGPD WEY 1.570	San Fr. Boston, megs.	192.43 m incisco, C , Mass. 191.08 m	eters Calif. eters	KGPA KGPS KGZA WCK	megs. 124.20 meters Seattle, Wash. Bakersfield, Calif. Fresno, Calif. Detroit, Mich.		KGPH KGPD KGPQ KGPI	Oklahoma City, Okla. Tulsa, Okla. Honolulu. Hawaii Wichita, Kans.
KGPD WEY 1.570 WPEL	San Fr: Boston, megs. Middle	192.43 me ancisco, C , Mass. 191.08 me boro, Ma	eters Calif. eters ss.	KGPA KGPS KGZA WCK WMD	megs. 124.20 meters Seattle, Wash. Bakersfield, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich.		KGPH KGPD KGPQ KGPZ KGZF	Oklahoma City, Okla. Tulsa, Okla. Honolulu. Hawaii Wichita, Kans. Chanute, Kans.
KGPD WEY 1.570 WPEL WPEQ	San Fr. Boston megs. Middle Baton	192.43 me incisco, C , Mass. 191.08 me boro, Ma Rouge, La	eters Calif. eters ss. 3.	KGPA KGPS KGZA WCK WMD WPDA	megs. 124.20 meters Seattle, Wash. Bakersfield, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif.		KGPH KGPD KGPQ KGPI KGIF WPDK	Oklahoma City, Okla. Tulsa, Okla. Honolulu, Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis.
KGPD WEY 1.570 WPEL WPEQ WPEW	San Fra Boston megs. Middle Baton l Northa	192.43 me incisco, C , Mass. 191.08 me boro, Mas Rouge, La moton, M	eters Calif. eters ss. a. Jass.	KGPA KGPS KGZA WCK WMD WPDA WPDJ	megs. 124.20 meters Seattle, Wash. Bakersfiel!, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passuc, N. J.		KGPH KGPD KGPZ KGZF WPDK WPEE	Oklahoma City, Okla. Tulsa, Okla. Honolulu, Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y.
KGPD WEY 1.570 WPEL WPEQ WPEW 1.574	San Fr: Boston megs. Middle Baton Northa megs.	192.43 meiseo, C , Mass. 191.08 me boro, Ma Rouge, La moton, M 190.48 me	eters Calif. eters ss. a. Jass.	KGPA KGPS KGZA WCK WMD WPDA WPDJ WPDX	megs. 124.20 meters Seattle, Wash. Bakersfielt, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich.		KGPH KGPD KGPZ KGPZ KGZF WPDK WPEE WPEE	Oklahoma City, Okla. Tulsa, Okla. Honolulu, Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y.
KGPD WEY 1.570 WPEL WPEQ WPEW 1.574 KGPY	megs. San Fr: Boston, megs. Middle Baton l Northa megs. Shreve;	192.43 me ancisco, C , Mass. 191.08 me boro, Ma Rouge, La moton, M 190.48 me port, La.	eters Calif. eters ss. 1. Iass. eters	KGPA KGPS KGZA WCK WMD WPDA WPDJ WPDX WPDX	megs. 124.20 meters Seattle, Wash. Bakersfield, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich. Atlanta, Ga.		KGPH KGPD KGPZ KGZF WPDK WPEE WPEF WPEG	Oklahoma City, Okla. Tulsa, Okla. Honolulu, Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y.
KGPD WEY 1.570 WPEL WPEQ WPEW 1.574 KGPY	megs. San Fr: Boston, megs. Middle Baton l Northa megs. Shrever Framin	192.43 me ancisco, C , Mass. 191.08 me boro, Ma Rouge, La moton, M 190.48 me bort, La. gham, M	eters Calif. eters ss. A. fass. eters ass.	KGPA KGPS KGZA WCK WMD WPDA WPDJ WPDX WPDX WPDY WRDR	megs. 124.20 meters Seattle, Wash. Bakersfielt, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich. Atlanta, Ga. Grosse Pointe, Mich.		KGPH KGPD KGPZ KGZF WPDK WPEE WPEF WPEG 2,458	Oklahoma City, Okla. Tulsa, Okla. Honolulu, Hawaii Wiehita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y. megs. 121.97 meters
KGPD WEY 1.570 WPEL WPEQ 1.574 KGPY WRDS	megs. San Fr: Boston, megs. Middle Baton Northa megs. Shreve; Framin E. Lans	192.43 maincisco, C , Mass. 191.08 maincisco, Mai Boro, Mai Rouge, Li muton, M 190.48 maincisco port, La. gham, M sing, Micl	eters Calif. eters ss. a. Mass. eters ass. h.	KGPA KGPS KGZA WCK WMD WPDA WPDJ WPDX WPDX WPDY WRDR 2.416	megs. 124.20 meters Seattle, Wash. Bakersfield, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich. Atlanta, Ga. Grosse Pointe, Mich. megs. 124.09 meters		KGPH KGPD KGPZ KGZF WPDK WPEE WPEF WPEG 2,458 WPDN	Oktahoma City, Okla. Tulsa, Okla. Honolulu. Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y. megs. 121.97 meters Auburn, N. Y.
KGPD WEY 1.570 WPEL WPEQ 1.574 KGPY WMP WRDS 1.596	megs. San Fr: Boston, megs. Middle Baton Northa megs. Shreve; Framin E. Lans megs.	192.43 maincisco, C , Mass. 191.08 maincisco, Maincisco, Maincisco, Maincisco, Maincisco, Maincisco, Maincisco, Maincisco, Maincisco, Michael 187.85 maincisco, Cartes and Maincisco, Michael 187.85 maincisco, Michael 187.85 maincisco, Michael 187.85 maincisco, Michael 187.85 maincisco, Massing, Massing, Michael 187.85 maincisco, Massing, Michael 187.85 maincisco, Massing, Massing, Michael 187.85 maincisco, Massing, Massin	eters Dalif. eters ss. a. flass. eters eters	KGPA KGPS KGZA WCK WMD WPDA WPDX WPDX WPDX WRDR 2.416 KGPB	megs. 124.20 meters Seattle, Wash. Bakersfielt, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich. Atlanta, Ga. Grosse Pointe, Mich. megs. 124.09 meters Minneapolis, Minn.		KGPH KGPD KGPZ KGZF WPDK WPEF WPEF WPEG 2.458 WPDN WPDD	Oklahoma City, Okla. Tulsa, Okla. Honolulu, Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y. megs. 121.97 meters Auburn, N. Y. Akron, Ohio
KGPD WEY 1.570 WPEL WPEQ WPEW 1.574 KGPY WMP WRDS 1.596 WCF	megs. San Fr: Boston, megs. Middle Baton Northa megs. Shrever Framin E. Lans megs. New Yo	192.43 mancisco, C Mass. 191.08 ma boro, Mar Rouge, Lampton, N 190.48 ma oort, La. gham, M ing, Miel 187.85 ma ork, N. Y	eters Dalif. eters ss. a. flass. eters eters	KGPA KGPS KGZA 	megs. 124.20 meters Seattle, Wash. Bakersfield, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich. Atlanta, Ga. Grosse Pointe, Mich. megs. 124.09 meters Minneapolis, Minn. St. Paul, Minn.		KGPH KGPD KGPZ KGZIF WPDK WPEE WPEF WPEG 2,458 WPDN WPDN WPDN	Oklahoma City, Okla. Tulsa, Okla. Husa, Okla. Husa, Okla. Honolulu. Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y. Megs. 121.97 meters Auburn, N. Y. Akron, Ohio Rochester, N. Y.
KGPD WEY 1.570 WPEL WPEW 1.574 KGPY WMP WRDS 1.596 WCF WKDT	megs. San Fr: Boston, megs. Middle Baton Northa megs. Shreve; Framin E. Lans megs. New Yo	192.43 maincisco, C , Mass. 191.08 ma Booro, Mai Rouge, Le moton, M 190.48 maince gham, M sing, Miel 187.85 maince ork, N. Y	eters Dalif. eters SS. SS. Jan	KGPA KGPS KGZA WCK WMD WPDA WPDJ WPDJ WPDY WRDR 2.416 KGPB WPDS 2.422	megs. 124.20 meters Seattle, Wash. Bakersfiel I, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich. Atlanta, Ga. Grosse Pointe, Mich. megs. 124.09 meters Minneapolis, Minn. St. Paul, Minn. megs. 123.79 meters		KGPH KGPD KGPZ KGZF WPEE WPEF WPEG 2.458 WPDN WPDN WPDN WPDN	Oklahoma City, Okla. Tulsa, Okla. Honolulu. Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y. Megs. 121.97 meters Auburn, N. Y. Akron, Ohio Rochester, N. Y. Charlotte, N. C.
KGPD WEY 1.570 WPEL WPEQ WPEW 1.574 WMP WRDS 1.596 WCF WKDT WRDU	megs. San Fr: Boston, megs. Middle Baton Northa megs. Shreve; Framin E. Lans megs. New Yo Detroit Brookly	192.43 maincisco, Consideration of the consideratio	eters calif. eters ss. a. fass. eters ass. h. eters	KGPA KGPS KGZA WCK WMD WPDA WPDJ WPDY WRDR 2.416 KGPB WPDS 2.422 KGPE	megs. 124.20 meters Seattle, Wash. Bakersfielt, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich. Atlanta, Ga. Grosse Pointe, Mich. megs. 124.09 meters Minneapolis, Minn. St. Paul, Minn. megs. 123.79 meters Kansas City, Mo.		KGPH KGPD KGPPZ KGZF WPDK WPEE WPEG 2.458 WPDN WPDD WPDD WPDR WPDR	Oklahoma City, Okla. Tulsa, Okla. Tulsa, Okla. Honolulu. Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y. Mew York, N. Y. Akron, Ohio Rochester, N. Y. Charlotte, N. C. Syracuse, N. Y.
KGPD WEY 1.570 WPEL WPEQ WPEW 1.574 KGPY WMP WRDS 1.596 WCF WKDT WRDU 1.712	megs. San Fr. Boston, megs. Middle Baton Northa megs. Shreve; Framin E. Lans megs. New Y Detroit Brookly megs.	192.43 mm neiseo, C., Mass. 191.08 mm boro, Ma. Rouge, Le motor, La. gham, Miel 187.85 mm ork, N. Y., Mich. 70, N. Y.	eters Dalif. eters SS. 3. 4fass. eters ass. h. eters	KGPA KGPS KGZA 	megs. 124.20 meters Seattle, Wash. Bakersfield, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich. Atlanta, Ga. Grosse Pointe, Mich. megs. 124.09 meters Minneapolis, Minn. St. Paul, Minn. megs. 123.79 meters Kansas City, Mo. Vallejo, Calif.		KGPH KGPD KGPZ KGZF WPDK WPEE WPEF WPDN WPDD WPDD WPDN WPDN WPDN WPDN WPDN	Oktahoma City, Okla. Tulsa, Okla. Tulsa, Okla. Honolulu. Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y. Megs. 121,97 meters Auburn, N. Y. Akron, Ohio Rochester, N. Y. Charlotte, N. C. Syraeuse, N. Y. Cleveland, Ohio
KGPD WEY 1.570 WPEL WPEQ WPEW 1.574 WMP WRDS 1.596 WCF WKDT WRDU	megs. San Fr. Boston, megs. Middle Baton Northa megs. Shreve; Framin E. Lans megs. New Y Detroit Brookly megs.	192.43 mm neisco, C, Mass. 191.08 mm boro, Ma Rouge, L' mpton, M 190.48 mm oort, La. gham, M sing, Miel 187.85 mm ork, N. Y, Mieh. n, N. Y. 175.13 mm aa, Calif.	eters Dalif. eters SS. 3. 4fass. eters ass. h. eters	KGPA KGPS KGZA WCK WMD WPDA WPDJ WPDY WRDR 2.416 KGPB WPDS 2.422 KGPE	megs. 124.20 meters Seattle, Wash. Bakersfielt, Calif. Fresno, Calif. Detroit, Mich. Highland Park, Mich. Tulare, Calif. Passaic, N. J. Detroit, Mich. Atlanta, Ga. Grosse Pointe, Mich. megs. 124.09 meters Minneapolis, Minn. St. Paul, Minn. megs. 123.79 meters Kansas City, Mo.		KGPH KGPD KGPZ KGZF WPDK WPEE WPEF WPDN WPDD WPDD WPDN WPDN WPDN WPDN WPDN	Oklahoma City, Okla. Tulsa, Okla. Tulsa, Okla. Honolulu. Hawaii Wichita, Kans. Chanute, Kans. Milwaukee, Wis. Brooklyn, N. Y. Bronx, N. Y. New York, N. Y. Mew York, N. Y. Akron, Ohio Rochester, N. Y. Charlotte, N. C. Syracuse, N. Y.

WMJ

WPDW

KGZD

WPDI

-WPDM

WPEK

KGPP

KGPX

KGZH

WMDZ

WPDE

WPDF

WPDH

WPDL

WPEB

WPES

Time on the Air of European Broadcasters

Grand Rapids, Mich.

Berkeley, Calif. Buffalo, N. Y.

2,430 megs. 123,45 meters

Dayton, Ohio

2,442 megs. 122,77 meters

Portland, Ore. Denver, Colo.

Louisville, Ky.

Richmond, Ind.

Lansing, Mich.

Saginaw, Mich.

Flint, Mich

Washington, D. C.

San Diego, Calif. Columbus, Ohio

New Orleans, La

Klamath Falls, Ore.

Indi mapolis, Ind.

'N THE January issue we gave a quite complete list of the Eurobean 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.

KGPJ

KGPL

KGPR

KGZB

KGZI

-WKDU

WPDB

₩PDC

WPDD

WPDU

WPED

WPEH

WPEI

WPEJ

WPET

LYK

IEPFA

KVP

Beaumont, Texas

Dallas, Texas

Chicago, Ill. Chicago, Ill. Chicago, Ill.

Cincinnati, Ohio

Pittsburgh, Pa. Arlington, Mass.

Somerville, Mass.

Providence, R. I.

Brookline, Mass.

Lexington, Ky.

Newton, Mass.

Los Angeles, Calif.

Fort Worth, Texas

Houston, Texas Wichita Falls, Texas

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.

KGPD

KGPI

KGPK

KGPM

KGPN

KGPW

KGZG

WPDP

WPDT

WPDZ

WPEC

WPEM

WPEY

WRDQ 2,506 megs.

KGZE

San Francisco, Calif. Omaha, Neb. Sioux City, Iowa San Jose, Calif.

Davenport, Iowa Silt Lake City, Utah

Des Moines, Iowa

Philadelphia, Pa.

Fort Wayne, Ind. Memphis, Tenn.

Woonsocket, R. I.

Chattanooga, Tenn.

Toledo, Ohio 1eas. 119,64 meters

San Antonio, Texas

Kokomo, Ind.

				Sunda	ıy	Week Day	
Keys.	City	Country	POWER	A.M.	P.M.	A.M.	?.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
		Belgium	15,000	7:00	6:00	As Sunday	0.00
590	Brussels						
599	Florence	Italy	20,000	3.45	5:30	As Sunday	
614	Prague	Czechoslovakia	120,000	12:15	5:30	As Sunday	
625	Manchester	England	50,000	7:30	5:00	5:15	6:30
635	Langenberg	Germany	60,000	1:00	6:00	As Sunday	
644	Lyons	France	1,500	3:00	5:30	As Sunday	
653	Beromunster	Switzerland	60,000	4:00	6:00	6:30	5:00
			50,000	4:15	5:00	2:15	5:00
680	Rome	Italy				1:20	5:00
689	Stockholm	Sweden	55,000	4:00	5:00		9:00
697	Belgrade	Yugoslovia	2,800	5:00	5:00	As Sunday	
707	Madrid	Spain	2,000			ex. Monday	
715	Berlin	Germany	1,500	12:15	6:30	As Sunday	
725	Dublin	Ireland	1,200	3:30	6:00	8:30	5:30
734	Katowice	Poland	16,000	4:00	5:30	As Sunday	
743		Switzerland	25,000	3:30	4:15	6:30	4:15
	Sottens			7:30	5:30	5:15	6:30
752	Midland Regional	England	25,000				
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
		Finland	10,000	1:40	3:00	5:00	3:00
815	Helsinki		13.000	6:30	6:00	7:00	6:00
825	Algiers	North Africa					0.00
832	Stuttgart	Germany	60,000	12:01	6:00	As Sunday	= 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	As Sunday	
		Belgium	15,000	7:00	6:00	As Sunday	
887	Brussels			3:40	5:00	2:15	5:00
905	Milan	Italy	60,000				
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	
		England	50,000	5:30	5:30	5:15	7:00
995	Manchester			3:15	6:45	2:45	6:45
1013	Hilversum	Holland	20,000				
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
	Morayska-Ostraya	Czechoslovakia	11,000	12:01	5:30	12:15	5:30
1137					5:30	5:15	7:00
1147	London	England	50,000	5:30			
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	
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
	Cork	Ireland	1.000	3:35	6:00	8:00	5:30
1337	COLK			7:00	10:00	As Sunday	5.00
1345	Fe Camp	France	10,000	1:00	10:00	as sunday	

Week Days

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	PK3AN	Surabaya, Java	54.00		PK3AN	Surabaya, Java	54.00
1.00-3.00	VK2ME	Sydney, Australia	31.28			Sydney, Australia	
3.00-5.00		Johannesburg, S. A	43.50			.Rabat, Morocco	
4.40 - 5.00						Sydney, Australia	
5.00 - 5.30	HVJ	Vatican City, Italy	50.26			Pontoise, France	
5.00-6.00	PK3AN	Surabaya, Java	54.00		DIH	Nauen, Germany	15.03
	JB	Johannesburg, S. A				Kuala Lampur, Malay	50.00
	VK2ME				CNR	Rabat. Morocco	23.38
	RV59	Moscow, U. S. S. R.	50.00	9.00-10.00		Pontoise, France	19.68
6.00 - 7.00	PK3AN					Johannesburg, S. A	
		Johannesburg, S. A				Pontoise, France	
	VK2ME	Sydney, Australia	31.28	10.30-11.00	CT3AQ	Funchal, Madeira Is	26.83

11.00 Noon	TI4NRH VQ7L0	Heredia, C. R. 19.90 Nairobi, Kenya 49.48		REN	Rabat, Morocco Moscow, U. S. S. R	
	VE9CI	London, Canada 109.62		VE9GW	Bowmanville, Ont	49.22
		Johannesburg, S. A 43.50		VE9CS	Vancouver, B. C	49.42
11 00 37	CT3AQ	Funchal, Madeira Is 26.83		YV1BC 12RO	Caracas, Venezula	49.00
11.30 Noon		Pontoise, France 25.20	4.30- 5.00	EAR58	Rome, Italy	25.40
		PM	4.30- 3.00	LANJO	Is	41 80
Noon 1-00		Pontoise, France 25.20	5.00-5.30		Rabat, Morocco	32.32
2	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
	V E9CI	London, Canada 109.62		HBP	.Geneva, Switzerland	
1.00-2.00	REN	Moscow, U. S. S. R 45.38	5.00~ 6.00	EADEO.	Pontoise, France	25.60
	VE9GW VE9CS	Bowmanville, Ont 49.22		EAR58	Santa Cruz de T., Canary	41 60
	VQ7LO	Vancouver, B. C		O XY	Is	
	VE9CI	London, Canada 109.62		REN	Moscow, U. S. S. R.	45 38
	FIUI	Tananarive, Madag 52.70		VE9GW	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	
	REN	Moscow, U. S. S. R 45.38	5.30-6.00	EAQ	Madrid, Spain	
	VE9GW	Bowmanville, Ont 49.22	6.00- 6.30	OXY	Skamlebark, Denmark	
	VE9CS VQ7LO	Vancouver, B. C	6.00- 7.00	EAQ	Pontoise, France	
	FIUI	Tananarive, Madag 52,70		VE9GW	Bowmanville, Ont	
2.30-3.00	12RO	Rome, Italy		VE9CS	Vancouer, B. C.	
3.00- 3.30	VQ7L0	Nairobi, Kenya 49.48		YV1BC	Caracas, Venezuela	49.00
3.00-4.00	0 XY	Skamlebark, Denmark 31.51		VE9HX	Halifax, Nova Scotia	49.59
	1197351	Rabat, Morocco 32.32		HK0	Medellin, Colombia	50.60
	REN	Moscow, U. S. S. R 45.38	7.00-8.00	VE9CS		49.42
	VE9GW VE9CS	Bowmanville, Ont. 49.22		YV1BC HKO	Caracas, Venezuela	
	12RO	Vancouver, B. C	8.00-10.00	HKD	Medellin, Colombia Barranguilla, Colombia	
	PCM	Hague, Holland 46.69	0.00-10.00	VE9CS	Vancouver, B. C	
4.00-5.00		Pontoise, France 25.60		YVIBC	Caracas, Venezuela	
2.00 0.00	OXY	Skamlebark, Denmark 31.51	10.00-12.00	VE9CS	Vancouver, B. C	

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.

3.998	75.00	HCJB Quito, Ecuador, 7:30-9:45 a.m. B	6.060	49.48	W8XAL Cincinnati, O. Relays WLW 6-10;
4.174	71.82	British Ships P	0.000	10.10	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	0.010	40.00	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
		VE9BY London, Ontario, Sat. midn1 a.m.	6.090		VE9BJ St. John, N. B., 5 p.m, and 11 p.m.
4.792	62.56	B	0.090	48.20	B
4.975	60.27	GBC Rugby, England. Phones ships irregu-	6.095	49.18	W9XF Chicago, Ill., 4:30-8 p.m.; 9:30 p.m
		iarly P			2 a.m. B
5.045	59.42	VRT-ZFA Hamilton, Bermuda. Phones	6.096	49.17	W3XAL Boundbrook, N. J., Sat. 4:30 p.m
		WNB-GMBJ nights P			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	6.125	48.95	YV11BMO Maracaibo, Venz., 8-11 p.m. B
5.879	51.00	XDA Mexico City. Tests XAM 10 a.m.	6.140	48.83	W8XK Pittsburgh, Pa. Relays KDKA 4-11
		8 p.m. irreg. P			p.m. B
5.925	50.60	HKO Medellin, Colombia, TuesThur	6.335	47.35	VE9AP Drummondville, Que. B
		Sat. 8-10 p.mSun. 6-8 p.m. B	6.386	46.96	W3XL Boundbrook, N. J. Experimental B
5.968	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
		a.m. B			p.m.; Fri. 7-8 p.m.; Sat, 8-11 p.m. B
5.996	50.00	HKD Barranguilla, Col., 8-10 p.m. B	6.611	45.35	TGW Guatamala City, TuesThurFrl.
6.005	49.93	VE9DR Drummondville, Que., 7 p.m			10:30 p.mmid. B
		mid. B	6.618	45.31	PRADO Riobamba, Ecuador, Thur. 9-11
6.036	49.67	W4XB Miami, Fla. Reported 5-11 p.m. B			p.m. B
6.050	49.56	GSA Daventry, England. To Canada 8-10	6.648	45.10	IAC, Coltano, Italy, Testing irregularly P
•	417, 9	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			WEJ P
6.060	49.48	VQ7LO Nairobi, Kenya, 11 a.m3:30 p.m.;	6.888	43.54	KEQ Kahuku, Hawaii. Phones California
		Tues. 3-4 a.m.; Thur. 8-9 a.m. B			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. CM5RY Matanzas, Cuba, Sat. 10:45-11:30	11.872	25.25	11:30 a.m. B W8XK Pittsburgh, Pa. Relays KDKA
7.518	39.89	p.m. KDK-KKH Kahuku, Hawaii, 9 p.m. and	11.898	25.20	4-10 p.m. B Pontoise, France, 11:30 a.m2:30 p.m. B F/S Saigon Indo-China 9-10 a.m.
7.610	39.40	2 a.m. P HJ3ABF Bogota, Colombia, 7 p.m11 p.m.	12.000 12.592	24.98 23.81	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 CNP Robot Morocco Sup. 7:20 a m
8.180	36.65	PSK Rio de Janeiro, Brazil. Reported working WOK	12.820	23.38	CNR Rabat, Morocco, Sun. 7:30 a.m 9 a.m. B German Ships P
8.328	36.00	ing WOK DAN Norden, Germany German Ships P	13.035 13.074	$\frac{23.00}{22.93}$	German Ships P J1AA Kemikawa-Cho, Japan. Phones, ex- perimental P
8.328 8.566	36.00 35.00	Italian Ships P	13.219	22.68	British Ships P
8.645	34.68	VE9BY London. Ontario Mon. 3-4 p.m. b	13.278	22.58	YVQ Maracay, Venezuela P
8,831	33.95	British phips P	13.296	22.55	CGA Drummondville, Que., 9 a.m2 p.m. P GBB Rugby, England. Talks Canada day-
8.950	33.50	TGX Guatamala City, Sat. 10 p.mmid. B KEJ, Bolinas, Calif. Tests irregularly P	13.500	22.09	GBB Rugby, England, Talks Canada day-
9.012	33.27	KEJ, Bolinas, Calif. Tests irregularly P	10.010	01.70	times.
9.276	32.32	CNR Rabat, Morocco, Sun. 3 p.m6 p.m. B	13.816 14.450	21.76	SUZ Cairo, Egypt, 7 a.m. and 3:30 p.m. P GBW Rugby, England, 6 a.m. and 6 p.m. P
9.480	31.63	PLW Bandoeng, Java. Phones Australia 3-8 a.m. irreg. P	14.485	$20.75 \\ 20.60$	GBW Rugby, England, 6 a.m. and 6 p.m. P 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
0.000	01.00	a.m.; Sat. 5-7 a.m. B	14.760	20.32	HJB Bogota, Colombia 11 a.m5 p.m. P
9.510	31.53	GSB Daventry, England. To Canada 8-10	14.796	20.27	WMB Miami, Fla., 1-5 p.m. P
	3 3		15.066	19.90	TI4NRH Heredia, Costa Rica, SatSun.
9.520	31.49	D.m. B OXY Skamleback, Denmark, 2-6:30 p.m. B			11-noon B
9.530	31.46	WZAAr Schenectady, N. 1., 5:15-11 p.m.;	15.120	19.83	HVJ Vatican City, 5-5:15 a.m. B
9.552	31,38	SatSun., 4-11 p.m. B	15.140 15.190	19.81 19.73	GSF Daventry, England B DJB Zeesen, Germany, 8 a.mnoon B
9.552	31.36	DJA Zeecen, Germany, 2 p.m6:30 p.m. B W1XAZ Springfield Mass. 4 p.m12:30	15.190	19.73	DJB Zeesen, Germany, 8 a.mnoon B W8XX Pittsburgh, Pa. Relays KDKA
9.000	31.00	a.m. B	10.201	10.12	9 a.m4 p.m. B
9.570 9.580	$\frac{31.33}{31.30}$	SRI Poznan, Poland, Tues. 6 a.m8 a.m. B HBL Geneva, Switzerland, Sun. 5-5:45 p.m. B	15.234 15.320	19.68 19.57	Pontoise, France, 8 a.m11 a.m. W2XAD Schenectady N. Y. Daily 1-3 p.m.; SatSun. to 4
9.585	31.28	GSC Daventry, England B	15.410	19.46	KWO Dixon. Calif. Phones Hawaii 2-7 p.m.
9.585	31.28	VK2ME Sydney, Australia. Sun. 1-2 a.m.;			P
0.500	21.05	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 p.m.	16.150	18.56	perimental P GBX Rugby, England, 4 p.m. and 11 p.m. P
9.670	31.00	TI4NRH Heredia, Costa Rica, week days	16.601	18.06	DAN Norden, Germany P
8.010	01 .00	10-11 p.m. B	17.080	17.55	GBC Rugby, England. Talks with ships
9.862	30.40	EAQ Madrid, Spain, 5:30-7 p.m. B	211.000	17.00	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			11:30 a.m. B
		6a.m. P	17.772	16.87	W3XAL Boundbrook, N. J., 8 a.m4 p.m. B
9.928	30.20	HJY Bogota, Colombia. Phones OCI eve-	17.830	16.82	PCV Kootwijk, Holland, 6-9 a.m. P
10.000	00.00	nings irregularly P	18.170	16.50	PMC Bandoeng, Java, 3:30-9 a.m. P YVQ Maracay, Venezuela, Heard about
10.060	29.80	VRT-ZFB Hamilton, Bermuda, Phones WNB days	18.296	16.39	10 a.m. P
10.090	29.70	OPM Leopoldville, Congo. Phones ORK	18.400	16.29	PCK Kootwijk, Holland. Phones Java
10.000	20.10	9-11 a.m.; 3-6 p.m. P	10.400	10.29	about 7 a.m. P
10.163	29.50	German Ships P	18.444	16.25	HJY Bogota, Colombia, 11 a.m. and 4 p.m.
10.212	29.35	PSH Rio de Janeiro, Brazil. Tests W2XBJ	10.111	10.20	P
		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	$\frac{29.15}{28.99}$	DJQ Koenigswusterhausen ORK Brussels, Belgium. Phones OPM 2-4,	10.020	10.00	a.m. P
10.010	20.00	9-11 s.m.: 3-6 n.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
		iarly	19.270	15.57	PPU Rio de Janeiro, Brazil, 10:30 a.m. and
11.174	26.83	CT3AQ Funchal, Madeira, TuesThurs.,			3:30 p.m. P
		5-6:30 p.m.; Sun. 10:30-noon B	19.282	15.55	FTM St. Assise, France, 10 a.m2 p.m. P
11.530	26.00	XAM Merida, Yucatan P	19.678	15.24	CEC, Santiago, Chile, 11 a.m. and 4 p.m. P
11.644	25.75	PPQ Rio de Janeiro. Brazil. Heard testing	19.684	15.23	EAQ Madrid, Spain. Phones P
		6 p.m. P	19.895	15.07	LSG Buenos Aires, Argentina, 10:30 a.m
11.680	25.67	YVQ Maracay, Venzuela. Tests Germany			3:30 p.m. P
	000	5-7 p.m.	20.028	14.97	DHO Nauen, Germany. Phones LSG
11.710	25.60	DGT Koenigswusterhausen B			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
	0. 00	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:			4 p.m. P
11.760	25.50	6:30 a.m. B XDA Mexico City. Tests XAM 1 p.m. and	21.054	14.24	WKA Lawrenceville, N. J., 8 a.m-4 p.m. P
11.700	20.00	6 p.m. P	21.069	14.23	PSA Rio de Janeiro, Brazil, 8 a.m. P
11.800	25.40	I2RO Rome, Italy, 11 a.m12:30 p.m.;	21.400	14.01	WKK Lawrenceville, N. J., 8 a.m4 p.m. P
,		2:30-5:30 p.m. B	21 470	13.96	GSH Daventry, England B

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. "Decembmer 15 I got an Atwater-Kent short wave converter 95, which has worked very nicely. With the combination I have heard 450 stations in nine countries. Only 100 stations are s. w. VK2ME comes in very nicely. YV1BC comes in almost perfect."

"On the short waves the best ones I have received," contributes Robert Base, 4105 Alton Road, Baltimore, Md., "are VK3ME, VK2ME, CT1AA, GSA, I2RO, Pontoise, EAQ, PRADO, PRBA, Rabat, DJB, LSX, CMCI, and others."

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

Several new stations have been reported about which we have not as yet received any definite details. One of these was heard on 47.5 meters (6312 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		
Time	Program	Call Dial	Program	Call Digi	
6.00					
6:15					
6:30					
6:45					
(it): 7		1			
7 15					
7,30					
7:45				\rightarrow	
8.00				++-	
8:15					
8:30					
8.45				+	
9:00				\rightarrow	
9:15					
9:30		+			
9:45					
10.00					
10:15		+			
10:30		111			
10.45					
11:00					
11/15				\rightarrow	
11:30					
11:45				1	
12:00				1	

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J. E Smith, President National Radio Institute Dept. 3CO Washington, D. C.



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