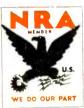
THE NOVEMBER 1933

RADEX

THE ALL-WAVE RADIO MAGAZINE







30 cents in Canada Including Tax

Monthly Frequency Checks by Channels
Around the Clock on the Short Waves
The Beginners' Story of Radio
Friday's Time on the Air
Overhauling an Old Set



NOVEMBER 1, 1933



B. FRANCIS DASHIELL Technical Editor

TENTH YEAR

RADEX

FRED CLAYTON BUTLER

Editor and Publisher



PAGE TAYLOR
Short Wave Editor

NUMBER 73

CONTENTS

Frontispiece—Annette Hanshaw
Featured on Maxwell House "Showboat"

The November DX Calendar of Special Programs	2
The Monthly Frequency Checks by Channels	3
The Beginners' Story of Radio (Alternating Currents and Electricity)	5
The Monthly Confab with the Editor	
Gossip from Radio's White Way, by "Betty"	12
Logging the Elusive Station with the Radexers	17
Let's Clean up the Old Set, by B. Francis Dashiell	23
Simple Remedies for Complex Troubles, by the Technical Editor	25
Latest News of the Short Wave World, by Page Taylor	29
My Experience with the JO Stations, by A. R. Calow	35
The International DX Contest	38
Verifying Reports in the German Language	39
Around the Clock on the Short Waves	
The Hundred Best Short Wave Stations	41
What's on the Air Tonight? Hour-by-hour Calendar	42
The Chain Programs Classified by Subject	52
All the Stations of North America with Friday's Time on the Air	54
The Index by Countries, States and Cities	68
A Log of 816 Stations with Names of Owners	73
The Airport Short Wave Stations of the U. S. A.	84
The Month's Changes in Station Data	88

Published Monthly Excepting July and August See Subscription Blank on Page 88

\$1.75 per Year

25c Per Copy

THE RADEX PRESS, INC.

Publication Office, 404 No. Wesley Ave., Mount Morris, Illinois.
Editorial and Executive Office, Hanna Building, Cleveland, Ohio
Entered as second-class matter November 7, 1932, at the post office at Mount Morris, Ill.,
under the Act of March 3, 1879. Printed in U. S. A.

ADDRESS ALL CORRESPONDENCE TO CLEVELAND OFFICE

I will train you at home



J. E. Smith, President, National Radio Institute, the man who has directed the Home Study Training of more men for the Radio industry than any other man in America. Free Book
Tells How
Mail Coupon!

Send for my book of information on the opportunities in Radio. It's FREE. Mail the coupon now, Get the facts on your opportunities in this field with a future. N.R.I. training fits you for jobs making, selling, servicing sets; to have your own business; to operate on board ships, in a broadcasting or commercial land station; for Television, afteraft Radio and many other branches. My FREE book gives you full information on Radio's many opportunities for success and how you can quickly learn at home to be a Radio Expert.

Many Radio Experts Make \$40, \$60, \$75 a Week

Why struggle along in a dull job with low pay and no future? Start training now for the live-wire Radio field. I have doubled and tripled salaries. Many men holding key jobs in Radio got their start through N.R.I. training.

Many Make \$5, \$10, \$15 a Week Extra Almost at Once

Hold your job. I'll not only train you in a few hours of your spare time a week, but the day you enroll I'll send you instructions which you should master quickly for doing 28 Radio jobs common in most every neighborhood. I will give you Radio Equipment for conducting experiments and making tests that teach you to build and service practically every type of receiving set made. Fred J. Dubuque, 19 Church St., Oswego, N. Y., wrote: "I have made about \$1.200 in a little over two years' spare-time Radio work."

ACT NOW-Get My Book-FREE

My book has shown hundreds of fellows how to make more money and win success. It's FREE to any ambitious fellow over 15 years of age. Investigate. Find eut what Radio offers; about my Course; what others who have taken it are doing and making, about my Money-Back Agreement, and the many other N. R. I. features. Mail the coupon for your copy RIGHT NOW.

J. E. SMITH, President National Radio Institute Dept. 3MO, Washington, D. C.

THE FAMOUS COURSE THAT PAYS FOR ITSELF



FREE MAKING HINTS

Mail the coupon. I'll send you one copy of my valuable 56-page reference book "28 Tested Methods for Making Extra Money." I'll do it to prove that my training is easy to understand and use—that it is practical—that it is full of money making information right from the start. This book shows you how to do 28 Radio jobs common in every neighhood—tells you how to get these jobs. Hundreds of my

hood—tells you how to get these jobs. Hundreds of my students have made \$5, \$10, \$15 a week in spare time while learning. Prove to yourself that you can do it too.

Mail Coupon.

Get a Job with a Future

FILL OUT AND MAIL
THIS COUPON 10DA

J. E. SMITH, President National Radio Institute, Dept. 3MO Washington, D. C.

Dear Mr. Smith: I want to take advantage of your Special Free Offer. Send me your two books, "28 Tested Methods for Making Extra Money" and "Rich Rewards in Radio." This request does not obligate me

NAME.....

ADDRESS.....

NOVEMBER DX CALENDAR

A list of the special DX programs especially for distant listeners, arranged chronologically in Eastern Standard Time. The power is given in parenthesis in kilowatts.

in Eastern Standard Time. The power is given	in parenthesis in kilowatts.
SUNDAY MORNINGS	Nov. 20-27
Nov. 5-12-19-26	3:00-5:00—KOOS, Marshfield, 1370 (.1)
12:00-1:00 CMBW, Havana, Cuba, 1140 (.6) CMX, Havana, Cuba, 890 (1.)	TUESDAY MORNINGS
KSO Des Moines 1370 (1)	Nov. 7-14-21-28 12:00-1:00—XEH, Monterrey. 1132 (.25)
XETW, Mexico City, 830 (.5)	1:00-1:30—WTOC, Savannah, 1260 (.5) 1:00-3:00—CMCW, Havana, 965 (.15)
XETW, Mexico City, 830 (.5) 12:00-3:00—CMCD, Havana, Cuba, 925 (.5) WGES, Chicago, 1360 (.5)	1:00-3:00—CMCW, Havana, 965 (.15) 1:00-4:00—WSUI, Iowa City, 880 (.5)
1:00-2:00—WDOD, Chattanoga, 1280 (1.) 1:00-2:30—XEAB, Tamaulipas, 1450 (7.5)	4:00-5:00—WCAH, Columbus, 1430 (.5)
1:00-2:30—XEAB, Tamaulipas, 1450 (7.5)	4:00-5:00—WCAH, Columbus, 1430 (.5) 5:00-6:00—WAWZ, Zarephath, 1350 (.25)
1:00-4:00—CMBD, Havana, Cuba, 965 (.25) 2:00-5:00—KPJM, Prescott, Ar., 1500 (.1)	Nov. 7
3:00-4:00-KFXM, San Bernardino, 1210 (.1)	5:00-5:30—WKFI, Greenville, 1210 (.1) Nov. 28
KGER, Long Beach, 1360 (.1)	1:00-2:00 CMHJ, Cienfuegos, 1125 (.06)
2:00-3:00 - KFYM, San Bernardino, 1210 (1) 3:00-4:00 - KFYM, San Bernardino, 1210 (1) KGER, Long Beach, 1360 (1) 3:00-5:00 - CKOV, Kelowna, B. C., 1200 (1) 10-AT, Trail, B. C., 1155 (025) 3:00-6:00 - XEFD,* Tijuana, 757 (5)	WEDNESDAY MORNINGS
3:00-6:00—XEFD,* Tijuana, 757 (5)	Nov. 1
4:00-5:00—CFJC, Kamloops, 1120 (.1) CMJK, Camaguey, 790 (.5)	4:30-5:00—WCAL, Northfield, 1250 (1.)
*P. O. Box 1441, San Diego, Calif.	Nov. 8 2:00-3:00—WJMS, Ironwood, 1420 (.1)
Nov. 5	Nov. 15
1:00-2:00—WWAE, Hammond, 1200 (.1) 2:30-4:30—10-BL Prince Albert, 1200 (.025)	3:00-4:00-WHBQ, Memphis, 1370 (.1) 3:00-7:00-WOPI, Bristol, 1500 (.1)
2:30-4:30-10-B1, Prince Albert, 1200 (.025) 3:00-5:00-KPCB, Seattle, 650 (.1) 4:00-5:00-WCSH, Portland, Me., 940 (2.5)	
4:00-5:00—WCSH, Portland, Me., 940 (2.5)	Nov. 22 4:00-5:00—WSPA, Spartanburg, 1420 (.25)
Nov. 5-19 1:30-3:00—CMBL, Havana, 1445 (.2)	THURSDAY MORNINGS
5:00-6:00—XFB, Jalapa, 1290 (1.)	Nov. 2-9-16-23-30
Nov. 12-19-26	2:00-4:00-CMK, Havana, 730 (5.)
1:00-3:30—WIBM, Jackson, Mich., 1370 (.1)	WEDC, Chicago, 1210 (.1) Nov. 2
Nov. 12 1:00-1:30WKY. Oklahoma City. 900 (1.)	2:30-4:00—CHWK, Chilliwack, 780 (.1) 4:30-5:00—WCBS, Springfield, Ill., 1210 (.1)
1:00-1:30—WKY, Oklahoma City, 900 (1.) 1:00-2:00—KUSD, Vermillion, 890 (.5) 3:00-4:00—WHBU,* Anderson, 1210 (.1)	4:30-5:00 — WCBS, Springfield, Ill., 1210 (.1)
3:00-4:00—WHBU,* Anderson, 1210 (.1)	5:30-7:00—KGFF, Shawnee, 1420 (.1) Nov. 9
WOS, Jefferson City, 630 (.5) 3:00-4:30—KFOX, Long Beach, 1250 (1.)	12:00-3:00—WCNW, Brooklyn, 1500 (.1)
3:00-5:00—KGNO, Dodge City, 1340 (.25)	Nov. 23 4:00-5:00—WTJS, Jackson, Tenn., 1310 (.1)
3:30-4:30 — CKWX, Vancouver, 1010 (.1) 4:00-5:00 — WBBZ, Ponca City, 1200 (.1)	Nov. 30
WHBD, Mount Orab, 1370 (.1)	12:00-7:00-WNBH, New Bedford, 1310 (.1)
*Wants 5c for verification.	FRIDAY MORNINGS
Nov. 19 1:30-2:30—WTMJ. Milwaukee. 620 (1.)	Nov. 3-10-17-24 12:00-1:00—KOIL, Council Bluffs, 1260 (1.)
1:30-2:30 — WTMJ, Milwaukee, 620 (1.) 2:00-3:00 — WBBX, New Orleans, 1200 (.1) WJEJ, Hagerstown, 1210 (.1) WNBX, Springfield, Vt., 1260 (.25) 3:00-7:00 — KGIR, Butte, 1360 (.5) 4:00-5:00 — KFBB, Great Falls, 1280 (1.)	12:00-6:00—WJAX, Jacksonville, 900 (1.)
WNRY Springfield Vt. 1260 (25)	1:00-1:30—WRAM, Wilmington, 1370 (.1)
3:00-7:00—KGIR, Butte, 1360 (.5)	1:00-2:00—WBBX, New Orleans, 1200 (.1) Nov. 17
4:00-5:00—KFBB, Great Falls, 1280 (1.)	12:00-2:00—KIDO, Boise, 1350 (1.)
KFJZ. Fort Worth, 1370 (.1) 4:00-6:00—WFBC, Greenville. 1200 (.25)	2.00 5.00 - VED Candalaire 1155 (5)
ALL V, Juniez, 1510 (.1)	3:00-5:00—XED, Guadalajara. 1155 (.5) 4:00-5:00—KPOF, Denver. 880 (.5)
Nov. 26	Dec. 1
3:00-4:00-WGLC, Hudson Falls, 1370 (.1)	2:00-3:00—WRAW, Reading, 1310 (.1)
2:00-3:00—WOL,* Washington, 1310 (.1) 3:00-4:00—WGLC, Hudson Falls, 1370 (.1) 3:00-5:00—WFAS, White Plains, 1210 (.1) WHAZ, Troy, N. Y., 1300 (.5) XEFV, Jaurez, 1370 (.1) *Must enclose postage and be postmarked not later than following Monday mightights.	SATURDAY MORNINGS
XEFV. Jaurez. 1370 (.1)	Nov. 4-11-18-25 12:00-1:30WMBC. Detroit, 1420 (.1)
*Must enclose postage and be postmarked not later than	12:00-1:30—WMBC, Detroit, 1420 (.1) 1:00-3:00—CMCW, Hayana, 965 (.15)
londwing monday mongans.	4:00-5:00—XEAO, Mexicali, 560 (.1)
Dec. 3 3:00-4:00—CHGS, Summerside, 1120 (.1)	Nov. 4 3:00-4:00—WJBC, La Salle, 1200 (.1)
MONDAY MORNINGS	3:00-5:00-XEFV, Jaurez, 1370 (.1)
Nov. 6-13-20-27	Nov. 4-18
12:00-3:00—WGES, Chicago, 1360 (.5) 12:30-1:00—KSOO, Sioux Falls, 1110 (2.5) 2:00-3:00—KFSG, Los Angeles, 1120 (.5)	2:00-3.00—XES, Tampieo, 1020 (.5) Nov. 11-18-25
2:00-3:00—KFSG. Los Angeles, 1120 (.5)	2:00-3:00-WGLC, Hudson Falls, 1370 (.1)
Nov. 6	Nov. 11
12:00-4:00—KOOS, Marshfield, 1370 (.1) 3:45-4:00—KUJ, Walla Walla, 1370 (.1)	2:00-4:00—XEFV, Jaurez, 1370 (.1) 3:15-4:15—WMBQ, Brooklyn, 1500 (.1)
Nov. 27	4:00-5:00-10-BQ, Brantford, 1200 (.005)
1:00-2:00—XEPN, Piedras Negras, 585 (75.) 2:00-3:00—XENT, Nuevo Laredo, 1115 (75.)	Nov. 25
2:00-3:00—XENT, Nuevo Laredo. 1115 (75.)	1:00-7:00—WHET, Troy, Ala., 1210 (.1) 4:00-5:00—CHRC, Quebec, 645 (.1)
3:30-4:30—CP4, LaPaz, Bol., 600 (10.) Nov. 13	Dec. 2
6:00-8:00-WJAS, Pittsburgh, 1290 (1.	4:00-11:00-KFNF, Shenandoah, 890 (1.)

THE MONTHLY FREQUENCY CHECKS

So many of the broadcasting stations who had planned special DX programs for this winter are using their monthly frequency check periods instead, that we are reprinting the list of stations to be checked with the periods allotted them. In the September issue we gave those stations indexed by days of the week; this month we are indexing them by frequencies. The time given is A. M. Eastern Standard and indicates the beginning of the test which will continue in each case for 20 minutes. The call letters will be announced at three-minute intervals. These periods constitute the very best opportunity for logging these stations as the Radio Commission is clearing the air of all possible interference at these times. Our readers in Oceania and other distant countries should bear in mind that these tests will be repeated each month; thus when Friday is indicated it means Friday, Nov. 3, Dec. 1, Jan. 5, Feb. 2, Mar. 2, etc.—the first Friday in each month.

ZMID M 1 - T ... 0 40

560 kcc

	560 kcs,	KMLB	Monroe, La., Tue. 3:40 Bellingham, Wash., Mon. 6:10 Stockton, Calif., Tue. 4:00
KFDM	Beaumont, Tex., Sat. 5:00	KVOS	Bellingham, Wash., Mon. 6:10
WQAM	Miami, Fla., Thur. 4:20	KWG	Stockton, Calif., Tue, 4:00
	570 kcs.	WABI	Bangor, Maine, Mon. 2:40
KGKO	Wiehita Falls, Tex., Sun. 5:00 Syracuse, N. Y., Mon. 5:00	WBBX	New Orleans, La., Tue. 4:40
wsyr	Syracuse, N. Y., Mon. 5:00	WBBZ	Ponce City Okla Wed 4:20
	580 kcs.	WBHS	Ponca City, Okla., Wed. 4:20 Huntsville, Ala., Tuc. 2:10
WDBO	Orlando, Fla., Thur. 4:00	WCAT	Ranid City S. D. Fri 3:50
	590 kcs.	WCAX	Rapid City, S. D., Fri. 3:50 Burlington, Vt., Mon. 3:00
WKZO	Kalamazoo, Mich., Sat. 3:50	WCLO	Janesville, Wis., Fri. 4:30
	600 kcs.	WFAM	South Bond Ind Sat 3:40
WCAC	Storrs, Conn., Mon. 5:10	WFBC	South Bend, Ind., Sat. 3:40 Greenville, S. C., Thur. 2:20 Cincinnati, Ohio, Fri. 4:10
WICC	Bridgeport, Conn., Mon. 4:40	WFBE	Cincinnati Obio Fri 4:10
	610 kcs.	WHBC	Canton, Ohio, Wed. 3:10
WJAY	Cleveland, Ohio, Sat. 4:00	WHBY	Green Bay, Wis., Thur. 3:00
	630 kcs.	WIBX	Hties N. V. Mon 3:20
KGFX	Pierre, S. D., Sun. 4:40	WIL	St. Louis, Mo., Wed. 5:20
	750 kcs.	WJBC	LaSalle, Ill., Sat. 3:00
KGU	Honolulu, T. H., Tues. 5:30	WJBL	Decatur, Ill., Fri. 4:50
	760 kcs.	WJBW	New Orleans, La., Tue. 5:10
WEW	St. Louis, Mo., Sat. 5:20	WLAP	Louisvilla Kv. Eri 5:50
	880 kcs.	WNBO	Silverhaven, Pa., Mon. 4:30 Carbondale, Pa., Wed. 2:10 Petersburg, Va., Wed. 2:50 Columbus, Ga., Tuc. 2:50
KFKA	Greeley, Colo., Sun. 5:30	WNBW	Carbondale Pa Wed 2:10
KPOF	Denver, Colo., Sun. 5:10	WPHR	Potershurg Va Wed 2:50
WCOC	Meridian, Miss., Thurs. 4:50	WRBL	Columbus Go Tue 2:50
WSUI	Meridian, Miss., Thurs. 4:50 Iowa City, Iowa, Sat. 5:40	WWAE	Hammond, Ind., Stt. 3:20
	890 kcs.	WWAL	THE STATE OF THE S
KARK	Little Rock, Ark., Sun. 4:50	77.101	1210 kcs.
-	900 kcs.	KASA	Elk City, Okla., Sat. 3:30
KGBU	Ketchikan, Alaska, Mon. 4:10	KDLR	Devils Lake, N. D., Sat. 4:30
WLBL	Stevens Point, Wis., Wed. 5:10	KFJI	Klamath Falls, Ore., Mon. 7:00
	Stevens Point, Wis., Wed. 5:10 920 kcs.	KFPW	Fort Smith, Ark., S.t. 3:10
KPRC	Houston, Tex., Sat. 4:40	KFVS	Cape Girardeuu, Mo., S.t. 4:10
WAAF	Chicago, Ill., Wed. 5:40	KGCR	Watertown, S. D., Sat. 5:10
	940 kcs.	KGY	Olympia, Wash., Mon. 4:40 Eureka, Calif., Tue. 4:40
WAAT	Jersey City, N. J., Mon. 4:50 Madison, Wis., Wed. 5:20	KIEM	Eureka, Calif., Tue. 4:40
WHA	Madison, Wis., Wed. 5:20	WALR	Zanesville, Ohio, Fri. 3:40
	950 kcs.	WBAX	Wilkes-Barre, Pa., Mon. 3:50
KGHL	Billings, Mont., Sat. 4:20 990 kcs.	WBBL	Richmond, Va., Wed. 3:20 Springfield, Ill., Thur. 4:40
	990 kcs.	WCBS	Springheid, III., I nur. 4:40
WJEM	Tupelo, Miss., Thur. 4:40	$\begin{array}{c} \mathrm{WCRW} \\ \mathrm{WEBQ} \end{array}$	Chicago, Ill., Fri. 5:30
	1010 kcs.	WEDC	Harrisburg, Ill., Thur. 4:00 Chicago, Ill., Thur. 3:20
WNAD	Norman, Okla., Sun. 5:20	WFAS	White Dising N. V. Mon 2:10
	1040 kcs.	WGBB	White Plains, N. Y., Mon. 2:10 Freeport, N. Y., S.t. 2:50
WESG	Elmira, N. Y., Mon. 4:30	WGCM	Mississippi City Miss. Thus. 2.50
WKAR	E. Lansing, Mich., Wed. 5:30		Mississippi City, Miss., Thur. 2:50 Chester, N. Y., Sat. 2:30
	1070 kcs.	WGNY WHBF	Peak faland III Thun 4.20
WCAZ	Carthage, Ill., Wed. 4:40 Tuscola, Ill., Wed. 5:00	WHBU	Rock Island, Ill., Thur. 4:20 Anderson, Ind., Thur. 5:20
WDZ	Tuscola, Ill., Wed. 5:00	WHET	Troy Ala Tua 2:10
_	1100 kcs.	WIBU	Troy, Ala., Tue. 3:10 Poynette, Wis., Fri. 5:10
KGDM	Stockton, Cal., Tues. 6:00	WJBI	Red Bank, N. J., Sat. 2:10
	_1120 kcs.	WJBU	Sunbury, Pa., Mon. 4:50
KFIO	Spokane, Wash., Mon. 6:50	WJBY	Gadsden, Ala., Tue., 2:30
KRSC	Seattle, Wash., Mon. 6:30 Houston, Tex., Sat. 3:00	WJW	Akron, Ohio, Fri. 3:00
KTRH	Houston, Tex., Sat. 3:00	WKFI	Casannilla Miss Tue 4.00
WHAD	Milwaukee, Wis., Wed. 4:30 Milwaukee, Wis., Wed. 4:50 College Station, Tex., Sat. 3:20	WMBG	Greenvine, Miss., The 3-00 Richmont, Va., Mon. 4:10 Jamestown, N. Y., Wed. 3:50 Manitowoc, Wis., Thur. 5:40 Thomasville, Ga., Tue. 2:00 Chicago, Ill., Thur. 3:40 Calumbus, Ohio, Fri. 3:20
WISN	Milwaukee, Wis., Wed. 4:50	WOCL	Ismertown N V Word 3:50
WTAW	College Station, Tex., Sat. 3:20	WOMT	Manitowne Wig Thur 5:40
	1200 kcs.	WODX	Thomasville Go Tue 2:00
KBTM	Paragould, Ark., Wed. 3:50 Bakersfield, Calif., Tues. 4:20	WQDX WSBC	Chiengo III Thur 3:40
KERN	Bakersheld, Calif., Tues. 4:20	WSEN	Columbus, Ohio, Fri. 3:20
KFJB	Marshalltown, Iowa, Wed. 4:40	WSIX	Springfield Tenn Tue 5:30
KFXD	Nampa, Idaho, Mon. 5:00	WSOC	Charlotte N C Thur 2:00
KFXJ	Grand Junction, Colo., Fri. 3:10; Sat. 4:50	WTAX	Springfield, Tenn., Tue. 5:30 Charlotte, N. C., Thur. 2:00 Springfield, Ill., Thur. 5:00
KGDE	Fergus Falls, Minn., Wed. 5:00	******	1220 kcs.
KGEK	Yuma, Colo., Fri. 3:30	WCAD	Conton N. V. Mon 4:00
KGHI	Little Rock, Ark., Wed. 3:30 Missoula, Mont., Mon. 4:20	WCAD WDAE	Canton, N. Y., Mon. 4:00 Tampa, Fla., Thur. 4:30
KGVO	Missouia, Mont., Mon. 4:20	WDAD	rampa, rm., rmur. 4.00

			4070 1
KEOD	1230 kcs.	KCRC	1370 kcs. Enid, Okla., Fri. 4:10
KFQD KGGM	Anchorage, Alaska, Mon. 5:50	KFBL	Everett, Wash., Mon. 4:50 Grand Forks, N. D., Thur. 4:30 Fort Worth, Tex., Fri. 4:50 Tucson, Ariz., Tue. 5:40 Oklabora, City. Fri. 4:30
KGGM	Albuquerque, N. M., Sat. 5:50 1240 k.s.	KFJM	Grand Forks, N. D., Thur. 4:30
KGCU	Mandan, N. D., Fri. 4:00 Minot, N. D., Fri. 4:20 San Juan, P. R. Thur. 3:10 1250 k.s.	KFJZ	Fort Worth, Tex., Fri. 4:50
KLPM	Minot, N. D., Fri. 4:20	KGAR KGFG	Tucson, Ariz., Tue. 5:40
WKAQ	San Juan, P. R., Thur. 3:10	KGFL	Oklahoma City, Fri. 4:30
TECAT	Mantheald Minn Wed 4:20	KGKL	San Angelo Tex Thur 3:30
WCAL WLB	Northfield, Minn., Wed. 4:30 Minneapolis, Minn., Wed. 5:10	KICA	Clovis, N. M., Wed. 3:20
WED	1260 kcs.	KICA KLUF	Galveston, Texas, Thur. 3:10
KRGV	1280 kcs. Harlingen, Tex., Sun. 4:20 Fayetteville, Ark., Sun. 5:40	KMAC:	Oklandink City, 711, 4:30 Roswell, N. M., Wed. 4:10 San Angelo, Tex., Thur. 3:30 Clovis, N. M., Wed. 3:20 Galveston, Texas, Thur. 3:10 San Antonio, Tex., Thur. 3:50 San Antonio, Tex., Thur. 4:10 Marshfeld Ore, Mon. 4:30
KUOA	Fayetteville, Ark., Sun. 5:40	KONO	Mumbfuld Oro Mon 4:30
KWWG WMBX	Brownsville, Tex., Sun. 4:00	KOOS KRE	Berkeley Calif Tue 5:20
WTOC	Brownsville, Tex., Sun. 4:00 Springfield, Vt., Mon. 4:10 Savannah, G., Thur. 5:10	KUJ	Marshfield, Ore., Mon. 4:30 Berkeley, Calif., Tue. 5:20 Walla Walla, Wash., Mon. 5:30
,,,,,,,	1270 kcs.	KVL	Walia Walia, wish., Mon. 5:10 Danville, Va., Mon. 2:30 Fort Wayne, Ind., Sat. 3:10 Hudson Falls, N. Y., Mon. 3:50 Mt. Orab, Ohio, Thur. 5:10 Memphis, Tenn., Tue. 2:20 Calumet, Mich., Fri. 5:20 Jackson, Mich., Thur. 5:30 Detroit Mich. Fib. 5:00
KGCA	Decorah, Iowa, Sat. 4:00 Decorah, Iowa, Sat. 3:40	WBTM	Danville, Va., Mon. 2:30
KWLC	Decorah, Iowa, S.t. 3:40	WGL WGLC	Hudeon Folla N. V. Mon. 3:50
WDD	1280 KCS.	WHBD	Mt. Orab. Ohio. Thur. 5:10
WRR	Dallas, Tex., Sun. 4:30	WHBQ	Memphis, Tenn., Tue. 2:20
IZI CIN	1290 kcs.	WHBQ WHDF	Calumet, Mich., Fri. 5:20
KLCN KTSA	Blytheville, Ark., Sun. 3:00 Sun Antonio, Tex., Sun. 3:40	WIBM	Jackson, Mich., Thur. 5:30
WEBC	Superior, Wis., Wed. 3:00	WJBK WLVA	Detroit, Mich., Fri. 5:00
WNBZ	Superior, Wis., Wed. 3:00 Saranac Lake, N. Y., Mon. 4:20	WMBR	Tampa Fla. Tue. 3:00
	4848 1	WPFB	Hattiesburg, Miss., Tue. 4:20
KCRJ	Jerome, Ariz., Tue. 5:50	WQDM	St. Albans, Vt., Mon. 3:30
KFGQ	Boone, Iowa, Thur. 4:20	WRAK	Williamsport, Pa., Mon. 2:10
KFPL KFPM	Organizila Toy Thur 3:40	WRAM WRJN	Preine Wie Fri 5:40
KFXR	Oklahoma City, Okla., Fri. 3:20	WSVS	Detroit, Mieh., Fri. 5:00 Lynchburg, Va., Mon. 3:00 Tampa, Fla., Tue., 3:00 Hatticsburg, Miss., Tue. 4:20 St. Albans, Vt., Mon. 3:30 Williamsport, Pa., Mon. 2:10 Wilmington, N. C., Tue. 5:00 Racine, Wis., Fri. 5:40 Buffalo, N. Y., Mon. 3:30
KFYO	Lubbock, Tex., Thur. 4:00		1380 kcs.
KGBX KGCX	Jerome, Ariz., Tue. 5:50 Boone, Iowa, Thur. 4:20 Dublin, Tex., Fri. 3:40 Greenville, Tex., Thur. 3:40 Oklahoma City, Okla., Fri. 3:20 Lubbock, Tex., Thur. 4:00 Springfield, Mo., Thur. 5:00 Wolf Point, Mont., Mon. 5:40 Kaispell, Mont., Mon. 5:20	WKBY	LaCrosse, Wis., Sat. 5:30
KGCX	Wolf Point, Mont., Mon. 5:40	KOOM	1400 Kcs.
KGEX KGFW	Kalispell, Mont., Mon. 5:20 Kearney, Neb., Thur. 5:20	KOCW	Chickasha, Okla., Sun. 3:50 1410 kcs.
KIFH	Juneau Alaska, Mon. 6:00	KFLV	Rockford, Ill., Wed. 3:50
KIT	Juneau, Alaska, Mon. 6:00 Yakima, Wash., Mon. 6:20 Medford, Ore., Mon. 7:10	WBCM	Rockford, Ill., Wed. 3:50 Bay City, Mich., Wed. 3:30
KMED	Medford, Ore., Mon. 7:10	WHBL	Sheboygan, Wis., Wed. 4:10
KRMD	Shreveport, La., Fri. 3:00 El Paso, Tex., Thur. 3:20 Aberdeen, Wash., Mon. 6:40 Laurel, Miss., Tue. 5:20	WHI8 WODX	Sheboygan, Wis., Wed. 4:10 Bluefield, W. Va., Wed. 2:30 Mobile, Ala., Thur. 5:00 Roanoke, Va., Wed. 3:10
KT8M KXRO	Aberdeen Wash Mon 6:40	WRBX	Rounoke Va Wed 3:10
WAML	Laurel, Miss., Tue. 5:20	** 10021	1420 Kre
WBEO	Marquette, Mich., Wed. 4:20 Terre Haute, Ind., Wed. 4:00 Wilkes-Barre, Pa., Mon. 4:20	KABC	San Antonio, Tex., Fri. 4:40 Texarkana, Ark., Thur. 5:10
WBOW	Terre Haute, Ind., Wed. 4:00	KCMC	Texarkana, Ark., Thur. 5:10
WBRE WCLS	Wilkes-Barre, Pa., Won. 4:20	KFIZ	Fond du Lac, Wis., Thur. 3:50
WDAH	El Paso, Tex., Thur. 3:00	KGFF KGIW	Shawnee, Okla., Thur. 5:30 Trinided, Colo. Wed. 3:10
WEBR	Joliet, Ill., Fri. 4:40 El Paso, Tex., Thur. 3:00 Buffalo, N. Y., Wed. 2:00 Royal Oak, Mich., Fri. 4:20	KGIX	Fond the Last was, Tab. 3.50 Shawnee, Okla., Thur. 5.30 Trinidad, Colo., Wed. 3:10 Las Vegas, Nev., Tue. 5:00 Lamar, Colo., Wed. 3:40 Eugene, Ore., Mon. 7:20 Cedar Rapils, Iowa, Fri. 5:00 Waco, Tex., Wed. 4:50 Presque Isle. Me., Mon. 2:30
WEXL	Royal Oak, Mich., Fri. 4:20	KIDW	Lamar, Colo., Wed. 3:40
WFBG	Altoona, Pa., Wed. 2:40	KORE KWCR	Eugene, Ore., Mon. 7:20
WFDF WHAT	Philadelphia Pa Mon 2:50	KWCR	Cedar Rapids, Iowa, Fri. 5:00
WIAS	Ottumwa, Iowa, Thur. 4:40	WACO WAGM	Program Isle Me Mon 2:30
WJAC	Johnstown, Pa., Mon. 2:00	WAMC	Presque Isle, Me., Mon. 2:30 Anniston, Ala., Tue. 3:50 Hazleton, Pa., Mon. 3:20
WKBB	E. Dubuque, III., Wed. 3:00	WAZL	Hazleton, Pa., Mon. 3:20
WKBC WLBC	Muncia Ind. Sat. 3:30	WELL	Battle Creek, Mich., Fri. 3:30
WMBO	Royal Oak, Mich., Fri. 4:20 Altoona, Pa., Wed. 2:40 Flint, Mich., Fri. 4:00 Philadelphia, Pa., Mon. 2:50 Ottumwa, Iowa, Thur. 4:40 Johnstown, Pa., Mon. 2:00 E. Dubuque, Ill., Wed. 3:00 Birmingham, Ala., Thur. 2:30 Muncie, Ind., Sat. 3:30 Auburn, N. Y., Mon. 3:40 Reading, Pa., Mon. 4:40 Knoxville, Tenn., Tue. 4:50 Grove Citv, Pa., Wed. 2:20 Winston, Sulem, N. C., Tue. 3:20 Philadelphia, Pa., Mon. 3:10	$\begin{array}{c} \mathbf{WENC} \\ \mathbf{WHDL} \end{array}$	Battle Creek, Mich., Fri. 3:30 Americus, Ga., Tue. 4:30 Tupper Lake, N. Y., Mon. 2:50 Cicero, Ill., Thur. 3:30 Baton Rouge, La., Thur. 2:40 Ironwood, Mich., Thur. 3:10 Kansus City, Kans., Fri. 5:20 Springfield, Mass., St. 2:00 Detroit Mich. Fri. 3:50
WRAW	Reading, Pa., Mon. 4:40	WHFC	Cicero III Thur 3:30
WROL.	Knoxville, Tenn., Tue. 4:50	WJBO	Buton Rouge, La., Thur. 2:40
WSAJ	Grove City, Pa., Wed. 2:20	WJMS	Ironwood, Mich., Thur. 3:10
WSJS WTEL	Philadelphia Pa Mon 3:10	WLBF WMAS	Kansas City, Kans., Fri. 5:20
WTIS	Jackson, Tenn., Tue. 4:10 Elkhart, Ind., Wed. 3:20	WMAS WMBC	Springheld, Mass., 51t. 2:09
WTJS WTRC	Elkhart, Ind., Wed. 3:20	WMBH	Jonlin Mo Fri 5:40
	1320 krs	WPAD	Paducah, Ky., Fri. 3:10
KGHF	Pueblo, Colo., Wed. 5:30	WOLV	Spartanburg, S. C., Thur. 2:10
KGMB	Pueblo, Colo., Wed. 5:30 Honolulu, T. H., Tue. 5:10	WTBO	Detroit, Mich., Fri. 3:50 Joplin, Mo., Fri. 5:40 Paducah, Ky., Fri. 3:10 Spartanburg, S. C., Thur. 2:10 Cumberland, Md., Mon. 3:40
	1340 kcs.		1430 kcs.
KGDY	Huron, S. D., Sun. 4:10	WNBR	Memphis, Tenn., Thur. 4:10 Albany, N. Y., Sat. 3:00
KGNO	Huron, S. D., Sun. 4:10 Dolge City, Kans., Sat. 3:50 Pensacola, Fla., Thur. 3:40	WOKO	Albany, N. Y., Sat. 3:00
WCOA	1350 kcs.	TET C	1440 kcs.
W 4 W 7	Zerenhath N. J. Sut 4:10	KLS KXYZ	Oakland, Calif., Tue. 4:50 Houston, Tex., Sun. 3:30 Greensboro, N. C., Thur. 3:30
WAWZ WBNX	New York, N. Y., Sat. 3:50	WBIG	Greensboro, N. C., Thur. 3:30
WBNX WEHC	Zarephath, N. J., Sat. 4:10 New York, N. Y., Sat. 3:50 Charlottesville, Va., Wed. 3:30	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1450 kcs.
	1360 kgs.	KTBS -	
WCSC	Charleston, S. C., Thur. 3:20 Vicksburg, Miss., Thur. 3:50		(Continued on page 87
WQBC	Vicksburg, Miss., Thur. 3:50		(Continued on Lage of

The BEGINNERS' STORY of RADIO

PART TWO

Alternating Currents and Electricity

\bullet \bullet \bullet By B. FRANCIS DASHIELL

the fact that radio transmission and reception can be accomplished only by vibration. These vibrations are of great importance in a receiver, yet they are simply electrical currents flowing along in wavelike formations. Electricity provides the energy to keep these vibrations or waves in motion. When the waves are close together, the vibrations are rapid; when they are far apart, the vibrations are slow.

These vibrating wave forms can be indicated easily by drawings, such as those illustrating this chapter. The different kinds of electric currents assume various wave shapes; one vibrates slowly, like a lazy sea; another more rapidly; one flows steadily; and another pulsates in irregular waves or surges.

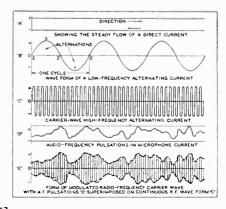
First, we see the direct-current, shown in "A"; it flows steadily and never changes its direction. there is a slowly vibrating current. with a long wavelike form, as shown by "B." A rapidly vibrating current, with short, wavelike form, is indicated at "C." Now, when direct-current, shown at "A." is varied in intensity, it begins to pulsate and takes irregular wave forms, shown by "D." The most complicated vibration is shown at "E," and it occurs when the rapidly vibrating current, shown at "C," is mixed with the pulsating wave that is indicated by "D." This is a typical radio broadcast wave.

A.F. and R.F.

We shall be forced to grasp this subject more clearly, and therefore

must give some study to vibrating electric currents. Radio utilizes two classes of electrical vibrations. The slower vibrations, to which the human ear responds, are known as audio-frequency vibrations, and they vary in speed from 25 to slightly more than 10,000 per second, as shown at "B" and "D." Now when the vibrations become very rapid the ear no longer can detect them. These, then, are inaudible, radio-frequency vibrations, and they range from 15,000 to 300,000,000 per second, as illustrated at "C."

You have guessed by now that both audio and radio-frequency vibrations are used in radio. All audio-frequency vibrations, as shown by "B," and direct-current pulsations, indicated at "D," produce audible sound. The radio-frequency vibrations, as shown at "C," provide a continuous, inaudible carrier-wave. This wave carries the audible sound waves through space.



We know that the continuous, radiofrequency wave will conduct the audible, audio-frequency wave into and through our radio sets. Let us now carefully study illustration "E." We observe a radio-frequency carrier wave, similar to "C," but holding to the outline of an audio-frequency sound wave, similar to "D." combination is the result of mixing the two wave forms together. wave, "C," is the product of the oscillating, or electrical vibrating, transmitter in the broadcasting station; the other, "D," comes from the microphone in the studio. Mixing the two causes the carrier wave to assume the form of the audio, pulsating wave, so that the latter can be broadcast far and wide.

A radio wave of the character of "E" now becomes a modulated radio-frequency wave or current. The outline of the carrier-wave tops will conform exactly with the sound or microphone wave "D," and it is the impression of these audio-current pulsations on the rapidly vibrating radio wave that converts the original sound waves into rapidly vibrating electrical energy having a modulated continuous-wave motion.

A.C. and D.C.

How are electrical vibrations created? Alternating-current has solved that problem. Without alternating currents radio in its modern sense could not be possible. But what are alternating currents? Alternating electricity cannot be obtained from a battery; only mechanical motion or oscillating radio tubes can produce it. Batteries give only direct-current. This direct-current flow is a movement of electricity in one direction only. No matter how much the pressure (voltage) of this movement is increased or decreased, it changes the direction of flow, direct-current continuously varies in strength but not in direction, as shown at "D," it is called a pulsating or surging direct-current.

However, when the pressure behind

electricity flowing through a circuit is reversed, the current flow will also reverse its direction of motion. Now. if the power or pressure is periodically reversed, alternately positive and negative, at regular intervals, then the current flow will likewise reand periodically alternate. These, then, are electric vibrations, rushing back and forth through the wires of the circuit like the swinging of a pendulum. And these alternations, or vibrations, may be so regulated as to occur at any desired rate or frequency per unit of time.

The 60-cycle Current

The rise and fall of the flow of the current in one direction is called an alternation; and the second rise and fall in the opposite direction is another alternation. See X and Y at "B." It takes two alternations for the current to return to its original position at Z in "B." Therefore, two alternations constitute a cycle, as shown at "B." The length of time required to complete the full cycle is the time period, which, in our houselighting circuits of 60 cycles per second, is 1/60th of a second. An alternation, in this particular circuit is, therefore, 1/120th of a second in length. The 60 cycle light-circuit hum we oftentimes get in our radios therefore has a vibration sound of 120 waves per second.

The number of cycles (not alternations) that occur during one second of time is known as the frequency of the alternating current. In radio, where many thousands of cycles are needed, the term kilocycle is used; 1,000 cycles being equal to 1 kilocycle. And in short-wave work we hear of the megacycle, meaning 1,000,000 cycles or 1,000 kilocycles. 2.5 megacycles being equal to 2,500 kilocycles, for instance. Alternating currents having frequencies as high as 600 megacycles have been created in ultra short-wave experiments!

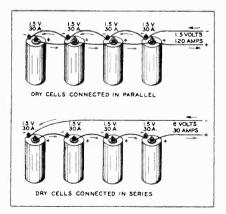
Alternating currents are very valuable. They can be transferred from one circuit to another without elec-

trical contact; they vibrate through space to strike our aerials, and swarm back and forth through our receivers; they may be amplified instantly to great intensity, or reduced to the faintest whisper.

The Mysterious Power

What is electricity? It is an agent for the transfer of energy; it cannot be seen or heard except through its effects. It can be produced by friction, chemical action, or mechanical motion. There are two kinds of electricity-positive and negative. These opposite kinds attract each other and therefore cause a current to flow through a conductor. charges tend to repel each other. The same condition is found in the magnet, which has north and south poles. As an example run a hard-rubber comb through the dry hair. comb becomes charged and will attract bits of paper. If held to the radio antenna a sharp crash will be heard in the speaker, thus proving that static electricity was generated by friction.

Electricity can be generated by chemical action in a battery. The simple voltaic cell is the basic form. It consists of two dissimilar metals, zinc and copper, immersed in a dilute acid solution. A current will flow through a wire connecting the two metals. The dry cell, a more prac-



ticable form, is essentially similar. Its zinc container, the negative terminal, holds the moist paste acid electrolyte and the central carbon (similar to copper but cheaper) positive electrode. Our B batteries are made up of a large number of small Storage batteries retain dry cells. the direct-current sent into them from an outside source (charging operabecause of certain chemical changes in the solution and plates. Single dry cells give 11/2 volts and storage cells give 2 volts each. Connecting single cells in series adds the voltages of the individual cells together but does not increase the quantity of available current beyond the capacity of one of the single cells. Parallel connections do not increase the voltage of the entire group beyond that of a single cell, but adds the total quantity of current available together.

Terms of Measurement

Electricity is measured by volts. amperes and watts. The current is the flow of energy; imagine the wire to be a pipe, and the current to be the motion of the water. The volt is the unit of pressure or electro-motiveforce (e.m.f.), just as the force of water in a pipe is measured by pounds. The ampere is the unit of amount or quantity of electricity, just as water is measured by gallons. The watt is the unit of electricity consumed or created per unit of time (one hour): it is determined by multiplying volts by amperes. For instance: A device consuming one ampere per hour with a pressure of 110 volts is said to use 110 watts. radio tube requiring 1.5 amperes at 2.5 volts consumes 3.75 watts per hour. Add all the wattages of your tubes together, plus about 25 per cent for loss of efficiency, and you will get the power consumption of your set. To this must be added also the plate currents of the tubes in milliamperes, which amount can be obtained only from tables of tube characteristics.

(Continued on page 86)

OVER the Editor's DESK

• • • The Monthly Confab

AY by day, in every way" we are growing bigger and bigger. Ninety-two pages of this issue, crammed "from kiver to kiver" with all-wave radio news and information. A lot of our readers can remember when there were only 32 pages. RADEX is, we believe, now the oldest radio publication in existence under its original management. As we look back from the pinnacle of our ninth birthday, we can see a long procession of radio magazines which have traveled to that bourne from which no one returns. Some of them were mighty good too.

Under the editorship of Page Taylor, our short wave department is steadily growing in interest and importance. The new feature that begins this month-Around the Clock on the Short Waves-is, we think, quite the most convenient method of presenting the time on the air vet devised. We are sure it will be most popular with our devotees of the higher frequencies. RADEX readers are turning more and more to the short waves for new thrills in radio. As they require new sets, they are buying the all-wave receivers in increasing numbers.

"I think you ought to enlarge RA-DEX, cut out the short-wave stuff, tell more of DX reports and about the stations themselves." advises F. L. Biss, Brittmount, Minn. Well, we are acting on Mr. Biss' first suggestion as we said before and adding eight pages to this issue of your favorite radio magazine, but about cutting out the "short-wave stuff"-Mr. Biss ought to see some of the letters we get from s, w, listeners telling us to devote ourselves to the short waves entirely. Then there are the letters from other readers who suggest cutting out both the short waves and broadcast band and giving them programs exclusively. As we just can't cut out anything, there was nothing for us to do but add and "we hope you'll like it."

The Broadcasting Business

Is the broadcasting business too much of a child as yet to have acquired a code of ethics? Many complaints have been made concerning the tendency of some stations to rush to the air unconfirmed rumors they receive without taking the trouble to try to verify them. Grossly exaggerated reports and even some made out of the whole cloth, have been broadcast as "news" flashes. Now the police departments of Indiana and Illinois are taking action against station WIND, claiming that it "faked" a gun-battle between police and gangsters they were chasing. As a result. police hearing the broadcast and tak-



Among the voices heard in the CBS "March of Time," as well as a number of other dramatic programs, is that of Ann Hastings. She's twenty-two, comes from Albany and has appeared in stock companies throughout the United States.

ing it for what it purported to be, changed all their plans and rearranged their forces. Unless the National Association of Broadcasters can discipline its own members, the Federal Radio Commission should step in and cancel a license or two and teach broadcasters to be careful concerning the truth of statements they make over their transmitters.

What are we going to do with stations who ask us to list them as verifying reception and then keep the stamps sent them by our readers and make no reply? The fault is not always the station's, as many listeners give vague reports, sign their names illegibly and fail to enclose postage. But we do receive many letters from readers who convince us that they have submitted good reports of reception and enclosed postage, not once, but often five times, and still received no reply. A. H. Bacon, 928 13th Street, New Westminster, B. C., tells us that he has written three letters enclosing U. S. stamps to station KLPM at Minot, N. Dak., and heard nothing in spite of the fact that the announcer invited reports of reception and said all letters would be acknowledged. Mr. Bacon sends us a copy of his report, which is certainly worthy of verification. Again we ask, what shall we do about this situation? In fairness to the stations, we are urging our readers to send postage or pennies always. Now we want the stations to be fair to our readers and give them a reply for their money.

Punishing the Outlaws

Inquiry was made by one of our readers in a previous issue regarding a so-called station WRB in Bridgeport, Conn. Henry Moeller, Jr., 31 Allview Ave., South Norwalk, Conn., tells us that this station was using the wires of the Connecticut Light & Power Co., broadcasting by "wired wireless." A statement from the FRC regarding this case gives the information that the defense of the owner was that he needed no license as the signals from his transmitting equipment were emitted through the power



Leah Ray is the cute little Southern girl who sings with Phil Harris and his orchestra over an NBC (Blue) network on Fridays at 9:00 p. m. EST. Leah, still in her 'teens, was featured in Maurice Chevalier's picture, "A Bedtime Story."

lines and received by sets connected with these power lines. The Government contended that this transmitting equipment acted as a radio station and emitted signals through the air, which signals were picked up by sets connected to ordinary antennae. The Government showed by its agents that the signals were received in the state of New York by a receiving set not connected with the power wires.

The jury rendered a verdict of guilty on two counts and the judge fined the defendant \$25 after a plea for leniency by his counsel.

Says Thank You

"I am writing to thank you," says Stuart B. Leland, 82 St. John's Place, New Canaan, Conn., "for your extreme kindness in replying to my request for the data on the filter chokes in my Radiola 60, which has been of exceeding help. I would not have been able to get this information otherwise.

as RCA stated they were unable to give it. RADEX offers the utmost help to every radio fan, both the DXer and technical experimenter. Though I am going to try to give up DXing this year, I will see that my subscription is renewed. Frankly, I don't think it would seem like winter unless I could cuddle up in a comfortable chair in the evening and study RADEX."

"I have just finished constructing the noise filter described in the May issue," reports H. C. Lutz, 627 Normal St., Springfield, Mo. "I was surprised to find how much better performance I got with it. Old Man Static was getting a lot of cussing he didn't deserve as I soon found out after I connected the filter."

The Radex Converter

In the May and June issues of this magazine, our Technical Editor described a simple short-wave converter for home building which could be attached to any receiver. A letter comes to us from W. H. Gould, Morris, N. Y., giving the results he has received. "I have now had the RADEX converter in use for a month and during this time, I have received the following stations: VE9DR, VE9JR, VE9GW, W9XF, W3DAU, W3XAL, W2XE, W8XK, VE9HX, YV1BC. GSB, GSC, GSD, GSE, W2XAF, DJA, DJB, DJC, DJD, EAQ, VK3ME, VK2ME, Pontoise, and many 80meter amateurs. I hardly expected to receive the Australian stations, but find they come in with as much volume as most locals. The best time to receive them in this locality is between 6:00 a. m. and 8:00 a. m. EST. I am using the converter with a General Electric Model J-85 8-tube superhet. The converter plate voltage is taken from the plate of the 47 tube in the b.c. set with a 5000-ohm variable resistance in series. A separate filament transformer is used for the converter filament current. I am grateful to RADEX for this very fine converter circuit and highly recommend it to any short wave fan."

That Fly-Weight All-Wave

"The flyweight portable all wave set you told about on pages 17 and 30 of the September issue, is fine. I just built one, I made it a 3-tube set, however. I have heard England, Germany, France, Spain, Italy and many others on short waves, also many long wave stations. Its best features are a short aerial and the fact that it works well on 45 volts B battery; 90 volts gives loudspeaker volume on stations within 500 miles. On the East Coast of Florida on long waves I heard a station that is mighty hard to get off the Florida coast—KSL of Salt Lake City, 1130 kcs. I also heard KOA. Denver. I believe the shaking of a short wave antenna on board ship makes stations harder to get. What do you think?" This interesting report comes to us from Thomas Johnson, of the S. S. Yorba Linda, whose harbor address is Box 1041, 25 South Street, New York City.

That list of 300 stations having monthly frequency checks which we published in the September issue, was certainly manna for our DXers. "Last night I picked up 23 of the 36 stations being monitored," reports F. E. Andrew, 104 19th St., Warwood, W. Va. -typical of the reports of many others. As the frequencies are cleared for these tests, they provide an especially favorable time for tuning in many of the low-powered stations who could not otherwise be heard. The checks are being made during the first week of every month so those you cannot log one month should be tried for the succeeding months.

Use the Codes

"The codes which you give in the September issue (page 27) for reporting volume and quality of reception, would simplify the giving of such information to a great degree and let the stations know with greater accuracy just how they were being received. After all," wisely concludes Myron A. Sturm, 1421 Sherwin Ave., Chicago, Ill., "the receipt of such information is the main reason for a

station's tolerance of the DXer. If these codes can be used to give the desired data briefly, our debt to them for their courtesy in sending verifications will be met somewhat." Yes, friend Myron, these codes will be readily understood by the engineers of broadcast as well as short-wave stations for they are in use internationally in radio.

"For the past few days I have been rereading my old copies of RADEX," comments James Owen, 1019 W. Webster, Springfield, Mo., "and noticed in the November, 1932, issue that you mentioned the fact that moving your set from one room to another would change your reception a lot. Well. I can verify that statement now. I moved my Philco 7-tube set from the living room to my room and many stations I could hardly hear before come in like locals now. I have been experimenting with new aerials and find that by using two aerials which connect at about a 45-degree angle I get the best results."

Clement Van Velsor, 1033 Sanford Ave., Irvington, N. J., thinks the ballgame which Walter Dmitrzak of Buffalo, mentioned in our October issue, probably originated with KEX. He says, "In Newark where night baseball is not nearly as frequent as in other International League cities. games have ended at 1:00 a.m. I have heard WBEN broadcasting a game between Rochester and Buffalo after 11:00 p.m. I think Mr. Dmitrzak heard a night game in the Pacific Coast League. The only station on 1170 or 1180 in a Pacific Coast League city is KEX."

"By the way," says Clair Calavan, Jefferson, Ore., "about two weeks ago, I noticed that XGOA, Nanking, China, was broadcasting on 660 instead of 681.8—probably to escape interference from the Japs on 680." A brand-new list of the Chinese stations comes to us from the International DXers Alliance, Bloomington, Ill., with XGOA still on 681.8. "Japs and Aussies may be received any morning at any time



Don Bestor and his orchestra frequently have been heard over NBC networks and the Prince of Wales has placed his stamp of approval on their music by placing a standing order for all their phonograph recordings. At present you can hear Don and his boys over the NBC (Blue) network every Friday at 8:00 p. m. EST on the Nestle's program.

of the year here," goes on Mr. Calavan, "even during the latter part of June when the nights are shortest."

What owner of a Midwest 1933 16-tube superheterodyne can help this reader? He reports that he can get only local stations and a few nearby U. S. stations and that he is fearfully troubled with howling and squealing and a sort of frying noise. The inquirer is C. A. Maple, 1035 South Vermont Ave., Los Angeles, Calif.

Who has an "Earl" set, or knows where and by whom it is made? John J. Wojcik, 2842 W. 25th Place, Chicago, Ill., has one and is anxious to hear from others who may have a similar set.

With Only One Tube

When we published some time ago the story of a reader in Pennsylvania who had heard a number of the Oceanic stations, we were given a barrage

(Continued on page 87)

GOSSIP from Radio's White Way

• • • *By* "BETTY"

EEP RIVER . . . muddy waters gliding aimlessly past gnarled tree trunks . . . soft winds sighing through the leaves . . . weary negro voices serenading the summer moon . . . lonely cabins dotting the fields of swaying cotton-these are the images conjured up by the name of Willard Robison, Evangelist of music is wholly Rhythm. His unique; his arrangements have no conventionalized pattern; his composition is one of those phenomena as truly symbolic of 1933 America as is the architecture of the modern skyscraper. Half-modern, half-folk song in structure, it is a congenial wedding of the tunes of the Old South to the syncopated rhythms of today.

A piano player in a nickelodeon, trouper in small-time vaudeville, entertainer in dance emporiums of oil boom days, attraction in medicine shows, star of the old tab shows, Robison brings a colorful background to his biweekly Columbia broadcasts. He is heard each Sunday at 5:00 p.m. EST, in a program of "Syncopated Sermons," accompanying himself on the piano while David Ross reads a continuity composed entirely of poetry; and each Thursday at Deep River Orchestra.

His Fight Upward

Robison was born in the obscure little town of Shelbina, Mo., during the closing years of the last century. He studied piano for a few months under a local teacher, and that constitutes his entire academic training. When young Willard was still in his early teens the family moved to Kansas and the youth landed his first job playing in a "jitney" show. He improvised the entire program, providing his themes and his own ar-

rangements. Other jobs in auto shows, medicine shows, and vaudeville followed and Robison organized his original Deep River Orchestra.

He toured the country with his orchestra, played at hotels from Maine to Florida, made numerous phonograph recordings, made several movie shorts, and finally found his way to radio. Robison was featured over the Columbia network in 1929 when he appeared on the old Kodak and Blackstone hours. Since then he has been heard over numerous stations and over another network.

The Southern Melodies

The negro spiritual and the folk tunes of the Old South have been Robison's inspiration since childhood. He finds sincerity and genuineness in these tunes, the qualities which are



Willard Robison

to him the cornerstone of all music. When he followed Paul Whiteman's advice and came east for the first time, he found that he could not compete with the established Tin Pan Alley composers. He lost a lucrative job with a large publishing firm because he could not write commercially and to order. The facile rhymes and trite melodies of the day were to him counterfeit music, and he could not write unless he had something worth-while to deliver.

An example of the way in which Robison composes is found in his famous song, "Cottage for Sale." He had bought a beautiful home in Crestwood, N. Y., for his wife and daughter, but fortune turned against him and he was forced to give it up. His feelings found expression in the song—and the public appreciated it to such an extent that the composition became a best seller and he was enabled to buy back his cottage.

There is nothing of the suave urbanity typical of the Broadway entertainer about Robison; it is obvious that he is more at home in the sagebrush than the salon. Tall, sandyhaired, slender, he is shy, soft-spoken, and drawling. He has a genuine love for the naive negroes of the southwest whose original melodies have been his inspiration. He considers his negro arranger, William Still, one of the most talented men of his acquaintance and to him attributes a large measure of the success of his Among Deep River interpretations. composers, Stephen Foster is his ideal, and between the two future generations will find more than passing similarity.

Your "Cousin Anna"

Agnes Moorehead — the comic "Cousin Anna" to you—of the "Evening in Paris" broadcasts always plays her hunches.

On a hunch, she accepted the wager of a friend and came to New York to prove she could get a job before starvation threatened. After a comparatively short interim, New York audiences were witnessing her per-



Agnes Moorhead

formances in shows starring such favorites as Elsie Ferguson, Violet Heming, Gertrude Lawrence, and in the Theatre Guild production, "Marco's Millions."

Then she played the hunch of going into radio. And success was the reward of her venture. It took courage to follow up those hunches, but they were not entirely responsible for her achievements. Hard work has played an all-important part in reaching her present place in the amusement world. And she may be just squeaky-voiced "Cousin Anna" to you, but she's a striking brunette to us.

Although born in Boston, most of her childhood was spent in St. Louis, Mo. She is an alumna of Muskingum College, the University of Wisconsin, and the American Academy of Dramatic Arts.

Out of the Parsonage

Agnes, who is a minister's daughter, first studied music at an old-fashioned square piano and progressed to entertaining visiting relatives with musical selections and recitations. The usual dramatic

activities at school and college resulted in her debut with the Municipal Opera in St. Louis during one summer vacation. The following two summers with the same company gave her the ground work needed in musical and dramatic work. Then, New York, the stage and radio.

Of course, Miss Moorhead has definite radio superstitions, as most performers do, her pets being the wearing of an Indian bracelet to each broadcast and not wearing diamonds. She believes a fallen picture is most certainly a bad omen, as is the picking up of her fallen gloves. She stooped to regain them only once, and although refusing to divulge the consequences, says "never again."

The bulk of her fan mail comes from men, although one old lady was so enthusiastic about "Cousin Anna" that she sent her a lively little pink pig in a crate. Of its fate Agnes begs us not to inquire. One of her hobbies is cookery.

Agnes admits she never fails to have "mike fright" just before going on the air, but once the program has begun, concentrates so entirely on the script that her poise soon returns.

Her present ambition is to make sincere characterizations. And she has a hunch that her future ambition will be to retire and raise children and flowers "out where the west begins."

Almost a Druggist

Eddie Duchin, talented young maestro-pianist, narrowly missed prescribing remedies for headaches instead of rhythms for blues. His father owns a chain of drug stores in Boston, Eddie was graduated from Pharmacy College where he prepared to follow his father's footsteps. career as a pharmacist was interrupted when his hobby, piano playing, came to the fore, to bring him ultimately to the bandstand of the Central Park Casino in New York.

Eddie never considered music as a profession, although that career began to evolve during the summers he worked as a waiter at a boys' camp in



Eddie Duchin

New Hampshire. The waiters organized an orchestra of three pieces—piano, saxophone, and fiddle. Here Eddie began to bob his head instead of waving a baton to guide the rest of the outfit. He still bobs his head vigorously as he leads his orchestra—but he wears a full dress suit and a debonair gardenia in his button hole rather than khaki camping regalia.

Eddie was born on April Fool's Day, but this proved no drawback to success. Both Eddie's parents were musically inclined, so he was forced to take piano lessons at the age of nine. One hour of practice a day was expected of him, and he always took care to hit it "on the nose," as in broadcasting, with no wasted moments over the hour traversing the scales with his rebellious hands.

His Originality Horrifies

As Eddie progressed in his piano studies, he began to experiment and style his playing, much to the horror of his instructor. Instead of playing measured Bach and Beethoven, Eddie's fingers cavorted over the octaves to jazz patterns. He never thought of making money out of this aptitude for syncopation until a pro-

fessional pianist advised him to join the Union. Eddie did so, and began to accumulate extra money in the summers, working in a drug store during the day and playing at local dances in the evenings.

In the summer of his Junior year at Pharmacy College, Eddie won a Leo Reisman audition and joined his orchestra at the old Waldorf-Astoria. He returned to Boston in the autumn to finish school, graduating in 1929

as president of his class.

Instead of joining his father in the pharmacy business, Eddie took a job as pianist with Reisman at the Central Park Casino, and so popular was his tickling of the ivories that within a year he was given an opportunity to organize his own outfit—featuring piano solos by Eddie Duchin.

Eddie says he's a confirmed bachelor . . . he's tall, dark-haired, goodlooking. And wherever he plays there is at least a dozen of adoring debutantes seated near the bandstand. He keeps his ear to the pulse of the nation with the type of music his dancers and his radio audience like. It's fast tempo that's popular now. Times are getting better, says Eddie.



Vee Lawnhurst and John Seagle

A Popular Team

Popular melody played and sung with the classical touch accounts for the favor which Vee Lawnhurst and John Seagle have won with Wildroot audiences who hear them each Sunday at 4:15 p. m. EST over an NBC (Red) network.

Vee Lawnhurst started her career as a pianist with a thorough grounding in technique and theory, and studied the classics for many years under competent teachers. Her unusual sense of rhythm, however, diverted her technical ability into the channels of modern composition, in which field she has been highly successful. She has been heard on many NBC programs, both as soloist and as a member of a popular two-piano team.

Working on the Wildroot program with John Seagle is her idea of a good time, says Vee. Whether she plays accompaniments for the handsome young baritone, or joins him in a vocal duet, there's satisfaction in harmonizing with some one who has her own appreciation of the good points of music, according to Miss Lawnhurst.

Seagle also received a training in classical music, his father, Oscar Seagle, having been a teacher and concert artist. John was born in Paris and came to this country after several hair-raising experiences as a child during the World War. Six years ago John and some of his buddies formed a quartet which won popularity on the air. He joined Vee on the Wildroot program several months ago, and they have been burning up the air ever since.

Dramatizing the News

Actors, musicians, dramatists, sound-effects technicians, production men, casting experts and engineers make up the seventy-odd people whose combined efforts are required to get Columbia's stirring news dramatizations ready for the microphone on the noteworthy March of Time programs, heard each Friday from 8:30 to 9:00 p. m. EST.

More than thirteen hours are put into actual rehearsal of the program. This particular activity is not made any easier by virtue of the fact that eleventh hour news developments may require complete revamping of the program.

Probably the most arduous task belongs to Arthur Pryor, Jr., director of the current events re-enactments. After a conference with the dramatists on Tuesday afternoon, he has an idea of what the world events may develop by Friday night. He then consults Howard Barlow, who has charge of the music, and Ora Nichols, CBS sound-effects expert. Wednesday, Pryor busies himself with the job of casting. On Thursday morning the actors are given tentative drafts of the March of Time script. After an audition that afternoon, the script is usually torn to bits and revision begins. If Pryor gets to bed before dawn Friday morning he considers himself fortunate. The entire process is repeated the day of the broadcast and ninety minutes before air time there is a final checking of scripts, changing of music, sound-effects and engineering cues, and the insertion and rehearsal of any new scenes occasioned by lastminute happenings in the four corners of the earth.

James Melton, the tenor, has quietly been studying dramatic acting for the past three months and is just about ready to step into the lead in a Broadway musical show. He still takes three vocal lessons a week, and has done so ever since he came up "Nawth" from Nashville.

Watch for the world's most famous radio quartette, the Revelers, to blossom out as movie actors. Negotiations are under way now for them to do a series of movie shorts.

People frequently wonder what it is that Jane Froman's maid carries so

carefully back and forth to the studio, for it's too big to be a jewel case and too small to be a piano. It's a thermos bottle. Jane always drinks coffee before singing and it cannot be too hot or too cold; hence the thermos bottle.

Don Ross had laryngitis and it brought out one of the best reasons why Jane Froman and he are called "radio's happiest couple." Jane and Don sing songs in the same key, so when Don had a program to do despite his illness, Jane rehearsed the orchestra, did the dress rehearsal and then turned the show, ready, over to hubby.

Realizing that "The Last Round Up" is going to presage a whole flock of cowboy ballads, members of the Men About Town trio are digging back into their trunks and Arranger Will Donaldson is working overtime to increase their repertoire of the ranch-hand songs.

Ethel Waters left radio temporarily because she was opening in the new Irving Berlin show and felt she couldn't do justice to both the stage and radio at the same time.

An emotional person is Lulu McConnell, fast-talking comic lady who made her radio bow as the star of "The Big Show".... This stage veteran sat down and broke into tears as soon as she finished her bridgegame skit on the opening program, though she wouldn't say whether they were tears of joy, nervousness or relief.... But within two minutes the irrepressible Lulu was making faces at one of Isham Jones' saxophone players.

"Aerials from a New Zealand Viewpoint" is the title of an interesting article which will appear in our December issue.

LOGGING the Elusive STATION

• • • With the RADEXERS

T CERTAINLY will not be our fault if our DXers waste any time in sleep this month. What with the DX Calendar and the monthly frequency checks arranged by channels, this issue of the radio fan's own magazine is chock full of opportunities to add to any man's log.

"I certainly agree with you when you state that this will be the greatest DX season the world has ever known," asserts Raymond Corbett, 619 12th St., Sacramento, Calif. "The modern sets can't be beat, and the Australian and even Japanese stations should be heard all over the

U. S. with regularity.

"Since fall started I have received the following new stations: WBCM, KFLV, WLB, WCAL, KGFI, CKFC, WHAD, WESG and KFBL. If this is a sample of what will come later, I guess I'll set a record of some sort. Heard my first Japanese station, JOHK, this morning, September 24, and it came in with good volume.

"Have noticed that KGBU in Ketchikan has been coming in with a very strong signal lately, better than it has ever come in before. The fans in the east who want Alaska in their list should be able to pick them up quite easily. They can best be heard from 1:00 a.m. PST on."

From Down Under

An interesting letter (and a subscription) comes to us from Norman T. Ganley (DX234A) 35 West End Ave., Westmere, W2, Auckland, N. Z. Says the preface, "I have before me the March issue of your RADEX which I have had lent to me by a friend. I enjoyed reading your book, finding it both most interesting and instructive.

"I am a keen DXer, having logged 243 stations, but it's only this last three months that I have started send-

ing for verifications. Have sent to KSL, KFI, KHJ, KPO, KGO and KYA in America. The Japs come in fairly strong here. The Mexicans are good at times.

"For the interest of some of your DX fans, our local 1ZR, 1090 kcs., 100 watts, operates Mon., Tue., Wed., Fri., 7:30 a.m. to 2 p.m., 5 to 10:30 p.m. Thu. and Sat. on till 11:00 p.m. and Sun. 11 a.m. to 1:00 p.m., 2:30 to 4:00 p.m. and 6:00 to 9:30. This is our best station. Although not having as much power as our 1YA, 1ZR has a more modern plant with crystal-controlled master oscillator.

"Our 2YA, Wellington, 720 kcs., 5000 watts, is quite a good station and well worth trying for. Tell your readers to watch for 1ZS on 1420 kcs. in the near future; a new company has



Miss Clementine Heineman, featured soloist and only woman member of Phil Spitalny's Orchestra as it is heard each Friday at 8:30 p. m. EST, on the Goldenrod Revue (CRS). Her instrument is the accordion.

taken the station over and I believe they are going to increase the power greatly.

"I have a Stewart-Warner 7-tube receiver, Model R-106A. It is a good set both for distance and tone."

From Australia comes the information that 2MO, Gunnedah, on 1320 kcs., is desirous of receiving reports from the U.S. Our correspondent, L. Schnitzerling, 72 Canning St., Warwick, Queensland, Australia, says they are on the air from 7:00 to 9:00 p.m. daily, Eastern Australian Time which, according to the RADEX Time Converter, is 4:00 to 6:00 a.m. EST. "Here is a piece of interesting information about some new stations it is proposed to erect in Australia," adds Mr. Schnitzerling. "At Grafton, N. S. W., 920 kcs., with 20 kilowatts; at Townsville, Queens., 640 kcs. with 20 kws.; at Sale, Vict., 830 kcs. and 10 kws.; at Launceston, Tasm., 630 kcs, and 10 kws. So far tenders only are called, but when these are officially on the air, I will advise you."

Some Foreign Programs

In the October issue, Earl R. Roberts, 42 Burt Ave., Newark, Ohio, told us of some of the plans for special DX programs by foreign broadcast stations. Now he has this to add: "HHK was unable to DX but hoped we could hear his regular Friday evening broadcast from 8:00 to 9:00 EST on 920 kcs., 1000 watts. LR4 would not DX but gave his schedule as 11:00 a.m. to midnight daily, Argentine time. The new station of the Compania Radio Boliviana, CP-4, on 600 kcs., 10 kw., agreed to a special broadcast. The date is November 27, 3:30 to 4:30 a.m. EST. This program will also be relayed by its s.w. station, CP-5, on 6080 kcs., 1000 watts.

"Radio Excelsior, LR-5, Buenos Aires, will be with us on December 3, using 830 kcs. and 27 kw., antenna power. Quoting from their letter which was written in English (unusual for a S. A. station) 'The hour that would best suit us would be from 2:00-3:00 a.m. EST, which corres-

ponds to 12:00-1:00 a.m. Argentine time.' The time I requested was 3:30-4:30 EST. I don't understand their statement regarding 2:00-3:00 being midnight to one in Argentine. I look for LR-5 to be on either at midnight their time or at 2:00 a.m. our time on December 3. Their broadcasting hours are 11:00 a.m. to midnight without interruption."

In view of this discrepancy in time, it looks as though Radexers who want to try for LR-5 will have to begin to look for them at midnight EST, Dec. 3rd and stay on until after 3:00

It Was Hot In Texas

"I have a Majestic 8-tube superhet in a midget cabinet, Model 21," comments Charles Lindsey Clark, 506 West 32nd St., Austin, Texas. "The set is three years old and only one tube has been replaced because of physical breakage. I have the aerial terminal grounded with No. 22 copper wire wound around a gas pipe. The ground terminal is left open. The weather down here was very poor yesterday, there being thunderstorms around. But I kept the set on for 20

A DX REPORT

Wy y sherectoday.

Jeneral store

sir Jeneral store

i am gide for hunter man wort

Come at dia place lac-des ilse for
hunting cleer deer hunter man bring
it with him mechan for her you o
spik from four place i liesen wit
him sunday nite also tusteday nite
i here song tout my ole modeler
an i ting dots dame fine song
also i bleer oder song i dont sho
de mant tuesday nite storie for
de small boy and gill brut mak
de stor stine for dem if dry is good
bry and gill hunter man loff lak
hell an tole me ar your how we
mok some moon shine
i bur you spik fus de same lak
your at me place i ting you have
good machine i liesen more
nex wich

tank you and much alligh
tank you and much alligh
gick carielle Pourin
gick Carielle Pourin

hours (it got so hot I had to turn a fan on it) and logged 55 stations. Of course, none is verified yet, but there were two of us listening in and we only gave ourselves credit for a station if we both heard it independently, and we made sure it fitted in with your September lists too.

"I guess my best catch was KGFJ, 100 watts. I also heard the WBBZ police calls, mentioned in RADEX, in between strains of Victor Herbert, Kreisler and Rachmaninoff. I am going to put in new tubes, a good aerial and ground, and have the set thoroughly gone over, so I guess you'll hear from me again."

Logging the TP's

"I wrote to RADEX awhile back, telling of my good luck among the Trans-Pacifics, and of the unusually high percentage of verifications," comments M. C. Hesterman, 506 Fourth Ave. No., Saskatoon, Sask. "My verifications now actually do register 100%, as 7ZL, Hobart, Tasmania, have sent me a very fine verification. They completed my list, and that's quite an achievement, isn't it, 100% verification?

"This DX season I am going to see if the Ollie Ross ground will improve my DXing, though I cannot by any means grumble as things are. Still, a chap is always trying for improvement, that's half the fun in radio. 2UE, in Sydney, broadcast to me at 9:45 p.m., Sydney time, on July 21, and today I received verification of my reception of that date. On the verification they state that they will again try and get through to me, this time at 9:45 p.m. Sydney time, on October 20. Needless to say I shall be there with bells on. By the way, I owe my success in the reception of the Trans-Pacifics to RADEX, as it showed me exactly where to go."

Hours of NAA

"I thought you might be interested to know that I got HIJK," contributes Robert M. Musson, 31 Allview Ave., South Norwalk, Conn. "I haven't received any verification yet as I re-



Adele Ronson, although in her early twenties, has been a frequent performer in radio drama for the past three years. At present with "Buck Rogers in the 25th Century."

ceived it only on October 1st at about 4:00 a.m. Could you give me any information concerning this rare station?" We are sorry but the information contained in our indices is all that we have. Robert also wants some information about NAA. This station is operated by the United States Navy from Washington, D. C. It broadcasts only the time signals and weather for public reception. The time signals are given from 11:55 a.m. to noon and from 9:55 p.m. to 10:00 EST, on the broadcast band. On the short waves the time is given from 2:55 to 3:00 a.m., 3:55 to 4:00 p.m., 6:55 to 7:00 p.m. and 11:55 to midnight. The weather reports are given daily at 10:10 a.m. and 10:00 p.m. and daily except Sunday and holidays at 3:45

"I am using a Majestic 294 12-tube all-wave receiver and have had fair results with it," reports Earl Jackson, Sgt. Detachment Q. M. Cops,

Schofield Barracks, Hawaii. "I am able to hear the following stations with good volume as early as 1:00 p.m. to 9:00 p.m. Honolulu time: KDKA, W1XAF, GSF, VK2ME, J1AA, VE9GW, W3XL, W3XAL and RV15. I am bothered with a fearful noise from the hair clippers in the barber shop in the same building. They oscillate and when they are in use I am compelled to shut off the set. I am also having trouble finding a place for my aerial as the winds here are so strong that at times it is almost impossible to keep an antenna up even by using weights at each end to hold the antenna when the trees sway." On the b. c. band the Sergeant picks up all stations along the West Coast and as far east as New York and Boston.

DX In Summer

"On July 27 I bought an RCA Victor radio, five tubes," writes Ray Phillips, 395 Amherst St., Manchester, N. H. "Different people told me that it was no use running the radio in summer, that you could not get much of anything except your local station. On August 10 I bought a RADEX magazine and since then have been what you call DXing. has been just one month since I started and during that time I have listened to 150 different stations, three of which are in Mexico, several in Canada and one in Porto Rico. The two most distant stations were KFI and KPO. If I can pick up all that at a time when 'there is no use in running your radio,' then I expect to hear many new stations during the winter."

"I started DXing in February and since then I haven't such a big record," confesses August Asor, 1686 State St., New Haven, Conn., "but I think it is very good for the radio I am using. I have six stations in California, three in Mexico, two in Cuba, 18 in Canada, HJN verified in South America, and the rest in different parts of the United States. I have logged a total of 135 stations, 18 of them only 100 watts. It isn't much

of a log compared to some of the ones in RADEX, but I think it pretty good for the radio I have—a Neutrodyne of 1922, 11 years old, and I bought it for only 75c. My antenna is a Lynch type. I will write again when I have verified all my stations."

"Have received 231 stations since last December, including stations in Cuba. Canada and Mexico," reports Lester Hale, 1916 Cleveland Ave., E. St. Louis, Ill. "My best catches are 10-BQ, 10-AB, WEXL and KIEV. These were received on a Model 158 Crosley Suptet. In one night, last winter, I logged 91 stations, which would have been impossible without the help of RADEX. These stations, of course, were not verified, owing to the short length of time each station was heard, being only a few seconds in some cases. However no station was logged until the call letters were distinctly understood. Several other stations were received whose call letters were known, but were not logged because the call letters were not heard."



Christy Walsh, noted sports authority, is the central figure in the "All-America Football Show" on Fridays at 9:30 p.m. EST, over the CBS.

"Last season (August 23, 1932, to April 12, 1933) I logged 296 stations from 15 to 150,000 watts," writes Thos. A. FitzGerald, 567 West St., Annapolis, Md., "all but one being North American stations—i.e.. YV1BC. I have a Majestic 210, inside aerial, no ground, and am a rather indifferent DXer, because I must keep my staid friends from becoming convinced that dial-twisting is a manifestation of insanity. I have never asked for verifications, but through error I have two or three. for I sometimes write to stations. making tests, for their information. and some have overlooked my statement that I am not seeking a verification."

Boiled Down

"On the b.c. band I have verified 2CO, 2UE, 2BL, 3HA, 3AR, 4BC, 4RK, 5AD, 5CK, 2YA, 3YA, 4ZW, KGU, HJN, WKAQ, and expecting others," reports J. A. Shanks, Russellville, Tenn. "I logged 2YA in detail 26 times out of 31 last May. The F.R.C. list is great and I have already increased my log with its help. Issue No. 70 certainly is a wonderful help to me in getting T-P's. I am rather proud of all my catches and also very proud of the magazine that helped me to get them. Thanks to RADEX I am a member of I.D.A. and have spent most of my time with this club since I joined."

"I started DXing just two weeks ago," remarks Kenneth C. McCartt, 213 State St., Lexington, Ky. "How's this for a two weeks' log? broadcast band: 149 stations on 97 channels and four 'in-betweens'-137 in 36 states in the United States, 6 in three Mexican states, 3 in two Canadian Provinces, 2 in Cuba, and one in Porto Rico. On higher frequencies I have three police radio stations and 14 amateurs. I have a 6-tube TRF Echophone receiver, to which I have attached a one-tube regenerative detector preamplifier that I built myself. It increases the sensitivity and selectivity ten to one hundred times."

Premium Offers for Readers of RADIO WORLD

THE GREAT NATIONAL WEEKLY
Twelith Year

15c Copy; \$6 yearly, 52 issues; \$3 six Mos.; \$1.50 three Mos.

CHOICE OF PANEL TYPE METERS

One meter sent free with each \$1.00 trial sweeks). Order Cat. PRE-MTR and add the number of the meter to the catalogue number. Any number of meters may be ordered on the equivalent extended subscription basis.

0-6 Voltmeter D.C.	No. 326
0-50 Voltmeter D.C.	
6-Volt Charge Tester D.C	No. 23
0-10 Amperes D.C.	
0-25 Milliamperes D.C.	
0-50 Milliamperes D.C.	No. 350
0-100 Milliamperes D.C.	No. 390
0-300 Milliamp res D.C.	No. 399
0-400 Milliamperes D C	No 394

HANDY PACKAGE OF PARTS

One grid condenser of 0.00025 mfd., with clips; one 5-to-7 meg. fixed grid leak; one knob with ¼-inch shaft; one a-c cable and plug. All sent on receipt of \$1.00 for 8-weeks trial subscription. Order Cat. PRE-HANPKG.

SHIELDS FOR 57, 58 TUBES

Aluminium shields of the type specified by the tube manufacturers for sensitive circuits; form-fitting shield fits snugly about the tube done. Six obtainable free on receipt of \$1.00 for S weeks trial subscription. Order Cat. PRE-TUBSII.

RADIO WORLD, 145 W. 45th St., New York City

"I am not what you might call a real DXer," admits Harold T. Hammond, Box 111, Marblehead, Mass. "I have the desire but not the time. My duties require a long day so I must do my sleeping when the other boys are listening in. However, in two months' time, listening in only between 10:00 and midnight, excepting Saturdays, when I stay over till 2:00 a.m. Sunday, I picked up 173 stations and have verified 107. I try to pick them up on two different nights before verifying. My best are KFI, KNX, XER, XEPN, XETR, VAS, CMJK, KUSD and CHGS."

Gets RXKR In Nova Scotia

"Radio reception here has been very good all through the summer," remarks Philip H. Robinson, Shelburne, N. S. "The South Americans have been especially good coming in at least fifteen days a month with from fair to excellent volume. Have

a veri from LR5 for evening of July 17, and from RXKR, for July 1, YV1BC for July 25, all with fair volume. Have also heard Fecamp, France, August 25 and 28; HJN, LT3 and LR2, LR3, LR4, all with good volume, especially the LR's."

"I have only been DXing for the past month," says Donald Reynolds, Newburgh, N. Y., "and find that I have not done so badly with a log of 203 stations in U.S., Canada, Mexico, and Central America, all worked before midnight. Some of my best catches are 10-AB, KTRH, HIJK, CMCD, CMC, XFB, KFWI, KYA, CJOR, XED, CMCW, HIX. My set is a 5-tube Majestic using a 100ft, aerial and a ground invention of my own. I wish RADEX was published weekly as I can hardly wait until I get the next issue."

"I am using a Silver Marshall 9-tube superhet, model 36A," advises Jerome Pickard, 324 No. 8th St., Saline, Kans. "On an average night I can receive 85 to 100 stations. Some of my best catches are CFRB, CFCN, CKY, CMAF, KEX, KGO, KECA, KFSD, and a lot of others including several police stations. I would like to hear from someone having the same type set."

"I have been DXing for the last three years and have logged 474 stations," summarizes. Edward S. Cope, 36 Vansittart Ave., Woodstock, Ont. "My best are KERN, KFXM, KGFJ, KPCB and HJN. My set is a 7-tube Arcadia made by the Grimes Radio Corp. I would like to hear from other DXers. I have been a reader of RADEX since 1929 and enjoy it very much. It is the best magazine on radio that I have ever read."

"Monday night, September 4, at 11:26 EDST, I pulled in XER while CKAC was going full blast," reports Stanley Brown, Montreal, Que. "I sent a letter to XER, as he announced that he wanted to know how their programs were being received. CKAC's transmitter is located at St. Hiacynthe, about 40 miles southeast of Montreal, but even then that is a



Gustave Haenschen probably has played for more people than any other conductor on the air. Although he has made but few personal appearances since he was a leader of a local dance orchestra in St. Louis, Gustave has made as many phonograph recordings as any orchestra director on earth and has played for countless broadcasts.

good 5 kc. separation."

"I cannot understand how anyone can pick up the number of stations given by so many," questions H. J. Wood, Heublein Hotel, Hartford, Conn. "I have stations on every channel from 540 to 1500, except 960, 1340 and 1470, but nothing outside the United States, except Mexico and Porto Rico. I know that some of the receivers on which these reports are made are not remarkable so presume that location must account for the difference."

"My log for the years 1924-31 stood at 490, with many off the air," reminisces Hubert N. Montulet, Eagle Nest, Blue Mtn. Lake, N. Y. "Due to RADEX, NNRC, and an RCA Electrola, with fair headphone attachment, I now have 707, all on the air. Unfortunately I have only 64 verified, but these are all under 250 watts and over 2000 miles."

(Continued on page 36)

Let's CLEAN UP the SET

• • • By B. FRANCIS DASHIELL

ET'S get ready for that good winter reception by giving the old receiver a thorough cleaning and overhauling. In another month the cold, north winds will chase static to its southern lair, and we shall want our sets to be in perfect condition for new DX records.

There is not much to wear out in a radio set. Tubes, of course, deteriorate with age, but moving parts, such as condenser shafts and bearings, volume controls and switches, will begin to show some signs of wear after a couple of years. Then, too, the possibility of electrical breakdown in condensers, coils, transformers and resistors, is ever present. But we cannot guard against such potential troubles; we must meet them as they come.

Dirt and dust cause most of the non-mechanical troubles found in a receiver. Loss of sensitivity, poor selectivity, and a general falling off in efficiency usually can be traced to accumulated deposits of dirt and dust.

Most people cannot understand why radio sets are not closed in at the back. Certainly, they argue, this would keep out the dust. We must realize, however, that the rear of the set must remain open for otherwise the sound quality would be badly impaired. And the heat, generated by transformers and tubes, must be permitted to escape readily through the open back of the cabinet.

Condensers Must Be Clean

Dust quickly gathers between the plates of the tuning condensers. It is not a physical impossibility to enclose condenser units within a tight casing, and we are at a loss why manufacturers have not taken this step. Proper design can in no way interfere with the tuning capacity of the condenser and there would also

be more shielding effect. Dust also covers the insulating support of the stationary, or stator, plates, slightest leakage of high, or radiofrequency, currents across these dirtcovered surfaces will result in the total loss of some weak, distant signal. And the higher the frequency the greater will be the loss, for it is very difficult to insulate properly against very short waves, even when the surfaces are of the highest quality material. Low-loss insulation always has been of prime importance in radio construction, and certainly dirt and dust cannot help its effectiveness.

First, the chassis must be removed



Tommy McLaughlin, romantic and robust young baritone, is the featured player of "Threads of Happiness" with Andre Kostelanetz's Orchestra and David Ross, Fridays at 9:15 p. m. EST, over CBS. Tommy is the protegé of that other Irish songster. Morton Downey.

from its cabinet; this can be accomplished by turning out the four hold-down bolts that pass up through the cabinet floor or its inner self. Disconnect the speaker plug, and also remove the speaker from its baffleboard. If the speaker is attached to the chassis with a soldered cable the two units must be removed together and placed on a table for cleaning.

Instructions For Cleaning

Now take a brush and dust out the interior of the cabinet. It may be given a coat of shellac if desired. Then, with a clean, soft, camel's-hair brush go carefully over the entire chassis, parts and speaker. Do not injure or press too hard upon the cone of the speaker. Remove all dust from around and between the cone and voice-coil and the surrounding magnet with its fixed field-coil.

A soft cloth, dampened with a good cleansing solution, is used to rub all the parts and surfaces of the chassis. The tube-socket tops must be cleaned. for signal leakage may occur across the flat surface, if covered with a dirt film, and thus between the prongs of the tubes. Polish the chassis and all surfaces with a clean, dry cloth that leaves no fuzz or lint. Get into the out-of-the-way places around the insulating supports and parts of the tuning condensers and polish them Use a pipe-cleaner becarefully. tween the plates of the condensers. It can be shaped nicely to reach the inaccessible places around the shaft.

Examine the surfaces between the plates with a flash-light and carefully remove any projecting bits of dirt or foreign matter. If the condenser makes contact with the rotating plates by means of friction springs the contacts should be cleaned and brightened. If only the shaft makes contact the bearings must be examined and polished. In most cases, however, continuous contacts are provided for, and then a drop of oil on the bearings will not interfere with the electrical conductivity of the condenser.

Use Great Care

Great care is exercised in the making of condenser gang-units so that satisfactory and uniform capacities are obtained over the full length of the scale. But, if this arrangement becomes damaged the dial immediately fails to track evenly from end to end. The condenser has everything to do with the manner in which stations will appear on the dial. Adjustment of trimmer or balancing condensers will not correct this fault.

If a condenser is out of balance over part of its scale it is defective. The trouble in nearly every case is due to misalignment of the plates or their being bent out of shape. The obvious remedy is the straightening out of the bad plates. But a very bad injury or defect in condenser plates may call for a complete replacement of the entire gang or unit. If this is deemed necessary be sure to procure an identical unit from the manufacturer. If the capacity is different the entire dial will be thrown off its proper reading, and in severe cases the coils may require changing in order to bring the dial back to its proper tracking.

The Compensating Condensers

The tiny, balancing condensers, one of which is attached to each of the units of the condenser gang, quickly become detuned when dust accumulates between the leaves. There may be other tiny, trimming condensers scattered about the chassis in different makes of receivers. This dust often accounts for a set becoming hard to tune sharply after it has been in use for some time. Use extreme caution when cleaning these parts so as to not disturb the original adjustment.

We shall not attempt to take up the realigning of a receiver by adjusting its compensating condensers, etc. In nearly every case, particularly superheterodynes, a test oscillator is needed, and we feel, therefore, that the services of a competent serv-

(Continued on page 85)

Simple Remedies for COMPLEX TROUBLES

• • • By the TECHNICAL EDITOR

PLEASE tell me whether the -27 tube in my Brunswick model 18 receiver is the oscillator.

The -27 is not the oscillator but is the second detector. One of the -24s is the first detector, and another is the oscillator. The -24 first detector can be located more easily because it is connected to the first tube of the set—the -51 radio frequency tube—by a small fixed condenser that couples the plate of the r. f. -51 tube to the grid of the second detector, -24 tube. The remaining -24 is, therefore, the oscillator.

About 2-Volt Tubes

I have an Airline five-tube set and a Fada receiver. Is it practicable for me to change the -01A type tubes over to the two-volt tubes? Please explain what changes will be necessary.

You have not given the model numbers of these two sets so we are unable to give you definite instructions for the work. But the Fada 5-tube set has four -O1A tubes and one -71A power tube, according to our assumption. In this case you can use four -30s in place of the -O1As, and a -31 in place of the The C battery connections will remain the same, and also for the B batteries. But you cannot use the 6-volt battery. A two-volt battery, an Aircell type, must be used. Two dry cells can be utilized, but the three volts will require that a portion of the rheostat be left in the circuit. A voltmeter should be used to determine the position of the knob so that just two volts are applied across the tube filaments when the set is being used.



Connie Gates, the little songstress from Cleveland, is one of the few one-woman shows in radio. Connie supplies accompaniment to her ballads on the piano. Heard over the CBS network each Tuesday and Thursday at 12:15 p.m. EST.

Needs Realigning

My Zenith model 39-A receiver is not as selective as it was when I first owned it. Can you suggest some manner by which I can bring back its original efficiency?

The Zenith 39-A receiver is of the tuned-radio-frequency type. Selectivity will be lost through the decreased efficiency of the tubes because of age, wear of condenser shafts, or maladjustments of the variable condensers. Good selectivity can be restored to the receiver by a readjustment of the alignment of the tuning condensers and the replace-

ment of the radio-frequency tubes with new ones. Dust accumulations and moisture tend to lower the operation of the set, and all parts must be carefully cleaned. Gas conduction in any of the r. f. tubes causes poor selectivity. A careful testing of these tubes is indicated.

By far the most important part of the work of restoring the selectivity lies in the proper adjustment of the tuning condensers. Any experienced serviceman should be able to line up these with a modulated oscillator and output meter. the mechanical design of the condensers may not permit the direct adjustment of them, the serviceman can improvise a remedy for this. The condenser bearings should be tight and there should be individual adjustment of each tuned circuit for at least 100 kilocycles of the dial. Some times a complete replacement of the condenser gang unit vastly improves the set, especially when adjustments are hard to complete with precision.

Volume Control

I get excessive volume on my Sonora set when the volume control is turned all the way down. I tried replacing the synchrotone modulator tube but with no appreciable effect. What can you suggest?

It is likely that the ground end of the volume control resistor is open and thus it obtains a series voltage for the control of the screen voltage. The replacement you made was the most obvious place to look for such trouble, and the fact that it did not remedy the trouble proves that the screen control must be at fault. In this case the relatively low value of the volume control resistor will not allow appreciable voltage control at the screens. As soon as the screen circuit is completed by advancing the volume control arm until contact is made the screen voltage is at its maximum, hence the volume is high. Examine and test the resistor; replace it if defective or resolder its connections.

Phones on Lafayette

I attached headphones and wafer adapters to the 57 tube of my new Lafayette Economy-Eight receiver. The signals are weak and the tuning is broad and difficult. What is the trouble with the headphone connection?

The phones should not be connected to the plate of the detector tube—a 57—in this case. Try attaching the wafer adapter to the 56 first audio tube. The detector tuning interference should disappear, and the weak signals will become louder. Or the phones can be connected to the output power tubes so as to obtain all the power of the set. See the February, 1933, issue of RADEX for complete details for all these connections.

No Substitute For A-22

I would like to replace the -22 tubes in my receiver. What is the best type to use?

There is no other type of tube that can be used to replace the -22 tube without making wiring and battery changes in the circuit.

Radio Starting Switch

What sort of battery switch must I get to replace the one now on my RCA model 20 receiver?

If you refer to the snap switch that turns the set on or off, any kind of small radio snap switch will suffice. But if you refer to the volume control with switch at the end of its resistance for cutting the batteries off, you need one having a resistance of 15 ohms. By control in this case we mean the filament resistance.

Radex Converter and Philco

Please tell me how to attach the new RADEX converter for short waves to my Philco 15X which uses 6.3-volt tubes.

The wafer adapter to take the filament current can be placed beneath any tube of the set. In your case we suggest using the -44 or -37 type tubes, which take 6.3 volts. It will

be necessary to connect the filaments of the two converter tubes in series, instead of parallel, in order to consume the additional voltage without burning out the tubes. Or you can connect the converter as shown in our diagram after placing a 4-ohm resistance in series with one of the filament leads from the wafer adapter.

The 180-volt connection to the plate of the converter may be taken from the plate terminal of the -44 screengrid radio-frequency tube by using a 5-hole wafer adapter having the plate contact only.

Short Wave Coils

I have some Silver-Marshall plugin coils. Can I use them to replace the coils in my Midwest short-wave converter?

We do not recommend that you attempt to change the coils of the Midwest for the plug-in coils on hand. The set is made and designed for the type of coil arrangement used. change the coils calls for changes in design and connections, all of which would be impracticable. The converter you have is also efficient, and the dead-end losses in the coils is very slight. Also, your plug-in coils will not replace the fixed coils in the converter due to their windings being different. The oscillator in the converter requires a special type of winding, which cannot be replaced with plug-in coils.

New Majestic Tubes

How can I improve my Majestic 20 by using the newer Majestic tubes that have appeared since the receiver came on the market?

In your set the G-51 may be replaced with G-58-S by using a special adapter and connecting the cathode and additional screen together (which wiring is accomplished in the adapter). This tube, which is to be replaced, is the radio-frequency amplifier. Do not replace the G-27 oscillator with a G-56, nor the G-51 first detector nor the G-51 intermediate frequency with G-58-S types. However,

OVER 50.000 CALLS



LISTED IN EVERY ISSUE

Always up-to-date

Including New Call Letters Changes in Address Cancellations

IF YOU ARE INTERESTED IN SHORT WAVE TRANSMITTING OR RECEIVING YOU CANNOT AFFORD TO BE WITHOUT THIS BOOK. Radio Amateur Call Book contains Up-to-the-minute Changes in listing new culls, changes in address, and cancellations for over 35,000 licensed Amateurs in the United States and possessions, and over 12,000 licensed Amateur Stations in more than one hundred different foreign countries. Each assur also contains High Frequency Commercial Stations, Special Stations and Expeditions, International Call Letters. New Prefixes, High Frequency Press and Weather, and Time Signal Schedules.

SINGLE \$1.00 ANNUAL COPY TODAY

SUBSCRIPTION \$3.25

Issued Quarterly—March, June, September, December

ORDER YOUR COPY TODAY

RADIO AMATEUR CALL BOOK, INC. 604 S. Dearborn Street Chicago, III., U. S. A.

the second detector (G-27) may be replaced with a G-56, without an adapter being necessary. No changes are recommended in the power stages or rectifier -80 type tube.

Tubes In RCA 66

If I substitute the 50 series of tubes in my RCA 66 set for present tubes will I get better results?

We do not believe that any material results will be had by replacing your older tubes with newer types, except in the r.f. end. This tube, a -27, which is at the extreme end of the row of tubes, may be replaced with a 56. In the power end the -45 type may be replaced with a -47 pentode by using an adapter.

Tube Changes In Victor

Please tell me whether new tubes in my Victor RE-57 will work better than the old tubes and improve its performance.

The only tube in this receiver which is comparable to any of the newer types is the -27 detector. All the r.f. tubes are -26s, which are not replaceable. You can insert a 56 in place of the -27 detector and we think the results will be pleasing. Have all the -26s tested and replaced if old and worn out. Dusting and cleaning an old set also works wonders in its operation. Clean between the plates of the variable condensers with an ordinary pipe cleaner.

Receiver Oscillates

Recently my RCA 46 receiver began to oscillate budly and spoil reception. It broadened the tuning so I had it aligned again, but without good results.

The usual cause for oscillation in this receiver is an open screen bypass condenser in either or both of the radio-frequency stages. Also, sometimes the volume control resistor will break or open at the ground or cathode end. This is often accompanied by increased sensitivity until oscillation sets in with poor control of volume. If the control of the volume is just as usual we believe you will likely find the trouble in the screen-grid bypass condensers.

Set Changes Its Tone

My Atwater Kent set, model 89, runs for several hours and then a hollow, tinny and blurred tone is taken on. What can I do to remedy the trouble?

The trouble you mention can be traced to a faulty resistor in the audio system. It is not always possible to localize this resistor because a defect in one of six or eight resistors would have this effect. We suggest first testing the second detector plate resistors under operating conditions, and then the first audio series plate resistor. The grid resistors for the first audio frequency stage as well as the detector and first audio cathode resistors may be defective.

The resistors must be tested after the fault has developed in the resistor as they will show no defect otherwise. In some rare cases the center tap of the inter-audio transformer will open from ground and block the power tubes, thus having a similar effect. It is indicated that some resistor temporarily breaks down after a period of perfect operation, assuming a very high value reaching normal value only when it becomes cool and inoperative.

Phileo 470 Control

What volume control is used on my Philco 470? I notice that when automobiles pass my home they set up interference in my short wave receiver, but when the cars turn into a side street they seem to be practically silent. Why is this?

Your set, the Philco 470, is a combination broadcast and short wave outfit, uses a dual type volume control. It is a high resistance type, and is given part number 5039 by the Philco makers. Order a new one by the number given.

The interference noted in your short-wave combination when automobiles pass the house is commonly experienced by short wave listeners. The sparking of the motors sets up static waves which do not carry far. When the cars turn into a side street it is likely that they keep farther from your antenna and can not be heard.

Majestic Tube Renewals

How can I improve the quality of reception on my Majestic model 90 receiver by substituting some of the newer 50 series of tubes for the ones now in use?

All four of the radio-frequency tubes in your set, which are -27s, may be replaced with 56s without the need of tube adapters. However. some readjustment of the trimmer condensers that are attached to each unit of the four radio-frequency tuning condensers may be necessary in order to rebalance the circuits for the new characteristics of the 56 The use of a 56 for the -27 tubes. detector tube may not give as good results unless the adjustments are very carefully made.

LATEST NEWS of the Short Wave WORLD

• • • By PAGE TAYLOR

OST of our readers will no doubt be interested in knowing that two seldom-heard stations will transmit special programs during this month. Charles A. Morrison, President of the International DX'ers Alliance, Bloomington, Ill., advises us that Station CT3AQ, Funchal, Madeira, will address a program to members of the IDA on Nov. 1st from 2 to 3 am, EST, or 0700 to 0800, GMT. CT3AQ will work on 26.83 meters, which is equivalent to 11,174 kc/s. Their address is Thiago d'Aguiar, Funchal, Maderia Islands.

Another interesting and hard-toget station is EAR58, Santa Cruz de Tenerife, Canary Islands. This station will broadcast a program for the IDA on November 19 on 41.6 meters (7,207 kc/s) from 2 to 4 am, EST, or 0700-0900, GMT. Reports on reception of this transmission can be sent to the Radio Club de Tenerife.

From Asia

RADEX is further indebted to Mr. Morrison for the following items: The Public Works Department of Hong Kong Colony operates two commercial s. w. stations, the Cape D'Aguilar Wireless Station VPS and the Victoria Peak Station, ZBW. VPS works on 28.2 and 50.2 meters, while ZBW uses wavelengths of 34.68 and 50.2 meters. CQH is the call used by the Portuguese Government station at Macao, which offers telephone service on 50 meters, with 1 KW power.

Gramaphone recordings, news and stock quotations are featured in the programs of the Malayan Amateur Radio Society over their station ZGE at Kuala Lampur. ZGE is on the air

on Sundays, Tuesdays and Fridays from 6:40 to 8:40 am, EST, on 48.92 meters with 180 watts power. This station is heard occasionally in this country at the present time.

From Central America

According to Mr. Morrison, the Nassau, Bahamas, telephone station is ZFS instead of VPN. ZFS works with WND, Miami, on 66.43 meters, and is used for broadcasting hurricane warnings frequently at 10:30 am and pm, EST.

Reception of transmissions of the airways stations is the favorite pastime of many short wave fans, so this month RADEX presents, for their convenience, a complete list of the



Alexander Woollcott, journalist, dramatic critic and playuright, now known as the "Town Crier," is heard each Wednesday and Friday at 10:30 p. m. EST, over the CBS.

United States Airport stations. Due to the large number of frequencies used by these stations, and the fact that each one uses several different frequencies, it is necessary to designate each one by a key number. Comments from readers concerning this arrangement will be appreciated.

Evidently the Republic of Panama has changed its prefix. G. W. Burns, of Cincinnati, Ohio, tells us of hearing a station HTF in Panama City working with WNC, Miami. Mr. Burns believes HTF is a new call for RXF as the wavelengths used are the same. He also reports reception of CAU, a new Chilean station at Santiago, likewise working with WNC. No frequency was mentioned for this station.

From Russia

The Radio Friends of the Soviet Union, Moscow, Warwarka, Ipatyewski Per 14, C. D. R., USSR have sent us a list of the Soviet commercial stations using voice. No doubt this list will clear up a few "mystery" stations for some of our readers. RAU, 19.85 meters, located at Tashkent; RDA, Odessa, 45 meters; RIM, Tashkent, 39.34 and 19.67 meters; RIS, Tiflis, 43.64 m.; RJY, Sinelorkovo, 53.57 m.; RJZ, Tiovaiskoe, 50.9 m.; RKI, Moscow, 39.89 and 19.95 m.; RKS, Irkutsk, 24 meters; RPK, Moscow, 41.5 and 20.76; RRH, Tashkent, 30.4 and 16.73; and RRLY, Irkutsk, 30.2 and 16.1 meters.

"Kindly accept my apologies in regard to information I recently sent concerning HBL and HBP," postcards I. Beitman, 249 Gates Ave., Elyria, Ohio. "I previously stated these stations were on the air from 11 to 11:45 pm, Central European Time. The official time for these stations, Saturday afternoons, Eastern Standard Time, 5:30 to 5:45 in English; 5:45 to 6 pm in French and 6 until 6:15 in Spanish."

From Europe

Unusually good reception of European stations is reported by one of our Official Auditors in Brooklyn.

N. Y., Arthur C. Gluck, 295 Clinton He writes: "Short wave sta-Ave. tions are coming in better than ever at this time of year. At least that has been my experience as far as European stations are concerned. use the latest model Comet Pro and it is no trick at all to pick up stations in Europe daily with such volume that the volume control must be turned low. GSG. Daventry on 16.88 meters is best from 8 to 9 am, EST. DJD, Germany, on 19.73 meters is the most powerful station in the 19meter band. They broadcast a special program for North American listeners each morning from 9 to 11 A directional antenna is used. which probably explains why this station is received so strongly. HVJ, 19.84 meters, Vatican City, is heard from 10 to 10:30 am with a powerful signal; they can be picked up easily just below GSF. PHI, Holland, is generally heard on Sunday mornings between 9 and 10, EST, on Announcements are 16.88 meters. made in several languages by their versatile announcer. Mr. Edward Startz. At times PHI broadcasts the siren and bells of a fire engine. the afternoons the best stations, and the time their signals are the strongest, are, DJB, noon to 2 pm; DJD, 1 to 3 pm; GSE, 1 to 2 pm, and GSD, 1 to 3 pm."

From South America

Several readers report very good reception of the new Bolivian station. CP5 of LaPaz. One of these reporters is our Official Auditor, R. W. Evans, 832 Richie Ave., Lima, Ohio, who heard CP5 on 6070 kc/s near 9:30-10 pm, EST. Other information contributed by this cor-"YV3BC respondent follows: Caracas, Venezuela, has changed the frequency to about 6160 kc/s and is heard here very well after 5:30 pm. TGW is received fairly well on about 6180 kc/s. HVJ on 15.110 megs. is heard with fair volume from 10 to VE9DR has changed 10:30 am. frequency to about 6060 kc/s."

Cincinnati, Ohio, seems to be favorably located for s. w. reception, judging by the letters received from our Auditor in that city, Geo. W. Burns, of 2466 Wahl Terrace. says that the Germans are "rather regular, DJB being heard in morning and after 3:30 pm, QSA5, R8, and DJD coming in after 4 pm, QSA4, R7. Neither of these two is heard at all well between noon and 3 pm. By far the best stations are GSD (on the African and West African programs between 3 5:30 pm), and EAQ after 6:15 pm. Strange to say, GSD averages QSA5, R9 on the African program but usually fades out after 6:15 on the Canadian program. Even so, the GSB-GSD arrangement for the Canadian program is the best so far. EAQ is only about QSA2, R4 on the Saturday afternoon transmissions."

HJ4ABB, Manizales, Colombia, 41.6 meters, has changed its schedule so that it is now heard quite often between 9 and 10 pm, EST. This is the well-known amateur broadcaster, Sr. Roberto Baena V. of Apartado 175, who is anxious to have letters about his transmissions and who always acknowledges correct reports.

From Japan

It seems that short wave reception in Japan differs but very little from reception here, judging from a letter received from Mr. Shokichi Yoshimura of Moji. Mr. Yoshimura writes as follows: "Now short wave reception is slightly noisy and weak, owing to the altered ionization here, so PHI, Pontoise and GSG come in a poor condition, however, I was fortunate to report that, since May to date I have received a number of verifications from WIXAZ, W8XK, W3XAL, \GSC, GSD, DJD, HBL, GAA, PCV, SUV, ORK, ZGE and KAY and am now awaiting for veries from IAC, IBEI, LSY, etc. There follow some particulars of the new Bandoeng station, PKIWK. It is owned and operated by J. F. W. de-Kort, Bragaweg 34, Bandoeng, Java.



Milton Berle, Fred Waring and Harry Richman—left to right, respectively, the trio of headliners whose talents, among others, are combined on the CBS "Old Gold" program Wednesdays at 10:00 p. m. EST.

It works on 49.02 meters, although the wave is given as 49.02 it appears to me to be nearer to 49.5. They work every day from 4 to 6 am and 7:30 to 8:30 am, EST."

How to Identify

Last May we printed an article for s. w. beginners in which a few tips were given to aid in the identification of overseas stations. In response to several requests, and for the benefit of new comers, some of these tips are repeated here, with a few additions:

LSX announces "Ellay essay eckay, Transradio, Buenos Aires."

I2RO has a lady announcer who says, "Radio Roma-Napoli."

TI4NRH uses bugle calls between selections.

YV1BC announces "Yay vay uno bay say, Broadcasting Caracas, la habla a la nacion."

HJ1ABB announces "La Voz de

Barranquilla."

HJ4ABB plays "Just a Gigolo" as a theme song.

HJ4ABE says, "Achay hota quatro ah bay ay, Medellin, Colombia."

XETE announces in English and signs off with "L'amour, Toujours, L'amour."

The German stations have a series of ten notes played over ten times on a piano, at ten second intervals.

Pontoise commences and closes their programs with "La Marseillaise."

OXY broadcasts chimes at 6 pm, EST (Midnight in Copenhagen).

CT1AA uses a cuckoo call repeated three times.

HVJ announces "Radio-Vatican."

VE9HX

The correct operating schedule of VE9HX has been received from Mr. William C. Borrett, the Managing Director of the station. VE9HX is now working on 6110 kilocycles under instructions from the Canadian Radio Commission, daily from 6 pm to midnight, Atlantic Standard Time. Mr. Borrett says they are receiving a large volume of mail daily about reception of their station from the Eastern States and as far west as Illinois. The address, The Maritime Broadcasting Co., Ltd., P. O. Box 998, Halifax, Nova Scotia.

TI4NRH

The schedule of T14NRH has been altered again, according to information received from its owner, Sr. Cespedes. He writes that, due to heavy interference in the 30-meter band in the early evening, he has changed his schedule to 10 to 11 pm, EST.

An interesting although incomplete letter was received from a reader in Russellville, Tenn., who failed to sign his name. This unknown correspondent uses a 16-tube Midwest All-Wave receiver on which he has verified reception of the two Australian short wavers, seven of the Empire station wavelengths, the four German broadcasters, EAQ,

HJ2ABA, NRH, HJ4ABB, CT1AA and many other stations, every continent except Africa being included in his log. "I also get Pontoise on 25.6 meters for their late program," he writes. "RV15, Kharbarovsk, Siberia, has been fairly good on 70.65 meters but at times rapid fading develops."

Answering his (or her) questions, VP5—is the prefix for Jamaican stations. Y5U and Y9FZ cannot be located.

A New Member

"Well, I have joined your list of s. w. fans at last," confesses James Owen, 1019 W. Webster, Springfield, Mo. "Last week I purchased a U. S. Apex Converter, 3 tubes, and connected it to my 8-tube Philco and so far am entirely satisfied with the results. To date I have logged W8XK on three frequencies, HJB talking to WNC, and EAQ. Last night EAQ was received with perfect clarity, and, by the way, anyone who hasn't verified this station as yet should tune in on their programs, which come in fine every evening without exception. They are transmitting programs for the International Broadcasting Co., which seems to be an English concern, and close these programs with a selection sounds like 'Taps.' VK2ME last Sunday morning was quite good from 4 to 4:30 am, CST, and VK3ME this morning was very good volume from 4:45 until 5 am."

Some Short Reports

"I received most of my short wave stations by tuning for them at the hours given in RADEX and also find that the lower bands are best in the early daytime and the higher ones best at night," comments Robert L. Weber, West McHenry, Ill. "The short waves have been very good to me, for I have XETE, YV1BC, YV3BC, PRADO, HC2RL, Pontoise, 2RO, GSB, D and F, EAQ, PHI, DJB and D and VK3ME. I will be willing to write any DX fan who would like

to correspond. I use a Midwest 8-tube all-wave set."

Ray La Rocque, 135 Highland St., Worcester, Mass., Chairman of the Courtesy Program Committee of the New England Radio Club, tells us that W3XL, 46.69 meters, now relays the programs of WJZ on Friday nights from 5 pm until 1 am, EST.

Willard D. Cook, R. F. D. No. 1, Woonsocket, R. I., asks if our readers can identify a strange station he heard near 29 meters. He says it begins to come in well at 8 pm and continues at fair volume until 11 pm. Mr. Cook would like to hear from other fans; he uses a Montgomery-Ward s. w. converter.

From Our Auditors

"Reception the first week in September was quite good and I was in hopes the past two months of unearthly noises were past but we had a severe storm and since that time . . . well, the wife says 'Cut out the short wave, it's terrible!' complains E. N. Luken, Auditor in Marshall, Minn. Thought I would mention that although XDA is a phoner and about all they do is test, nevertheless they put on some wonderful programs about 7:30 pm CST every night. They come in fine and certainly sound good. About like XETE when putting on a good program, and there is a real station to stay tuned in on. I notice EAQ is doing a lot of English speaking and that should make them more popular than ever. haven't picked up Pontoise in the evenings yet, in fact, didn't even know they were on evenings until reading September RADEX. I still don't believe they will come in as good as days."

Clarence Sargent, 18 Clinton St., Dansville, N. Y., includes the following information with his regular report as an Official Auditor. "YV3BC on 48.87 meters has been QSA5, R9 for the past two weeks. HBL-HBP, the League of Nations stations, now work on Saturdays instead of Sundays, from 5:30 to 6:15 pm. LSX, Buenos Aires, 28.98 meters broad-

casts music irregularly from 8-9 pm, EST."

The Official Auditor for the Province of Ontario, E. C. Houlgate, 351 Adelaide St., London, contributes the information that CT1AA on 31.25 meters was heard with very good strength during the entire broadcast, from 5 to 7 pm. on two occasions. "The program was quite distorted," he adds. "The transmitter sounds very much as if the speech amplifier is being badly overloaded. HJ3ABD on 40.5 meters is heard quite well nearly any evening. They are usually on the air until around 11:15 pm."

From our Los Angeles Auditor. Stuart Walmsley, 1316 West 58 Place, we have a report in which he writes, "EAQ last week was about an R7 but during the week they have decreased to no more than a faint carrier. During the summer this station can generally be counted on as a fairly consistent performer here on the Pacific Coast. VK2ME on their Saturday night broadcast comes through here at about R6 and are that consistent nearly all the time. Regarding the German stations, I



Radio's famed piano team. Ohman and Arden, on the NBC Red at 9:30 p. m. Sunday and at other times.

have never played them. I would like to hear one once. My receiver is a Patterson All-Wave set, manufactured here in Los Angeles."

"DJB Germany comes on at 7 am CST and with short intermissions is on all the forenoon and part of the afternoon," advises S. H. Lawrence, 308 Booth St., Anamosa, Iowa. "During intermissions ten notes are sounded on a piano with about ten seconds in between. It comes in best during the early part of the day. I pick them up easily on the loudspeaker. They give world news from 8 to 8:15 in German and from 8:15 to 8:30 in English. CST."

"Reception has been the most disappointing we have had for a long time but it is storming now and maybe the air will clear and reception improve," concludes C. R. Anderson, 1026 1st St., N. E., Mason City, Iowa. "Nothing much new to write about only there is a new Mexican, not XETE, on about 27.58 meters, a powerful station at 5:45 pm CST, testing; thus far I have not been able to catch the call as all the announcing has been in Spanish. EAQ was received one evening with volume clearness never before expeand rienced; one could hear the operators in the studio talking in the background, and it was possible to hear the needle start in the record grooves. VE9JR is received here as a local but in spite of their schedule we only catch them around 10:30 am, reading market reports, and in the evenings around 7 pm; might be skip as I'm bothered with it a lot."

"Short wave rans should listen on the 40-meter band after midnight," suggests Official Auditor C. E. Gates, 514 Ivy St., Pittsburgh, Par "There are often interesting South and Central American amateur phone stations on around 1 and 2 am. Outstanding are HC1FG, X1Q and X1G. The DJ's have been coming in with fine clarity, but not much volume. They have been the most consistent of the Europeans, even better than EAQ, which was the star station last year.

I2RO has been just fair, while Pontoise has been very poor. YVQ has been coming in good of late, around 2-3 pm."

W. T. R. Morris, Jr., Official Auditor, 3219 Garland Ave., Richmond, Va., says he has heard the Alaskan phones recently, usually late in the evenings, and continues, "I have been spending right much time away from dear ole Richmond lately and have not been able to jot down much info on the short wave situation. However. I am back now and ready for a long winter of good s. w. reception. For the past few weeks I don't think I have ever experienced such terrible reception before. It has been absolutely rotten. DJD, my old daytime standby, has been failing here lately, as have GSA and GSB. Today was the first real reception I've had in weeks but it was nothing to brag about. DJD came pounding in here about 11:30 am and was a pretty good signal until 2 pm, then it sorta dwindled away. I think, except for DJD, the static was the loudest signal The after-6pm-stations on the air. seem to never weaken. YV1BC and LSN were pounding in here at 7-9 CT1AA seems to be a pretty good signal when he's on the air, but this is around 5-6 pm and the daytime noises have not vet faded away."

This information regarding the new short wave station HC2RL comes to us from Mel Johnston, 1290 Lafayette Ave., New York City: HS2RL is located in Guyaquil, Ecuador, on the west coast of South America (Mail address, P. O. Box 759). It broadcasts on 45 meters and is on the air every Sunday from 5:45 to 7:45 p.m. and every Tuesday from 9:15 to 11:15 p.m. The announcements are in Spanish and English and the sign-off is a march. Letters are welcomed by the station and replies and verifications are sent out at once. Mr. Johnston reports the station coming in with great signal strength, good modulation and slight fading.

MY EXPERIENCE

with the JO Stations

• • Βη Α. R. CALOW*

FIND the Japanese stations very easy to tune in (when conditions are favorable, of course) and I have had as many as 14 and 15 several nights recently while six or eight is a common occurrence. But getting the right "dope" for verification purposes is not so easy.

I find their programs mostly of an uninteresting character but heard, at times, some excellent music both vocal and instrumental also lectures, news reports, etc., in English but I have not bothered to use this as the basis for verification because such programs are usually on a network of several stations. I did. however. write to JOHK last October reporting a lecture in English which I heard clearly for more than thirty minutes. and in January I received an illustrated booklet containing information about JOHK and other Japanese stations but it wasn't a real verification.

It is not necessary for Pacific Coast fans to sit up all night trying to identify the Japs; the best time to do this is when they sign off as they give their call letters clearly in English then. They sign off at about 10:00 p. m. Japan Time which is 5 a. m. PST. It has been my recent experience that they can be heard best at signing-off time without interference from U.S. early-morning stations during March and April because any of these that were coming through from the East or mid-West had already faded out before 5 a. m. PST owing, I presume, to the effects of daylight at the transmission end, but there is still darkness over the Pacific Ocean and the Japs are still coming in. (No doubt similar conditions obtain in the fall months of September and October-I intend to try that next fall.)

I have also found by recent experiments in tuning them in from 4:45 to 5 a. m. PST that they do not always sign off at exactly 5 a. m. PST (10 p. m. Japan Time) neither do they all sign off at exactly the same time but vary sometimes from five to ten minutes and therefore it is possible (providing one is lucky enough to strike the right ones at the right time) to catch several of them and hear the call letters in English as they sign off. They commence to sign off any minute from about 4:50 to 5 a. m. PST. The following will illustrate what I mean and what can be done:

Monday, April 10th, 1933, I tuned in 10 Japs about 4:35 a. m. PST. JOAK on 870 kcs. gave his call in English at 4:52 and left the air at once. JOFK on 850 kcs. did likewise at 4:51.

Tuesday, April 11th, about the same number were heard clearly at 4:45. JOIK on 830 kcs. gave his call in English at 4:52 and immediately signed off. JOQK, a 500-watter on 920 kcs. followed at 4:56; JOAK on 870 kcs., at 4:57; and JOHK loud and clear on 770 kcs. at 4:59.

Saturday, April 15th, the sign-off in English was as follows: JOBK at 5:01, JOIK at 5:02 and JOHK at 5:08. Sometimes the Jap stations put on test programs after the regular broadcasting hours.

Japs do Test

Saturday, March 18th, from 5:50 to 6:10 a.m. PST (daybreak) I picked up JOFK testing on 850 kcs. with musical selections. I sent in a report and on April 24th, I received a real verification:

"We are very much pleased to hear that you have received our waves on the 18th March and beg to verify with much interest that your receptions are all entirely correct. We were making the test of our waves radiated from this station at that time. Hoping to hear again

Sincerely yours, K. Akana, Program Dept., JOFK, Hiroshima."

This verification proves that the Japs do put on test programs after the regular broadcasting hours are over and DXers should watch for them and get them verified.

I started DXing in March, 1932, after reading your article entitled "What Do You Mean DX?" in No. 57 RADEX. Since that time I have positively identified by call letters nearly 300 stations with 230 verified including the following Australians: 3LO, 4QG, 2UE, 5CK, 2CO and 3AR. am also expecting verifications from 4BC and 4BH. Others heard include 4RK, 2BL and 4TO. My most consistent "down under" stations are 2YA and 5CK which I hear best from 4:30 to 5:30 a.m. PST. I seem to be able to get these two very easily especially 5CK. His time is: weekdays 11 p. m. Adelaide Time (Zone 45 on the RADEX Time Converter) Saturdays 11:30 p. m., Sunday 10 p. m. I have heard him close down at these times.

5CK usually broadcasts a program of phonograph recordings of popular dance tunes from 5 to 5:30 a. m. PST and then broadcasts the "11 o'clock close-down" as he calls it; this is eleven strokes on the gong, followed by "God Save the King" and he is gone at exactly 5:30 a. m. PST. He sends out a very nice verification card.

My receiver is a 1932 Victor R-20 10-tube super-het and I use loud-speaker only. I would appreciate hearing from any RADEX readers who use this same receiver and will answer all letters received.

Those Elusive Stations

(Continued from page 22)

Some DX Tips

So many of our readers have failed in their attempts to log CKY at Winnipeg, Manitoba, that they will be interested in this report from G. E. Jacques, 235 Greeley Ave., Hornell, "I do not know if you will call this DX or not but, on the advice of a friend who had heard them on their new frequency, I have heard CKY every night (or rather morning) since August 31st to this date (Sept. 20th). They leave the air at 12:45 a.m. EST. They have a lady announcer who says: 'This is the Canadian Radio Commission station ' a pause and then a man says CKY."

Ralph H. Schiller, President of the Transcontinental Radio DX Club, Hawthorne, N. J., sends us a list of seven b.c. and one short-wave station which will have special DX programs for that club in November. These are being entered in our DX Calendar. We appreciate this sort of cooperation from the DX clubs as it helps us give all of them a big calendar in place of each club having a small one of its own.

Short wave station W1EXZ will broadcast last minute DX tips for the Transcontinental Radio DX Club every Monday night from 7:00 to 7:30 EST on 1750 kcs. Short wave listeners may also try for CP5, La Paz, Bolivia, on Monday morning, November 27th, from 3:30 to 4:30 a.m. EST when that station will carry the DX program of its sister CP4 for the International DXers Alliance.

From the Stations

From Station KGU, Honolulu, Hawaii: "We would be happy to have your magazine include a short news item saying that KGU in Honolulu will gladly acknowledge all authentic reports of reception with our card and colored stamp. We ask only that the DXer include a U. S. 3c stamp. During the winter months we believe

^{*1290 19}th Ave. East, Vancouver, B. C.

Mr. Dashiell will discuss the proper methods of attaching microphones and phonograph pick-ups, in an early issue.

our programs can be heard at a good many points throughout the United States just as they were throughout New Zealand and Australia during the summer months. Once or twice during the winter we will be glad to put on special programs for DX listeners, using native Hawaiian talent." We have assured KGU that our readers will anxiously await notice of the special DX programs as KGU is still unlogged by many a DXer.

A number of readers have reported hearing WHB of Kansas City on 1120 kcs. instead of the 860 listed in this magazine. A letter to the above station brings a reply which reads: "We are operating experimentally from midnight to 1:00 a.m. CST on 1120 kcs. Our daytime frequency remains the same—860 kcs. Our test programs on 1120 are authorized until Sept. 30th. It is likely that the period will be extended for an additional 90 days or until December 30th."

"Our local stations are being shifted all over the dial to accommodate a new direction-finder and marine commercial station being erected here." advises C. L. Parkins of Station VOKW, St. John's, Nfld. "My license is for 100 watts on 1300 kcs. Just now I am on 1085 with about 71/2 watts. VOKW is being rebuilt and will be finished about the end of Oc-At that time I will gladly give you any information you require re VOKW. As for DX programs, I do not transmit regular ones but may be able to arrange an occasional one if you so desire."

"We wish to announce to the DX listeners," states A. D. Cervantes, Manager of CMCW at Havana, Cuba, "that we will give special and prompt attention to every DX report coming to us in the next season. We have organized a DX department which will handle all correspondence. At the same time we wish to apologize to any DX listeners that received our verifications late last year. A censorship by the last Government caused a large number of our letters to be lost."



The Revelers, famous harmony group, whose voices are heard over NBC. Left to right they are James Melton, first tenor; Elliott Shaw, baritone; Lewis James, second tenor; Frank Black, arranger and accompanist, and Wilfred Glenn, bass. Black is also general musical director of NBC.

"Station WCBM, Baltimore, on 1370, is cooperating with the Newark News Radio Club in broadcasting tips weekly, on Thursday nights at midnight EST," advises Robert Emory Base, 4105 Alto Road, Windsor Hills, Baltimore.

Some Club News

And still another DX club to add to the roster-the National Radio Club of York, Penna. "The purpose of the club is to stimulate an interest in DXing and to pass on DX tips to those interested in receiving them," says Robert H. Weaver, president, whose address is 603 West Market Street, York. "We send out weekly tips and other information. The cost of joining this club is \$1.25 per year. We are planning a gigantic series of broadcasts to take place Friday and Saturday mornings, October 14th and More than 125 stations have been written asking them to join."

Mr. Weaver sends us a list of four special DX programs which the club has arranged and which are being incorporated in this month's DX Calendar.

Keith L. Freas, 73 Delwood Road, Kenmore, N. Y., writes us that the Buffalo Evening News DX Club of which he has been Secretary, has disbanded and that he has been appointed to a position in the new National Radio Club at York, Pa. The popular "Singleton and Eliminator" device of the BENDXC will be continued by the new club.

The DX CONTEST for FOREIGN Stations

ETAILS regarding the DX contest of the International DX-ers' Alliance of Bloomington, Illinois, are now available. The contest will begin on October 1, 1933, and end at midnight, CST, March 31, 1934. Only verifications of reception during this period will be counted. All verifications must be in the hands of the contest judges for inspection not later than midnight, CST, June 31, 1934.

Verifications must be from stations at least 2000 miles distant and no stations will be counted that are located in the same continent as the contestant. The continents, of course, are North America, South America, Europe, Africa, Asia and Oceania. Stations located on islands more than 2000 miles distant from point of reception will be counted regardless of continent. In exceptional reception localities, the eligibility of stations may be subject to special ruling by the judges.

All verifications must be approved by one of the contest judges. In sending verifications to the judges, return postage must be included. In case of the indecision of a contest judge as to the eligibility or authenticity of any veri, the case will be referred to the Honorary Judges for final decision.

List of Awards

The Grand Award for the greatest number of verifications from stations on the broadcast band (540 to 1510 kcs.) is a 1934 model, custom-built, all-wave deluxe Lincoln Radio Receiver which has been donated by the Lincoln Radio Corp. of Chicago.

Second Award, the famous Ollie

Ross aerial-ground combination, donated by Mr. Ross.

Third Award, a large, handsome world wall map.

Special Award, the Frank Johnson award for the most unusual single verification will be a subscription to RADEX.

Second Special Award, a Reeks sliding scale time converter.

Additional awards will be made to contestants in Oceania, Europe and North America.

The contest judges are Frank A. Johnson, 59 West 66th St., Chicago, Ill., F. H. A. Barnett, 5 Chapman St., Anderston, Dunedin, New Zealand, and Francis Wiseman, 90 Brighton Grove, Newcastle-on-Tyne, England.

The Honory Judges are W. H. Hollister, President of the Lincoln Radio Corp., 329 South Wood St., Chicago; S. Gordon Taylor, Technical Editor, Radio News, 222 West 39th St., New York, and Fred C. Butler, Editor of RADEX, Hanna Building, Cleveland.

Good Advice to DXers

THE following letter from KVI, Tacoma, applies to all other stations and readers who want their report verified promptly would do well to follow the suggestions:

The writer would be very pleased to have you print the remainder of this letter in your DX section of RADEX; next issue, if possible:

Effective immediately, this station, KVI, will positively verify every report sent in. The writer, one of the announcing staff, and himself an ardent DXer, knows the feelings of the DXer, who, logging a station which he considers a good catch, cannot get it verified.

However, when sending in information to be verified, do not send in numbers and announcements given on Columbia chain programs, as it is not possible to verify these. They may be heard on any one of dozens of other stations. It is suggested that the name of the sponsor of local

spot announcements given on the 15-minute cuts, be given, as these are sure proof.

Another suggestion for those who find it hard to break through to the Pacific Coast on the 570 kc. channel, is that they listen in at midnight, PST, for our sign-off.

If you already have KVI verified, please do not overwhelm me with letters, but those of you who haven't, will not be disappointed. We do not handle stamps, but will verify by letter or card.

You will also be advised, through this magazine, and through the various radio clubs, of the starting date of a series of weekly DX broadcasts, which the writer is planning, to run regularly throughout the winter.

A LETTER for GERMAN Stations

UR readers report that their chances of receiving verifications of their reports are greatly increased when their letters are in the language of the station. March, 1933, issue of this magazine (No. 67) we gave a model report in the Spanish language and last month (No. 72) the same letter appeared in French. We now give below the same in the German language through the courtesy of one of our good friends, Rudolph Kure, of Cincinnati. For the English translation, see the March issue above referred to.

(German translation)

Chefingenieur Rundfunkstation (Call) (City and Country) Sehr geehrter Herr!

chen und mir gefl. meinen Empfang Ihres Senders zu beglaubigen?

- 1. Orchester-Nummer 2. Pianoforte-Nummer
- 3. Violin-Nummer 4. Orgel-Nummer
- Marimba-Nummer
 Ziehharmonika-Nummer
- 7. Gesangsolo (Herr) 8. Gesangsolo (Dame)
- 9. Chorgesang
 10. Klassische Musik
 11. Kolkstuenliche Musik
- 11. Kolkstuemliche Musik 12. Heimische Musik
- 13. Tanzmusik 14. Fox-Trot
- 15. Marsch
- Walzer
 Gespraech
- 18. Senderankuendigungen19. Empfangsstaerke—schwach
- 20. Empfangsstaerke—gut 21. Empfangsstaerke—stark
- 22. Tonbeschaffenheit—schlecht 23. Tonbeschaffenheit—gut
- 24. Witterungsverhaeltnisse—gut 25. Witterungsverhaeltnisse—schlecht
- 26. Amerikanische Weisen
- 27. Deutsche Weisen28. Guitarre
 - 29. Duett Trio
 - 30. Zeitangabe

Indem ich Ihnen fuer Ihre Senderempfangsbestaetigung zum voraus bestens danke, gebe ich mich der angenehmen Hoffnung hin Ihnen in kurzer Zeit einen weiteren Bericht einsenden zu koennen und verbleibe

Ihr Aufrichtigster

He Couldn't Believe It

WHEN I first bought RADEX, I was surprised to see letters from readers reporting reception of stations on the broadcast band as far away as New Zealand and Australia and I just couldn't believe it. To be frank, I really thought they were lies and so I let it go by until I found that in nearly every issue someone was receiving NZ's and Japs and Aussies. So then I began to think, well maybe some of those fellows do get a real distant station now and then.

I began to get interested in the b.c. band and so one morning I got up at 5:00 o'clock, EST., and tuned in. I was waiting for my set to warm up and I had my dial set at 720. Not purposely. It just happened to be set at 720. Well sir, what should I hear but a very weak station there

(Continued on page 72)

AROUND the CLOCK

on the SHORT WAVES

GMT	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00
AST	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00
EST	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
CST	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00
MST	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00
PST	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
	W8XK W9XF	GSD GSF VK2ME W9XF	GSD GSF V K2ME	RV15	RV15	J1AA RV15 VK2ME VK3ME	GSF GSG J1AA RV15 VK2ME VK3ME W1XAZ ZGE	RV15	DJB EAR58 GSF GSG HI1A PHI Pont. Rabat VE9DR VE9DW WK2ME W1XAZ W8XK	DJB GSE GSF GSG PHI Pont. VE9DR VE9GW VE9JR VK9JME W1XAZ W8XK	CT3AQ DJB DJD GSE GSF HVJ Pont. VE9DR VE9GW WIXAL WIXAZ W8XK	CT3AQ DJB DJD GSB GSE GSF 12RO Pont. VE9DR VE9JR W1XAI W1XAZ W2XE W3XAU

NOON TO MIDNIGHT (EST)

GMT	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	1:00	2:00	3:00	4:00
ST	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00
ST	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
ST	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:0
AST	10:00	11:00	12:00	1:00	2:00	3 00	4:00	5:00	6:00	7:00	8:00	9:00
'ST	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00
	DJB DJD GSB GSE HI1A 12RO Pont. TGW VE9DR VE9DR W1XAL W1XAZ W2XE W3XAL W3XAU W8XK	W1XAZ W3XAL W3XAU W8XK W9XF	VE9GW VE9JR W1XAZ W2XAD	DJB DJD GSB GSD HJ4ABB 12RO OXY Pont. Rabat RV59 VE9DR VE9GW VE9GW W1XAZ W2XAD W2XAD	OXY Pont. Rabat RV59 VE9DR VE9GW W1XAZ W2XE W3XAL W3XAL	OXY RV59 VE9DR	CTIAA CT3AQ DJA CSB GSD GSD HBL HBL VE9DR VE9DR W1XAL W1XAL W2XE W3XAL W8XK W9XF XETE YV1BC	W1XAZ W2XAF W2XE W3XAL	4ABE LSX Pont. VE9DR VE9GW VE9JR W1XAL W2XAF	HJ 1ABB 2ABA 3ABD 4ABB 4ABB Pont. PRADO TGW VE9DR VE9DR WIXAL W3XAL W3XAL W3XAU W3XAU W8XK W9XF XETE YV1BC	HJ 3ABD Pont. PRADO TGW NRH VE9DR VE9BW W1XAL W1XAZ W2XE W3XAU W8XXAU W8XXAU W8XXY XETE	HJ 4ABB VE9DI W13XA W3XA W3XK W8XK W9XF XETE

One Hundred Best

Short Wave Stations

Arranged Alphabetically

Stations marked with an asterisk (*) will not verify. Frequencies are given in megacycles. Times are given in Eastern Standard.

*PSF, Brazil, 14.682

```
*British Ships, 13.220, 8.831, 4.174
*CEC, Chile, 19.678, 15.835
CGA, Canada, 13.296, 9.340
CNR, Morocco, 12.820
                                                                                                                                                                                                   Rabat, Morocco, 12.820. Sun, 7:30 to 9 a.m.
   CP5, Bolivia, 6.081
  CT1AA, Portugal, 9.592. Tues. and Fri., 4:30-7 p.m.
CT3AQ, Madeira, Tues., Thurs., 5-6:30 p.m.; Sun. 10:30
CH3aQ, Madeira, 10es, 1 nurs., 5-0.30 p.m., 5um. 10.30 a.m., noon.

DAF, Germany, 12.394
DFB, Germany, 10.285
DJA, Germany, 10.285
DJA, Germany, 5-190. 8 a.m. to 6:30 p.m.
DJB, Germany, 11.753. 10 a.m. to 6 p.m.
EAQ, Spain, 9.862. 5:30 to 7 p.m. daily and 1-3 p.m. Sat.
EHY, Spain, 10.164
EHY, Spain, 10.164
ETM, France, 19.282
FZS, 1ndo-China, 11.983
"German Ships, 13.135, 10.163, 8.328, 4.174
GAS, England, 18.304
GBB, England, 13.500
GBS, England, 12.148
GBW, England, 14.450
GSA, England, 14.450
GSA, England, 9.510. 11.30 a.m.-12:30 p.m.; 1-5:30 p.m.;
GSB, England, 5-10. 11.30 a.m.-12:30 p.m.; 1-5:30 p.m.;
                 a.m.-noon.
 9-8 p.m.
GSC, England, 9.585
GSD, England, 11.750. 1-3 a.m.; 1-5:30 p.m.; 6-8 p.m.
GSE, England, 11.865. 9:30 a.m.-12:30 p.m.; 6-8 p.m.
GSF, England, 15:140. 1-3 a.m.; 6-8 a.m.; 8:30-11:30 a.m.
GSG, England, 17.770. 6 to 8 a.m.; 8:30 to 10:30 a.m.
  GSG, England, 17.7/0. 6 to 8 a.m.; 8.30 to 10:30 a.m.

HBL, Switzerland, 9.580. Sat., 5 to 5 45 p.m.

HBP, Switzerland, 7.872. Sat., 5 to 5.45 p.m.

HI-1-A, Santo Domingo, 6.272. 8-8:30 a.m.; 12:30-1:30
  p.in.; 8-9 p.m.
*HJB, Colombia, 14.930
*HJY, Colombia, 18.444
HJIABB, Colombia, 5.793.
                                                                                           8-10 p.m. daily
 HJ2ABB, Colombia, 5.879.
HJ3ABB, Colombia, 7.402.
HJ3ABB, Colombia, 7.139.
HJ3ABB, Colombia, 7.139.
p.m.; Wed., 8-10 p.m.
HJ4ABE, Colombia, 5.879.
Mon., Wed., Fri., 7:30-9:30
  HJ5ABB, Colombia, 6.378
HJ5ABF, Colombia, 8.271
 HJ5ABF, Colombia, 8.271

HKN, Colombia, 7.138. 8-10 p.m., daily

HSP, Siam, 17.719

HVJ, Vatiean City, 15.120

IAC, Italy, 12.785

I2RO, Italy, 11.800. 11:30 a.m. to 12:30 p.m.; 1:15 to 6 p.m.

J1AA, Japan, 9.862. 5 to 8 a.m.

KAY, Philippines, 14.980

KAZ, Philippines, 9.990

*KKP, Hawaii, 16.024

LSN Argentina 9.895
  LSN, Argentina, 9.895
 LSN, Argentina, 10.345
LSY, Argentina, 10.345
LSY, Argentina, 18.116
*OCI, Peru, 18.670
OXY, Denmark, 9.520. 2 to 6:30 p.m.
PHI, Holland, 17.761. 8-10 a.m. Mon., Tues., and Fri.; 8 to
 10:30 a.m. Sat. and Sun. PLV, Java, 9.410 Pontoise, France, 15.234. 8-
                                                                                   8-11 a.m.
                                                        11.898.
                                                                                   11:30 a.m. to 1:15 p.m.
                                                        11.711. 3-5 p.m. and 6-11 p.m.
 *PPU, Brazil, 19.270
 PRADO, Ecuador, 6.618. Thursday, 9-11 p.m.
```

```
8.218. Sun, 2:30 to 5 p.m.
  *RXF, Panama, 14.545
RV15, Siberia, 4.273. 3-9 a.m., daily
RV59, USSR, 5.996. 3-6 p.m., daily
RW50, USSR, 11.923
  SRI, Poland, 9.488. 1-3 p.m., Tues.; 8-9 a.m., Wed.
  TGA, Guatemala, 14.545
TIR, Costa Rica 14.545
 THK, Costa Rica, 14.545
THANEH, Costa Rica, 9.670. 10-11 p.m., daily
UOR2, Austria, 6.072. 8:30-9 a.m.; 10 a.m.-1 p.m. and
2-4 p.m. on Tuesdays.
VE9BJ, Canada, 6.090
VE9CS, Canada, 6.074
VE9DR, Canada, 6.005.

to 11:15 p. m.

VE9GW, Canada, 6.092. 3 p.m.-midnight

VE9HX, Canada, 6.110. 5-11 p.m.. daily

VE9HX, Canada, 1.1710. Sun., 9-10 p.m.: Sat., 9:30-10
a.m.; 11:11:30 a.m.: 12:45-1:15 p.m.; 7-8:30 p.m.;

9-10:30 p.m. Other days: 9:30-10 a.m.; 11-11:35
a.m.: 2-2:15 p.m.: 3:15-3:35 p.m.; 7-10:30 p.m.

VK2ME, Australia, 10.520.

9.585. Sunday, 1-3 a.m.; 4:30-8:30
a.m.; 9-11 a.m.
   VE9DR, Canada, 6.005. 7:30 a.m. to Midnight; Sun., noon
9.585. Sunday. 1-3 a.m.; 4:30-8:30 a.m.; 9-11 a.m.
VK3ME, Australia, 9.503. Wed., 5-6:30 a.m.; Sat., 5-7 a.m.
VPN, Bahamas, 4.513
VWZ, India, 17.533
*WEA, U. S. A., 10.601
*WEF, U. S. A., 9.488
*WNC, U. S. A., 15.055
WIXAL, U. S. A., 15.242. Sunday, 10 a.m.-1 p.m.
11.780. Sat., 5:30-11 p.m.; Sun., 6:30-
9:30 p.m.
                                                         8:30 p.m.
  W2XAD, U. S. A., 15.320. Mon., Wed., Fri., 3-4 p.m.; Sun,
 2-4 p.m.

W2XAF, U. S. A., 9.530. 7 p.m. to 1 a.m.

W2XE, U. S. A., 15.258. 11 a.m. to 1 p.m.
                                                                3 to 5 p.m.
6 to 11 p.m.
                                            11.823.
                                              6.116.
  W3XAL, U. S. A., 17.772. 12:30 to 6:30 p.m. except Sat.
                                                 6.096 3 p.m. to midnight, Saturday
  W3XAU, U. S. A., 9.585.
                                                                  11 a.m. to 5 p.m.
  6.057. 7 p.m. to midnight W3XL, U. S. A., 6.421. Irregular
  W8XK, U. S. A., 21.451. 7 a.m. to 2 p.m.
15.204. 10 a.m. to 4:15
                                                                10 a.m. to 4:15 p.m.
                                            11.870 4:30-10 p.m.
                                              6.140. 4:30 p.m. to 12:30 a.m.
6.076. 3 to 6 p.m.
 W9XAA, U. S. A., 6.076. 3 to 6 p.m.
W9XF, U. S. A., 6.100. Silent Sat.; Sun, 1-2:30 p.m.; 4:30-7 p.m.; 9 p.m. to 2 a.m.; other days, 4:30-8 p.m.; 9:30
7 p.m.; 9 p.m. to 2 a.m.; other days, 4:30-8 p.m.; 9:30 p.m. to 2 a.m.
XAM, Mexico, 11.187
XETE, Mexico, 9:600. 2:30-5 p.m.; 6:30 p.m. to midnight
*YNA, Nicaragua, 14.480. Phones Hialeah.
*YVQ, Venezuela, 13.337. Phones Hialeah
*YVR, Venezuela, 18.296 and 9:168
YV1BC, Venezuela, 6:112. 5:15 to 10 p.m.
YV2AM, Venezuela, 14.102. Sun., 6:30 to 11:30 a.m.
YV3BC, Venezuela, 9:510. 9:30 to 10 p.m.
6:134. 10:30 a.m. to 1 p.m. and 4:30-
                                                                 10:30 a.m. to 1 p.m. and 4:30-9:30 p.m.; Sun., 8:30 a.m. to noon and 3-6:30 p.m.
                                                6.134.
 *ZFA, Bermuda, 5.045
ZFB, Bernuda, 10.060
ZGE, Malaya, 5.996. Tues., Fri., 6:30-8:30 a.m. and
Sun., 7-9 a.m.
```

WHAT'S ON THE AIR TONIGHT?

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

COLUMBI	
Call	Dial

L, Red (R)
Dial

NATIONA	L, Blue.(B)
Call	Dial

CANADIA	N (F)
Call	Dial

E Eastern: C Central; M Mountain; P Pacific. TIME: RADEX is the only publication listing stations in alphabetical order for your convenience. While these programs are correct at the time of going to press changes are made from time to time.

MONDAY

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C - Buck Rogers in 25th Century

CKLW WAAB WABC WADC WBT WCAO WCAU WDRC WEAN WHK WJSV WKBW WOKO

R - Walter Logan's Ensemble KDYL KITP KDYL KFYR KOA KPO KPRC KSD KSTP KTBS KTHS KVOO WAPI WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WFLA WDA1 WIBA WIOI WJAX WJDX WKY WIOD WIS WIAR WMAQ WMC WSB WSM WSMB WTAG WTAM WRVA

B - Richard Himber and Orchestra KOIL KSO KWCR KWK KYW WBAL WBZ WBZA WCKY WENR WHAM WJZ WMAL WREN WSYR

E-6:15 p.m., C-5:15, M-4:15, P-3:15 C — H-Bar-O Rangers WAAB WABC WCAU WDRC WEAN WFBL WGR WHEC WHK WLBZ

E-6:30 p.m., C-5:30, M-4:30, P-3:30

WMAS WOKO WORC

E-6:30 p.m., U-9:30, m-10-7, C — Vera Van, Contralto CFRB CKLW KLRA WAAB WABC WADC WBIG WBRC WCAO WDBJ WBRC WBSU WFEA WGST WHEC WIP WJSV WKBW WJAC WHK WHP WJSV WKBW WLAC WLBW WMBG WOKO WORC WQAM WREC WSFA WSJS WTAR WTOC Dinner Music

CFBO CFCF CFCH CFCO CFCY
CFNB CFPL CHGS CHNS CHRC
CJCB CKCH CKNC CKOC CKPC CKPR CRCA CRCO CRCS CRCT

E-6:45 p.m., C-5:45, M-4:45, P-3:45 R — Horsesense Philosophy; Andrew

Kelly WBEN WCAE WCKY
WEAF WFAA WFBR WGY WHO
WJDX WMAQ WMC WOC WSAI
WSB WSM WSMB WTAG WWJ B - Lowell Thomas

CRCT KDKA WBAL WBZ WBZA WFLA WGAR WHAM WIOD WJAX WJR WJZ WLW WSYR

E-7:00 p.m., C-6:00, M-5:00, P-4:00 - Myrt and Marge CKLW KRLD WABC WADC WBT WCAO WCAU WDAR WDBO WDRC WEAN WFBL WGR WHK WJAS

WFBL WJSV WKRC WNAC WOKO WQAM WSPD WTOC WWVA

R — Molle Show; Charlie Leland KSD WBEN WCAE WCSH WDAF

WEAF WEEI WFBR WGY WHO
WJAR WLIT WMAQ WOC WOW
WRC WTAG WTAM WTIC WWJ
B — Amos 'n' Andy WHO

CRCT KDKA WBAL WBZ WBZA WCKY WFLA WGAR WHAM WIOD WJR WJZ WLW WMAL WPTF

WRVA F — Harvey Robb, Organist Stations same as 6:30 Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15 - Just Plain Bill CFRB CKLW WABC WCAO WCAU WGR WHK WJSV WKRC WNAC

R — Billy Bachelor; Ray Knight WEAF WGY WJAR WRC WEAF WEAF WGY WTAM WWJ

B — Baby Rose Marie, Songs KDKA WBAL WBZ WBZA WHAM WJZ WMAL WSYR

E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — Music in the Air WABC WCAO WCAU WDRC WEAN

WFBL WFEA WGR WHEC WICC WJAS WJSV WLBZ WNAC WOKO WORC

Lum and Abner KSD WBEN WCAE WCSH WDAF WEAF WEEL WEI WLW WRC WTAG WFBR WGY WJAR

B - Richfield Country Club CRCT KDKA WBAL WBZ WBZA WHAM WJZ WMAL WSYR

Chamber Music Stations same as 6:30 Monday

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Boake Carter; Phileo

CRLW KMBC KMOX WABC WBBM WBT WCAO WCAU WCCO WGR WHAS WHK WJAS WJSV WNAC The Goldbergs

WBEN WCAE WCSH WDAF WEAF WEEI WENR WFBR WGY WJAR WLIT WOW WRC WSAI WTAG WLIT WWJ WTAM

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Happy Bakers CKLW WABC WADC WCAH WDRC WFBM WGN WGR WHEC WHK WICC WJSV WMAS WMBG WMT WNAC WORC WSPD WWVA

R — Soconyland Sketches—Drama
WBEN WCSH WEAF WEEI WGY

M — Soconyalus Settlines Disama WBEN WCSH WEAF WEEI WGY WJAR WTAG WTIC B — Frank Black's String Symphony CFCF CRCT KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR WHAM WJR WJZ WLS WMAL WREN WSYR

 Blackfoot Trails CFBO CFCF CFCH CFCN CFCY CFNB CFPL CFQC CFAC CFQC CECO CECY CHAB CHGS CHNS CHRC CJCJ CJGX CJOC CICB CJCA CJRM CJRW CKCH CKCK CKNC CKOC CKPC CKPR CKUA CKX CKY CRCA CRCO CRCS CRCT

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Edwin C. Hill CKLW KMBC KMOX WABC WADC WCAO WCAO WCCO WDRO WEAN WEBL WFBM WCN WGR WHK

WFBL WFBM WGN WGR WHK WJAS WJSV WKRC WNAC WOKO

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Bing Crosby CKLW KDB KERN KFBK KFPY

CKLW KDB KERN KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KSL KVI KWG
WABC WADC WCAU WDRC
WEAN WFBL WFBM WGN WGR
WHAS WHK WJAS WJSV WKRC
WNAC WOKO WOWO WSPD

R — Johns-Manville; Floyd Gibbons KDYL KOA KPRC KSD WBEN WCAE WCSH WDAF WEAF WEEI WGY WING WHO WIOD WFBR WFLA WJAR WJAX WLIT WLW WMAQ WMC WOC WRC WRVA WSB WSM WTAG WTAM WTIC WWJ WOC WOW WSMB

E-8:45 p.m., C-7:45, M-6:45, P-5:45 B — Red Davis—Dramatic Sketch KDKA WBAL WBZ WBZA WHAM WJR WJZ WLS WSYR

E-9:00 p.m., C-8:00, M-7:00, P-6:00
C — Evening in Paris
CKLW KLZ KMBC KMOX KOMA
KSL WABC WCAO WCAU WCCO
WDSU WEAN WGN WGST WHAS
WHK WJSV WNAC
R — A. & P. Gypsies
KSD WBEN WGS WCAI WDAF
WILLER WCSV WHO WILLE WEEL WGY WHO WDAF

WEAF WHO WJAR WOW WRC WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ WSAI WTAG

WSAI WIAG WIAM WIIC WWJ
F— Hour of Gaiety and Romanec
EFAC CEBO CFCF CFCH CFCN
CFCO CFCY CFJC CFNB CFPL
CFQC CHAB CHGS CHNS CHRC
CHWK CJCA CJCB CJCB
CJGX CJOC CJRM CJRW CKCH
CKCK CKNC CKOC CKOV CKPC
CKPB CKUA CKV CKY CRCA CKPR CKUA CKX CK CRCO CRCS CRCT CRCV CKY CRCA

B — Sinclair Minstrels
KDKA KFYR KOA KOIL KPRC
KSO KSTP KTBS KTHS KVOO

MONDAY—(Continued)

KWCR KWK WBAL WBZ WBZA WDAY WEBC WFAA WFLA WGAR WHAM WHBA WIOD WIS WJAX WJDX WJR WJZ WKY WLS WLW WMC WOAI WPTF WREN WRVA WSB WSM WSMB WTMJ WWNC

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

C — Kate Smith
CFRB KFH KLRA KLZ KMBC
KMOX KOMA KSL KTRH KTSA
KVOR WABC WACO WADC WBIG
WBRC WCAO WCAU WCCO WDBJ
WDRC WDSU WFBL WFBM WFEA
WGST WHAS WHP WIBW WISN
WAS WARD WIDD WAND WGST WHAS WHP WIBW WISN WJAS WJSV WKBW WLBW WMBD WMBG WOKO WORC WPG WQAM WREC WSBT WSJS WTAR WTOC

E-9:30 p.m., C-8:30, M-7:30, P-6:30
C—Isham Jones; Lulu McConnell
CFRB CKLW KOB KERN KFBK
KFPY KFRC KGB KHJ KLZ KMBC
KMJ KMOX KOIN KOL KRLD
KSL KVI KWG WABC
WADC
WEBM WBT WCAH WCAO WCAU
WCCO WDRC WDSU WEAN WFBL
WFBM WHAS WHK WICC WJAS
WJSV WKBW WKRC WJAC WNAC
WOKO WOWO WREC WSPD WTAR
R—Del Monte Ship at Jav

KDYL KOA KPRC KSD KSTP KTBS KVOO WBEN WCAE WCSH WEAF WEBC WEEI WFAA WFBR WFLA WGY WHO WIOD WIS WJAR WJAX WKBF WKY WLIT WMAQ WOAI WOC WOW WRC WRYA WSAI WTAG WTAM WTMJ WWNC WWJ

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
C— Wayne King and Orchestra
CKLW KALE KDB KERN KFRC
KGB KHJ KLZ KMBC KMOX
KOIN KOL KSL KWG WAAB WABC
WADC WBBM WCAO WCAU WCCO
WDRC WEAN WFBL WFBM WGR
WHAS WHK WJAS WJSV WKRC
WOKO WOWO WSPD
COLORED PROCESSOR

WOKO WOWO WSFD

R—Contented Program

CFCF CRCT KDYL KFI KFYR

KGO KGW KHQ KOA KOMO KPRC

KSTP WCSH WEAF WEBC WEEL

WEBR WJAR WLIT WMC WOAL WRC WSB WSM WTAG

E-10:30 p.m., C-9:30, M-8:30, P-7:30
R — Jules Lande, Violinist
KSD WBEN WCAE WCSH WDAF
WEAF WEEI WFBR WGY WHO
WIOD WIS WJAR WLIT WLW
WMAQ WOC WOW WRC WTAG
WTAM WTIC WWJ WWNC
Luis Bomanelit's Orcheste F — Luigi Romanelli's Orchestra

Stations same as 9:00 Monday

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 KLRA KLZ KMBC KMJ
KMOX KOIN KOL KOMA KSL
KVI KWG WBBM WBRC WCCO
WDSU WFBM WGST WHAS WLAC
WODX WREC

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C — Howard Barlow's Symphony CKLW KFH KLRA KLZ KMBC KOMA KTRH KTSA KVOR WAAB

WABC WACO WADC WBIG WBRC WCAO WCCO WDBJ WDRC WDSU WEAN WFBL WFBM WGN WGST WHAS WHEC WHP WIBW WICC WIP WISN WJSV WKBW WLAC WLBW WMBD WMBG WMT WOKO WORC WPG WQAM WREC WSJS WTAR WTOC

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

F - Musical Cavalcade Stations same as 9:00-Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15
C—Columbia News Service
CFRB CKLW KFH KLRA KLZ
KMBC KMOX KOMA KTRH KTSA
KVOR WAAB WABC WACO WADC
WBIG WBRC WCCO WDBJ WDRC
WDSU WEAN WFBM WGST WHAS
WHP WIBW WICC WISN WIAS
WJSV WKBW WLAC WLBW WMBD
WMBG WMT WOKO WORC WPG
WQAM WREC WSBT WSJS WTAR WTOC

R — Lum and Abner KFYR KSD WDAF WENR WHO WIBA WKBF WOC WOW WTAM

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C — Joe Haymes and Orchestra
CFRB CKLW KFH KLRA KLZ
KMBC KOMA KTRH KTSA KVOR
WABC WADC WBRC WCAO WCAU
WDBJ WDRC WDSU WEAN WFBM
WFBM WGST WHAS WHK WHP
WIBW WICC WISN WJSV WKBW
WLAC WLBW WMBD WMBG WHA
WNAC WOKO WORC WPG WQAM
WREC WSBT WSJS WTAR WTOC

TUESDAY

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C — Buck Ragers, See Monday B — Walter Logan, See Monday
B — Dick Messner and Orchestra
KOIL KSO KWCR KYW WBAL
WCKY WENR WHAM WJR WJZ
WMAL WREN WSYR

E-6:15 p.m., C-5:15, M-4:15, P-3:15 C — H-Bar-O Rangers, See Monday

E-6:30 p.m., C-5:30, M-4:30, P-3:30
C—Betty Barthell, Songs
CFRB CKLW KLRA KOMA WAAB
WABC WADO WBIG WBRC WCAO
WDBJ WDRC WDSU WFBM WFEA
WGST WHEC WHK WHP WJSV
WRBW WLBW WMBG WOKO WORC
WQAM WREC WSFA WSJS WTAR
WTOC

WTOC

R — Mid-Week Hymn Sing
KDYL KFYR KGIR KPO KPRC
KTBS KTHS KVOO WDAY WEAF
WFAA WFI WGY WHO WIBA WIS
WJAX WJDX WMAQ WOAI WOC
WRC WSAI WTAG WWNC

B — Kathryn Newman, Soprano KSO KWCR WBAL WCKY WHAM WJZ WREN WSYR WENR F - Dinner Hour, See Monday

E-6:45 p.m., C-5:45, M-4:45, P-3:45 R — Elizabeth Lennox, Contralto WEAF WEEL WFBR WFLA WGY
WHO WIOD WIS WJAR WJAX

WJDX WMAQ WOC WOW WRVA WSAI WSM WTAG WWJ WWNC B - Lowell Thomas, See Monday

E-7:00 p.m., C-6:00, M-5:00, P-4:00 C — Myrt and Marge, See Monday B — Amos 'n' Andy, See Monday F — Rex Battle's Orchestra Stations same at 6:30 Monday

E:7:15 p.m., C-6:15, M-5:15, P-4:15 C — Just Plain Bill, See Monday B — Billy Bachelor, See Monday

B - Radio in Education KDKA KECA KEX KFSD KFYR KGA KGHL KGIR KJR KOA KOIL KGA KGILI KGIK KAK KOA KOIL KPRC KTAR KTBS KTHS KVOO KWCR KWK KYA WAPI WBAP WBZ WBZA WCKY WFLA WHAM WIBA WIS WJDZ WJZ WMAL WOAI WPTF WREN WSMB WWNC

E-7:30 p.m., C-6:30, M-5:30, P-4:30 R — Lum and Abner, See Monday F — Maritime Presentations Stations same as 6:30 Monday

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Boake Carter, See Monday R — Goldbergs, See Monday B — Don Carney's Dog Chats
KDKA WBZ WBZA WCKY WGAR
WHAM WJR WJZ WMAL WMAQ

WSYR

E-8:00 p.m., C-7:00, M-6:00, P-5:00 E-8:00 p.m., C-7:00, M-6:00, P-5:00
C— Elmer Everett Yess; Comedy
CKLW KFAB KFH KMBC KMOX
KOMA KSCJ KTRII KTSA WABB
WABC WADC WBBM WBIG WBRC
WBT WCAH WCAO WCAU WCCO
WDAE WDBO WDOD WDRC WDSU
WEAN WFBL, WFBM WGR WGST
WHAS WHEC WHK WIBW WICC
WJAS WJSV WKBN WKRC WLAC
WMAS WMBG WMT WOKO WORC
WOWO WQAM WREC WRR WSFA
WSPD WTAR WWVA WSPD WTAR WWVA

WSED WIAR WOOD RESIDENCE WITH WEAR WESH WEAF WEEK WESH WEAF WEEK WEFF WEY WIAR WRC WIAG WTAM WWJ

WIAM WWW.

B— Eno Crime Clues

KDKA KWK WBAL WBZ WBZA

WGAR WHAM WJR WJZ WLW

WMAL WMAQ WREN

F - Chas. Dornberger's Orchestra Stations same as 6:30 Monday

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Singin' Sam, Barbasol Man CKLW KMBC KMOX WABC WADC WCAO WCAU WCCO WDRC WEAN WFBL WIBM WGN WGR WHK WAS WJSV WKRC WNAC WOKO

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Voice of Experience CKLW KMBC KMOX WABC WBBM WBT WCAO WCAU WDRC WEAN WGR WHAS WHK WJAS WJSV WKRC WNAC

WARD WASH

R— Wayne King and Orchestra
KPRC KSD KSTP WBEN WCAE
WCSH WDAF WEAF WEEI WFAA
WFI WGY WHO WJAR WKBF
WKY WMAQ WMC WOAI WOK
WOW WRC WSAI WSB WSM WSMB
WTAG WTAM WTMJ WWJ

TAM STREET WASH

B — Horlick's Adventures in Health CRCT KDKA KOIL KSO KWK WBAL WBZ WBZA WGAR WHAM WJR WJZ WLS WLW WREN

TUESDAY—(Continued)

F - Romantic Pictures-Readings Stations same as 6:30 Monday

E-8:45 p.m., C-7:45, M-6:45, P-5:45 C - Kate Smith

C— Kaie Smith

CFRB CKLW KFH KLRA KLZ

KMOX KOMA KSL KTRH KTSA

KVOR WABC WACO WADC WBIG

WBRC WCAO WCAU WCCO WDBJ

WDRC WDSU WEAN WFBL WFBM

WFEA WGR WGST WHAS WHEC

WHK WHP WIBW WICC WISN

WJAS WJSV WLAC WLBW WMBG

WMT WNAC WOKO WORC WPG

WQAM WREC WSBT WSJS WTAQ

WTAR WTOC

B— Smith RDS.—Trade and Mark

WIAR WIOC B — Smith Bros.—Trade and Mark KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WGAR WHAM WIR WJZ WLS WLW WMAL WREN WSYR

E-9;00 p.m., C-8:00, M-7:00, P-6:00 C - California Melodies

C— Calitornia Melodies
CFRB CKLW KFH KLRA KLZ
KMBC KMOX KOMA KSL KTRH
KTSA KVOR WABC WACO WADC
WBIG WBRC WCAO WCAU
WBBJ WDRC WCAO WCAU
WBBJ WDRC WDSU WEAN WFBL
WFBM WFEA WGST WHAS WHEC
WHK WHP WICC WISN WJAS
WJSV WKBW WLAC WLBW WMBG
WMBG WMT WNAC WOKO WORC
WPG WQAM WREC WSJS WTAR
WTOC WTOC

W LOUGE R.— Ben Bernie and Orchestra
KFYR KOA KPRC KSD KSTP
WBAP WBEN WCAE WCSH WDAY
WEAF WEEL WFBR WFI WGY
WHO WAR WKY WLW WMAQ
WMC WOAI WOC WOW WRC
WRVA WSB WSM WSMB WTAG
WTAM WTMJ WWJ
R.— Housebold Musical Memories

WIAM WIMJ WWJ

8 — Household Musical Memories
KDKA KSO KWK WBAL WBZ WBZA
WHAM WJR WJZ WKBF WLS
WRÊN WSYR

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C — Nino Martini, Tenor CFRB CKLW KFH KLRA KLZ KMBC KMOX KOMA KRLD KSL KTRH KTSA KVOR WABC WACO WADC WBIG WBRC WCAO WCCO WDBJ WDRC WDBU WEAN WEBL WFFA WCFF WGN WGST WCEO WDBJ WDRC WDSU WEAN WFBL WFBM WFEA WGN WGST WHAS WHEC WHK WHP WIBW WICC WJAS WJSV WKBW WLAC WLBW WMBD WMBG WMT WNAC WOKO WORC WPG WQAM WREC WSJS WTAR WTOC

- Texaco Fire Chief Program KDYL KFI KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTAR KTBS KPRC KSD KSTP KTAR KTBS KVOO WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFI WFLA WGY WHO WIBA

E-10:00 p.m., C-9:00, M-8:00, P-7:00
C — Legend of America
CKLW KFH KLRA KLZ KMBC
KMOX KOMA KTRH KTSA KVOR
WAAB WABC WACO WADC WBIG
WBRC WCAO WCAU WCCO WBIG
WBRC WCAO WCAU WCCO WBIG
WDRC WDSU WEAN WFBL WFEA
WGST WHAS WHEC WHP WIBW

WICC WJAS WJSV WKBW WLAC WLBW WMBD WMBG WMT WOKO WORC WPG WQAM WREC WSJ\$ WTOC WWVA

R— Lives at Stake Drama
KDYL KFI KGO KGW KHQ KOA
KOMO KPRC KSD KTBS KTIIS
KVOO WBAP WBEN WCAE WCSH
WDAF WEAF WEEI WFBR WFI WGY WHO WJAR WJDX WKBF WKY WLW WMAQ WMC WOAI WOC WOW WRC WRYA WSB WSM WSMB WTAG WTAM WWJ

B — Ortiz Tirado, Mexican Tenor CFCF CRCT KDKA KSO KSTP KWCR KWK WBAL WBZ WBZA WCKY WDAY WEBC WENR WFLA WGAR WHAM WIBA WIOD WIS WJAX WJR WJZ WMAL WREN WSYR WTMJ WWNC

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

C — Boswell Sisters
CFRB CKLW KFH KLRA KLZ
KMBC KMOX KOMA KSL KTRH
KTSA KVOR WAAB WABC WACO
WADC WBIG WBRC WCAO WCAU
WCCO WDBJ WDRC WEAN WFBL
WFEA WGST WHAS WHEC
WHK WHP WIBW WICC WISN
WJAS WJSY WKBW WLAC WLBW
WMBD WMBG WMT WOKO WORC
WQAM WREC WSJS WTAR WTOC WWVA

R — Madame Sylvia—Beauty Talk KDYL KFI KGO KGW KHQ KOA KOMO KSD KSTP WBEN WEAF WEBC WEEL WGY WHO WIBA WMAQ WOC WRC WTAG WWJ

F - Maurice Meerte's Orchestra Stations same as 9:00 Monday

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

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C — Howard Barlow, See Monday

B - Amos 'n' Andy, See Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15 C - Columbia News Service, See Mon. - Elmer_Everett Yess; Comedy

KALE KDB KERN KFRC KGB KHJ KLZ KMJ KOIN KOL KSL KWG

R - Lum and Abner, See Monday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Isham Jones and Orchestra C— Isham Jones and Orchestra

GFRB CKLW KFH KLRA KLZ

KMBC KOMA KSL KTRH KTSA

WABC WADC WBRC WCAO WDBJ

WDRC WDSU WEAN WFBL WFBM

WGST WHK WHP WIBW WISN

WJSV WKBW WLAC WLBW WMBO

WMBG WMT WNAC WOKO WORC

WQAM WREC WSBT WSJS WTAR

WTOC WWYA WTOC WWVA

- Paul Whiteman and Orchestra GFCF KDYL KFYR KOIL KPO KSO KSTP KWCR KWK WAPI WBAL WBZ WBZA WCKY WDAY WEBC WENR WFLA WHAM WIDD WIS WJDX WJZ WMAL WMC WREN WRVA WSB WSM WSMB WSYR WWNC

E-11:45 p.m., C-10:45, M-9:45, P-8:45 C — Voice of Experience KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMJ KOIN KOL KSL KVI KWG

E-12:00 mid., C-11:00, M-10:00 P-9:00 R - Ben Bernie and Orchestra KFI KGO KGW KHQ KOMO

WEDNESDAY

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C - Buck Rogers, See Monday R - Walter Logan, See Monday B - Ernie Holst and Orchestra KOIL KSO KWCR WBAL WBZ WBZA WCKY WJR WJZ WREN

E-6:15 p.m., C-5:15, M-4:15, P-3:15 C — H-Bar-O Rangers, See Monday

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C — Vera Van, See Monday R — Back of News; William Hard KFYR WEAF WFBR WGY WIBA WIS WJAR WJDX WRC WSAI WSB WSM WWJ WWNC

B — Irene Beasley, Contralto KGO KOA KPRC KSO KTBS KVOO KWCR WBAL WBAP WCKY WENR WGAR WJZ WOAI WREN

F - Dinner Hour, See Monday

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

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

Amos 'n' Andy, See Monday Organ Recital, See Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15 C — Just Plain Bill, See Monday B — Billy Bachelor, See Monday B — John Herrick, Baritone KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WENR WHAM WJZ WBAL WSYR

E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — Music in Air, See Monday R — Lum and Abner, See Monday
F — Dramatic Sketch

CFBO CFCF CFCH CFCO CFCY
CFNB CFPL CHGS CHNS CJCB
CKCH CKNC CKOC CKPC CKPR CRCA CRCO CRCT

E-7:45 p.m., C-6:45, M-5:45, P-4:45 C — Boake Carter, See Monday R — Goldbergs, See Monday B — Irene Rich for Welch

B—IFERE HIGH FOF WEIGH KDKA WBAL WBZ WBZA WCKY WJZ WMAL WMAQ WMC WSB WSM WSMB WSYR

E-8:00 p.m., C-7:00, M-6:00, P-5:00
C — Happy Bakers, See Monday
R — George Olsen; Bert Lahr
CFCF GROT KSD WBEN WCAE
WCKY WCSH WDAF WEAF WELI
WFBR WGY WHO WJAR WLIT
WLS WOC WOW WRC WSAI WTAG
WTAM WTIC WWJ
R Eng Crime See Tuesday

B — Eno Crime, See Tuesday F — Rhapsodies in Rhythm Stations same as 8:00 Monday

E-8:15 p.m., C-7:15, M-6:15, P-5:15 C — Edwin C. Hill, See Monday F — Gamboliers—Harmony Duo Stations same as 8:00 Monday

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C— Albert Spalding; Conrad Thibault CFRB CKAC CKLW KDB KERN KFBK KFPY KFRC KGB KIIJ KLRA KLZ KMBC KMJ KMOX

WEDNESDAY-(Cont'd)

KOIN KOL KOMA KSL KTAT KTRH KTSA KVI KWG WABC WBRC WCAO WCAU WCCO WDOD WDRC WDSU WEAN WFBL WFBM WGN WGR WGST WHAS WHK WJAS WJSV WKRC WLAC WMT WNAC WOKO WORC WOWO WREC WRR

WHEN WCSH WDAF WEAF WFBR WGY WHO WJAR WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WWJ

E-8:45 p.m., C-7:45, M-6:45, P-5:45 B — Red Davis, See Monday

E-9:00 p.m., C-8:00, M-7:00, P-6:00
C—Irvin S. Cobb; Al Goodman
CKLW KLRA KRLD KTRH KTSA
WABC WACO WADC WBIG WBRC
WBT WCAH WCAO WCAU WDAE
WDBJ WDBO WDOD WDRC WDSU
WEAN WFBL WFEA WGLC WGST
WHAS WHK WICC WJAS WJSV
WKBW WKRC WJAC WURC WOWO WMBG WNAC WOKO WORC WOWO WQAM WREC WSFA WSPD WTAR WTOC

- Ipana Troubadours KDYL KFI KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTBS KOMO KPRC KSD KSTP KTBS KTHS KVOO WAPI WBAP WBEN WCAE WCSH WDAF WEAF WFAA WHO WIOD WFBR WGY WJAR WJAX WKY WLIT WMAQ WMC WOAI WOC WOW WRĆ WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ

B — Warden Lawes; Sing Sing Drama KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR WHAM WJR WJZ WLS WMAL WREN WSYR

F - One Hour With You Stations same as 9:00 Monday

E-9:15 p.m., C-8:15, M-7:15, P-6:15 C - Kate Smith, See Monday

E-9:30 p.m., C-8:30, M-7:30, P-6:30 C — Guy Lombardo — Burns and Allen CKLW KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KSJ. KTRH KTSA KVI KWG WABC WADC WBT WCAO WCAU WCCO WADC WBT WCAO WCAU WCCO WDRC WEAN WFBL WFBM WGN WHK WJAS WJSV WKBW WKRC WNAC WOKO WORC WOWO WSPD

Leo Reisman's Orchestra RSD KSTP WBEN WCAE WCSH WDAF WEAF WFBR WGY WJAR WLIT WMAQ WOW WRO WSAI WTAG WTAM WTMJ WWJ

WIAG WIAM WIMJ WWJ
B— John McCormack, Tenor
KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KSO KWCR
KWK WBAL WBZ WBZA WCKY
WENR WGAR WHAM WJR WJZ
WMAL WREN WSYR

WDSU WEAN WFBL WFBM WFEA WGN WGST WHAS WHEC WHK WHP WIBW WICC WISN WJAS WJAS WJSV WKBH WKBW WKRC WLAC WLBW WLBZ WMAS WMBD WMBG WMT WNAC WNAX WOKO WORC WOWO WPG WQAM WREC WSPD WTAR WTOC

Corn Cob Pipe Club KDYL KFI KFYR KGHL KGIR KOO KGW KHQ KOA KOMO KSD KSTP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WENR WFBR WGY WHO WIBA WJAR WLIT WLW WOC WOW WRO WRVA WTAG WTAM WTIC WTMJ WWJ

B - Pedro Via's Drchestra CFCF CRCT KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR WHAM WJZ WMAL CFCF WREN WSYR

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C — Alexander Woollcott; "Town Crier" CFRB CKLW KLRA KLZ KMOX KOMA KSL KTRH KYSA KVOR WAAB WABC WACO WADC WBIG WARD WARD WACO WADC WBIG WBRC WCAO WDBJ WDRC WDSU WEAN WFBL WFEA WGR WGST WHAS WHEC WHP WIBW WJAS WHAS WHEC WHP WIBW WJAS WJSV WLAC WLBW WMBD WMBG WMT WOKO WORC WPG WQAM WREC WSJS_WTAR WTOC

R — National Radio Forum K — National Hadio Forum
KFYR KPRC KSD KSTP KTHS
KVOO WBEN WCAE WCSH WDAY
WEAF WEEI WFAA WFBR WFLA
WJDX WKY WMAQ WOAI WOC
WOW WRC WRVA WSAI WSB WSM
WEALD WFAC WFFA WSTE WAT WSMB WTAG WTAM WTIC WWJ WWNC

B - Ruth Lyon, Soprano
CFCF KDKA KÖIL KSO KWCR
WBAL WBZ WBZA WCKY WENR
WGAL WJR WJZ WMAL WREN WSYR

F - Joe DeCourcy's Orchestra Stations same as 9:00 Monday

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

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

E-11:00 p.m., C-10:00, M-9:00, P-8:00
C— Evan Evans, Baritone
CKLW KPH KLRA KLZ KMBC
KOMA KSL KTRH KTSA WAAB
WABC WACO WADC WBIG WBRC
WCAO WCCO WDBJ WDRC WDSU
WEAN WFBL WGST WHAS WHEC
WHP WIBW WIP WISN WIAS
WJSV WKBW WLAC WLBW WMBD
WMBG WMT WOKO WORC WPG
WQAM WREC WSJS WTAR WTOC
B— Amos 'n' Andy, See Monday B - Amos 'n' Andy, See Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15 C - Columbia News Service, See Mon. Lum and Abner, See Monday

B — Poet Prince, Songs KDYL KFI KFYR KGO KGW KHO KOA KOIL KOMO KSO KSTP KTBS KOTA KOLO KOWO KASI WABI KTIIS KWCR KWK WAPI WBAL WCKY WDAY WEBC WFAA WIBA WJDX WJR WJZ WKY WMAL WMAQ WMC WREN WSB WSYR

E-11:30 p.m., C-10:30, M-9:30, P-8:30 C — Ozzie Nelson and Orchestra KLRA WABC WBRC WDBJ WDRC WDSU WEAN WGST WICC WLAC WMBG WNAC WORC WQAM WREC WSJS WTAR WTOC

Jack Denny and Orchestra GFCF CRCT KSO KWCR KWK WBAL WBZ WBZA WCKY WENR WGAR WJZ WREN WSYR

THURSDAY

E — 6:00 p.m., C-5:00, M-4:00, P-3:00 C — Buck Rogers, See Monday

R - Roger Gerston and Orchestra KDYL KFYR KOA KPO KPRC KSD KSTP KTBS KTHS KVOO WAPI WBEN WCAE WCSII WDAY WEAF WEBC WFAA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOC WOWWRC WRYA WSAI WSB WSMB WTAG WTAM WWJ WWNC

B - Dick Messner, See Tuesday

E-6:15 p.m., C-5:15, M-4:15, P-3:15 C - H-Bar-O Rangers, See Monday

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C—Eddie Dooley's Football Dope WABC WBIG WBT WCAO WCAU WDBJ WDRC WEAN WFBL WFEA WHEC WHP WJAS WJSV WKBW WLBZ WMBG WAC WOKO WORC WSJS WTAR

WSJS WIAK
R— John B. Kennedy
RDYL KPYR KOA KPO KPRC KSD
KTBS KTHS KVOO WAPI WDAY
WEAF WFBR WFI WGY WHO WIBA
WIS WJAX WJDX WMAQ WMC
WOR WRO WSAI WSB WSMB WTAG WWJ WWNC

B - Old Songs of the Church KSO KWCR WBAL WCKY WENR WHAM WJZ WREN WSYR

F - Dinner Hour, See Monday

E-6:45 p. m., C-5:45, M-4:45, P-3:45 R — Sizzlers Trio

K – SIZIERS FIIO KFYR KOA KPRC KSD KSTP KTBS KVOO WAPI WBEN WCKY WDAY WEAF WEBC WEEI WFAA WEBR WEI WGY WHO WIBA WJAR WJDX WKY WMC WOAI WOC WOW WSB WSM WSMB WTAG WSAI WWJ

B - Lowell Thomas, See Monday

E-7:00 p. m., C-6:00, M-5:00, P-4:00 Myrt and Marge, See Monday Amos 'n' Andy, See Monday - Rex Battle

Stations same as 6:30 Monday

E-7:15 p. m., C-6:15, M-5:15, P-4:15 C — Just Plain Bill, See Monday - Billy Bachelor, See Monday

E-7:30 p. m., C-6:30, M-5:30, P-4:30 C— Fray and Braggiotti—Piano Duo KLRA WABC WBIG WBRC WDBJ WDRC WDSU WEAN WFEA WGST WLAC WLBZ WMBG WNAC WORC WQAM WREC WSFA WSJS WTAR

R — Lum and Abner, See Monday

F — Book Review—Prof. Macdonald

Stations same as 6:30 Monday E-7:45 p. m., C-6:45, M-5:45, P-4:45 C — Boake Carter, See Monday

R - Goldbergs, See Monday - Old World Musicians

Stations same as 6:30 Monday

E-8:00 p. m., C-7:00, M-6:00, P-5:00 - Elmer E. Yess, See Tuesday C — EIMER E. 1885, See Tuesday

— Rudy Vallee and Orchestra

CFCF CRCT KDYL KFL KFYR KGO

KGW KHQ KOA KOMO KPRC KSQ

KSTP KTAR KTHS WAPI WBAP

WBEN WCAE WCSH WDAF WDAY

THURSDAY—(Continued)

WEAF WEBC WEEI WFBR WFI WFLA WGY WHO WIOD WJAR WJAX WJDX WKY WLW WMAQ WMC WOAI WOC WOW WPTF WRC WRVA WSB WSM WSMB WTAG WTAM WTMJ WWJ

F - Chateau Frontenac Orchestra Stations same as 6:30 Monday

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

E-8:30 p. m., C-7:30, M-6:30, P-5:30 E-8:30 p.m., C-7:30, M-6:30, P-5:30
C- Hall Johnson Singers
GFRB CKLW KFH KLRA KLZ
KMBC KMOX KOMA KSL KTRH
KTSA KVOR WABC WACO WADC
WIBBM WBIG WBRC WCAO WCCO
WIBBM WFEA WGR WGST WHAS
WHEE WHK WHP WIBW WICC
WISN WJAS WJSV WLAC WLBW WISN WJAS WJSY WLAC WLAW
WLBZ WMBG WMT WNAC WOKO
WORC WPG WQAM WREC WSBT
WSFA WSJS WTAG WTAR WTOC
B— Horlick's, See Tuesday
F— Musical Etchings

Stations same as 6:30 Monday

E-8:45 p.m., C-7:45, M-6:45, P-5:45 B — Thirteen Male Voices KDKA KOIL KWCR WBAL WBZ WBZA WCKY WGAR WHAM WJZ WLS WMAL WREN WSYR

E-9:00 p.m., C-8:00, M-7:00, P-6:00 R — Maxwell House Showboat R — Maxwell House Snowgoa't KDYL KFI KFSD KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTAR KTBS WAPI WBAP WBEN WCAE WCKY WCSII WDAF WEAF WELDI WFBR WFI WFLA WGY WHO WIOD WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOC WOW WMAQ WMC WOAT WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ WWNC

B — Death Valley Days—Drama KDKA KOLL KSO KWCR KWK WBAL WBZ WBZA WGAR WHAM WJR WJZ WIS WLW WMAL WREN WSYR

F - Imperial Grenadiers, Male Qt. Stations same as 9:00 Monday

E-9:30 p. m., C-8:30, M-7:30, P-6:30 C — Columbia Dramatic Guild

CFRB CKLW KFH KLRA KLZ KMBC

B — Wayne King and Orchestra KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WENR WGAR WHAM WJR WJZ WREN

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C — Willard Robison's Orchestra WLBW WLBZ WMBD WMT WOKO WORC WPG WQAM WREC WSBT WSJS WTAR WTOC

R - Paul Whiteman and Orchestra KDYL KFI KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTBS ROA KOMO KPRC KSD KSTP KTBS KTHS KVOO WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEL WFBR WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WKY WLW WMAQ WMC WOAI WOC WOW WRC WRVA WS WSM WSMB WTAG WTAM WTMJ WWJ WWNC

WWJ WWNC

— Hands Across the Border
CFAC CFBO CFCF CFCH CFCN
CFCO CFCY CFJC CFNB CFPL
CFQC CHAB CHGS CHNS CHRC
CHWC CHWK CJCA CJCB CJCJ
CJGX CJOC CJRM CJRW CKCH
CKCK CKNC CKOC CKOV CKPC
CKPR CKUA CKX CKY CRCO CRCS
CRCT CRCV CFCF KDKA KOIL KSO
KWCR WBAL WBZ WBZA WCKY
WGAR WHAM WJR WJZ WMAQ
WREEN WSYR WREN WSYR

E-10:30 p.m., C-9:30, M-8:30, P-7:30 B — Archer Gibson, Organist KDKA KSO KWCR KYW WBAL WBZ WBZA WCKY WGAR WHAM WJZ WMAL WREN

F — Chas. Dornberger's Orchestra Stations same as 9:00 Monday

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

E-11:00 p.m., C-10:00, M-9:00, P-8:00
C — Gladys Rice, Soprano
CKLW KFH KLRA KLZ KMBC KSL
KTRH KTSA WAAB WABC WACO
WADC WBIG WBRC WCAO WCCO
WDBJ WDRC WDSU WEAN WFBL
WFBM WGN WGST WHAS WHBC
WHAC WILLIAW WHER WMBC WMBC WLAC WLBW WLBZ WMBD WMBG WMT WOKO WORC WPG WQAM WREC WSBT WSJS WTAR WTOC B — Amos 'n' Andy, See Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15 — Columbia News Service, See Mon.
— Elmer E. Yess, See Tuesday
— Lum and Abner, See Monday
— Poet Prince, See Wednesday C C

E-11:30 p.m., C-10:30, M-9:30, P:8-30 C - Is ha m Jones, See Tuesday R — Jack Denny and Orchestra KSD WBEN WCAE WCSH WDAF

WEAF WEEL WFBR WFL WGY WHO WJAR WOC WOW WSAL WTAG WTAM

FRIDAY

E-5:00 p. m., C-5:00, M-4:00, P-3:00
C — Jack Miller and Orchestra
CFRB CKLW KLRA WAAB WABC
WADC WBRC WCAO WDBJ WDRC
WDSU WFEA WGST WHEC WHK
WICC WJAS WJSV WLAC WLBW
WLBZ WMBG WOKO WORC WQAM
WREC WSFA WSIS WTAR WTOC R - Walter Logan, See Monday

E-6:15 p.m., C-5:15, M-4:15, P-3:15 C — H-Bar-O Rangers, See Monday

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C — Eddie Dooley, See Thursday B - Three X Sisters KDKA KOIL KWCR KWK WBAL WBZ WBZA WCKY WENR WHAM WJZ WMAL WREN WSYR F - Dinner Hour, See Monday

E-6:45 p. m., C-5:45, M-4:45, P-3:45 C — H. V. Kaltenborn

CHLW KLRA KLZ KMBC KOMA
KRLID KSL KTRH KTSA KVOR
WAAB WACO WADC WBCG WDBJ
WDSU WEAN WFBL WFBM WFEA
WGST WHEC WHP WICC WISN
WJSV WKBW WLAC WJBW WLBZ
WMBG WMT WOKO WQAM WREC
WSFA WSIS WTAO WTAR WTOC WSFA WSJS WTAQ WTAR WTOC WWVA

R—Betty Boop Frolics
KOA KPO KSD WBEN WCAE WCKY
WEAF WEEI WFBR WJAR WJDX
WMAQ WMC WSB WSM WSMB WMAQ WM WTAG WWJ

B - Lowell Thomas, See Monday

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

- A mos 'n' A ndy, See Monday R

Organ Recital, See Monday E-7:15 p. m., C-6:15, M-5:15, P-4:15 C — Just Plain Bill, See Monday R — Billy Bachelor, See Monday

E-7:30 p. m., C-6:30, M-5:30, P-4:30 - Music in Air, See Monday - Scott's E mulsion Circus Days KDKA KWK WBAL WBZ WBZA WENR WGAR WHAM WJR WJZ WLW WMAL WREN

F — Anlon Young, Baritone Stations same as 6:30 Monday

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

Goldbergs, See Monday B - Ire ne Rich, See Wednesday

E-8:00 p. m., C-7:00, M-6:00, P-5:00 C — Happy Bakers, See Monday R — Cities Service Concert

CRCT KDYL KOA KPRC KSD KTBS
KTHS KYW WBEN WCAE WCSH
WDAF WEAF WEBC WEEL WFAA
WFBR WGY WHO WJAR WKY WLIT
WOAL WOC WOW WRC WRYA WSAL WTAG WTAM WTIC WTMJ WWJ

B — Nestle's with Ethel Shutta KDKA KWK WBAL WBZ WBZA WCKY WGAR WJR WJZ WLS WMAL WSYR

— Allan Clifton's Salon Orchestra Stations same as 8:00 Monday

E-8:15 p. m., C-7:15, M-6:15, P-5:15 C — Edwin C, Hill, See Monday

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

C — MARCH OF LITTIE
CKLLW KDB KERN KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KSI, KTRH KVI
KWG WABC WCAO WCAU WCCO
WDRC WDSU WEAN WFBL WFBM WGN WGR WGST WHAS WHK WJAS WJSV WKRC WNAC WOKO WSPD

Jimmy Johnson, Xylophonist Stations same as 6:30 Monday

E-8:45 p. m., C-7:45, M-6:45, P-5:45 B - Red Davis, See Monday

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C — Irvin S. Cobb, See Wednesday R — Fred Allen's Revue KSD WBEN WCSH WEAF WEEI WFBR WGY WJAR WLIT WLW

FRIDAY—(Continued)

WMAQ WRC WTAG WTAM WTIC WWJ

B - Phil Harris and Orchestra B—PHI HAFTIS AND OFCHESTRA CFCF KDKA KDYL KFI KGHL KGIR KGO KGW KHQ KOA KOIL KOMO KSO KWCR KWK WAPI WBAL WBZ WBZA WCKY WFAA WGAR WJZ WKY WIS WMAL WOAI WREN WSB WSM WSMB

WSYR F - Jack Dale, Tenor Stations same as 9:00 Monday

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

CKLW KDB KERN KFBK KFH CKLW KDB KERN KFBK KFH KFPY KFRC KGB KHJ KLRA KLZ KMBC KMJ KMOX KOIN KOL KOMA KSL KTRH KTAT KTSA KVI KUMA ASL ATRII KIAT KISA KYI KWG WABC WADC WBRC WBT WCAO WCAU WCCO WDAE WDRU WDSU WEAN WFBL WFBM WGN WGST WHAS WHK WJAS WJSV WKBW WKRC WLAC WNAC WOKO WOWO WREC WRR WSPD WTAR WTOC

F - Gentleman Jim, Comedian Stations same as 9:00 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-AII America Football Show

CKLW KDB KERN KFBK KFBK
KFPY KERC KGB KHJ KLZ KMBC

KMJ RMOX KOIN KOL KOMA

RRLD KSL KTRH KTSA KV KWG

WARC WACO WADC WBRC

WACO WADC WBDW

WAAN WFBL WEBM WGR WGST

WHAS WHEC WHK WHP WIBW

WJAS WJSV WKRC WLAC WBBW

WJAS WJSV WKRC WLAC WBBW

WMT WNAC WOKO WORC WOWO

WREC WSPD WTAR

R PON'S Program; Lee Wiley

R — Pond's Program; Lee Wiley KSD WBEN WCAE WCSH WDAF WEAF WFBR WGY WHO WJAR WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WTIC WWJ

WIAG WIAM WIIC WW3
B— Armour Program; Phil Baker
KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KPRC KSO KSTP
KTAR KWK WAPI WBAL WBZ
WBZA WEBC WENR WFAA WGAR WHAM WIOD WJAX WJR WJZ WKY WMC WOAI WREN WRVA WSB WSM WSMB WTMJ WWNC F - Gems from Lyric Stage

Stations same as 9:00 Monday

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C—Swift Revue—Olsen and Johnson CKLW KDB KERN KFBK KFPY KFRC KGB KHJ KLZ KMBC KMJ KMOX KOIN KOL KOMA KRLD KSCJ KSL KTRH KVI KWG WABC WADC WBM WBMC WBT WCAO WCAU WCCO WDRC WEAN WFBL WGST WHAS WHK WJAS WJSV WKBW WKRC WNAC WOKO WOWO WREC WREC

R — First Nighter—Drama
CRCT KDVL KFI KGO KGW KHO
KOA KOMO KPRC KSD KSTP
WAPI WBEN WCAE WCSH WDAF
WEAF WEBC WEEI WFBR WGY WHO WJAR WKY WLIT WMAQ WOAI WOC WOW WRC WSAI WSB WSM WSMB WTAG WTAM WTIC

E-10:30 p.m., C-9:30, M-8:30, P-7:30 Alexander Woolcott, See Wednesday

- Lum and Abner's Sociable K—Lum and Adder's Sociable KFYR KSD WBEN WCAE WCSH WDAF WDAY WEAF WEEI WENR WBBR WGY WHO WIBA WJAR WKBF WLIT WLW WOC WOW WRC WTAG WTAM WTIC WTMJ

WRC WTAG WTAM WTIC WTMJ
B—Mario Cozzi, Baritone
RDKA KFYR KOIL KSO WAPI
WBAL WBZ WBZA WCKY WDAY
WEBC WFLA WHAM WIBA WIOD
WIS WJAX WJR WJZ WREN WSB
WSM WSYR WWNC

F - Billy Bissett's Orchestra Stations same as 9:00 Monday

E-10:45 p.m., C-9:45, M-8:45, P-7:45 C — Myrt and Marge, See Monday B — Headline Hunter; Floyd Gibbons KDKA KFYR KSO WAPI WBAL WBZ WBZA WCKY WDAY WEBC WFLA WHAM WIBA WIOD WIS WJAX WJR WJZ WREN WSB WSM WSYR WWNC

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C — Howard Barlow, See Monday Amos 'n' Andy, See Monday Souvenirs-Robert Forest

Stations same as 9:00 Monday

E-11:15 p. m., C-10:15, M-9:15, P-8:15 C - Columbia News Service, See Monday

E-11:30 p. m., C-10:30, M-9:30, P-8:30 Is ha m Jones, See Tuesday

E-12:15 a. m., C-11:15, M-10:15, P-9:15 R — Fred Allen's Revue
KDYL KFI KFSD KGO KGW KHO KOA KOMO KTAR WDAF

SATURDAY

E-6:00 p.m., C-5:00, M-4:00, P-3:00 C — Meet the Artist

CFRB CKLW KFH KLRA KMBC CFRB CRLW RFH ALRA KMBC KOMA KSL KTRH KTSA KVOR WAAB WABC WACO WADC WBBM WBIG WBRC WCAO WCCO WDBJ WDSU WFBL WFEA WGR WGST WHAS WHEC WHK WHP WIBW WHAS WHEC WHK WHP WIBW WICC WIP WISN WJAS WJSV WLAC WLBW WLBZ WMBG WMT WOKO WQAM WREC WSBT WSFA WSIS WTAQ WTAR WTOC WWYA

B - Richard Himber, See Monday

E-6:15 p.m., C-5:15, M-4:15, P-3:15
C — George Hall and Orchestra
CFRB CKLW KFH KLRA KMBC
KMOX KOMA KSL KTRH KTSA
KVOR WAAB WACO WADC WBIG
WBRC WCAO WCCO WDBJ WDSU
WFEA WGR WGST WHAS WHP
WIBW WICC WIP WISN WAS
WISW WILCO WIP WISN WASS WJSV WLAC WLBW WLBZ WMBG WOKO WQAM WREC WSBT WSFA WSJS WTAQ WTAR WTOC WWVA

E-6:30 p.m., C-5:30, M-4:30, P-3:30 C — Eddie Dooley, See Thursday B — O'Leary's Irish Minstrels

KOIL KSO KWCR WBAL WBZ WCKY WENR WHAM WJZ WMAL WREN WSYR

F - Dinner Hour, See Monday

E-6:45 p.m., C-5:45, M-4:45, P-3:45 C— Tito Guizar, Tenor CKLW KLRA KUZ KMBC KMOX KRLD KSL KTRH KTSA KVOR WAAB WABC WACO WADC WBIG WBRC WCAO WGAU WCCO WBBJ

WDSU WFBL WFBM WFEA WGST WHAS WHEC WHP WIBW WICC WISN WJSV WKBW WLAC WLBW WLBZ WMBG WMT WOKO WQAM WREC WSBT WSFA WSJS WTAQ WTAR WTOC WWVA

WIAR WIOC WWYA

R — Twenty Fingers of Harmony
CRCT KDYL KOA KSD WBEN
WCAE WCSH WEAF WFBR WFI WCAE WCSH WEAT WIDA WGY WHO WIS WJAR WJAX WJDX WMAO WMC WOC WOW WRC WMAQ WMC WOC WOW WRC WRVA WSAI WSB WSM WSMB WTAG WWJ WWNC

B — Flying with Capt. Al Williams WBAL WBZ WBZA WCKY WGAR WHAM WJR WJZ WSYR

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

CKLW KFH KLRA KLZ KMBC CKLW KPH KLRA KLZ KMBC KRLD KSL KTRH KTSA KVOR WABC WACO WADC WBBM WBIG WBRC WCAO WCAU WDBJ WDSU WEAN WFBL WFEA WGR WGST WHEC WHK WIBW WICC WISN WJAS WJSV WLAC WLBW WLBZ WMBG WMT WOKO WQAM WREC WSBT WSFA WSJS WTAQ WTAR WTOC WWVA

F - Rex Battle

Stations same as 6:30 Monday

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C — Midred Bailey
CFRB CKLW KFH KLRA KMBC
KMOX KOMA KTRH KTSA KVOR
WABC WACO WADC WBBM WBIG
WBRC WCAO WCAU WDBJ WDSU
WEAN WFBL WFBM WFFA WGR
WGST WHEC WHK WHP WIBW
WICC WISN WJAS WJSV WLAC
WJBW WLBZ WMBG WYAC WOKO
WQAM WREC WSBT WSFA WSJS
WTAQ WTAR WWVA
E MENT BAYS AND ORCHESTA

R — Meyer Davis and Orchestra CRCT KSD WCAE WEAF WFI WHO WJAR WOC WRC WTAG

E-7:30 p.m., C-6:30, M-5:30, P-4:30 C — Jane Froman; Charles Carlile WABC WDRC WEAN WFBL WFEA WGR WJSV WLBZ WNAC WOKO

Optimistic Mrs. Jones KFI KGO KGW KHQ KOA KOMO KSD WBEN WCAE WDAF WEAF WEEI WFBR WFI WGY WHO WJAR WOC WRC WTAG WTAM WWJ

B - Circus Days, See Friday Sous les Ponts de Paris

CFBO CFCH CFCO CFCY CFNB
CFPL CHGS CHLP CHNS CHRC
CJCB CKAC CKCH CKNC CKOC
CKPC CKPR CRCA CRCO CRCS CRCT

E-7:45 p.m., C-6:45, M-5:45, P-4:45 R — Jack and Loretta Clemens KDYL KFI KGO KGW KHQ KOA KOMO KSD WBEN WCSH WDAF WEAP WEEI WFBR WGY WJAR WOW WRO WSAI WTAG WTAM WWJ

B — Annie, Judy and Zeke-Hillbilly CFCF KFYR KOIL KPRC KSO KSTP KTBS KTHS KWCR WBAL WBAP WCKY WENR WIIAM WIBA WIOD WIS WJR WJZ WKY WMAL WMC WOAL WREN WRVA WSB WSM WSMB WSYR WWNC

E-8:00 p.m., C-7:00, M-6:00, P-5:00 C — Elmer_E. Yess, See Tuesday R - K-7-Drama KSD KYW WBEN WCSH WDAF

SATURDAY—(Continued)

WEAF WEEI WFBR WGY WJAR WOW WRC WTAG WTAM WWJ F — Maurice Meerte's Orchestra Stations same as 6:30 Monday

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

C — Gertrude Niesen, Songs CFRB CKLW KFH KLRA KLZ KMBC KMOX KOMA KSL KTRH KTRA CFRB CKLW KFH KLRA KIJZ KMBC KMOX KOMA KSL KTHH KTSA KVOR WABC WACO WADC WBIG WBRC WCAO WCCO WDBJ WDSU WEAN WFBL WFBM WFEA WGR WGST WHEC WHP WIBW WICC WIP WISN WJAS WJSV WLAC WLBW WLBZ WMBG WMT WNAC WOKO WFG WQAM WREC WSBT WSJS WTAQ WTAR WTOC WWYA

E-8:30 p.m., C-7:30, M-6:30, P-5:30 C — Phil Spitalny's Orchestra CFRB CKLW KFH KLRA KLZ

C—Phil Spitalny's Orchestra
CFRB CKLW KFH KLRA KLZ
KMBC KMOX KOMA KSL KTRH
KTSA KVOR WABC WADC WBIG
WBRC WCAO WCCO WDBJ WDSU
WBAN WFBL WFBM WFEA WGR
WGST WHEC WHK WHP WIBW
WICC WISN WJAS WJSV WLAC
WJEBW WLBZ WMBG WMT WNAC
WJEBW WLBZ WMBG WMT WNAC
WJEBW WLBZ WMBG WMT WNAC
WOKO WFG WQAM WREC WSBT
WSJS WTAQ WTAR WTOC WWVA
R—Antobal's Cubans
KDYL KFI KGO KGW KHQ KOA
KOMO KPRC KSD KTBS KTHS
KVOO WCSH WDAF WDAY WEAF
WEBC WFAA WFBR WFLA WGY

WEBC WFAA WFBR WFLA WGY WHO WIBA WIS WJAR WJAX WJDX WKY WMAQ WMC WOAI WOC WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WWJ WWNC B - Sous Les Ponts de Paris

KDKA KOIL KSO KWCR KYW WBAL WBZ WBZA WCKY WGAR WHAM WJR WJZ WMAL WREN

- Harmonica Band; Round-Up Rangers

Stations same as 9:00 Monday

E-9:00 p.m., C-8:00, M-7:00, P-6:00 C - Elder Michaux and Congregation C—Elder Michaux and Congregation
OFRB CKLW KFH KLRA KLZ
KMBC KMOX KOMA KSL KTRH
KTSA KVOR WABC WADC WBIG
WBRG WCAO WCAU WCCO WDBJ
WDSU WEAN WFBL WFBM WFEA
WGST WHAS WHEC WHP WIBW
WICC WISN WJAS WJSV WKBW
WLAC WLBW WLBZ WMBD WMBG
WMT WNAC WOKO WQAM WREC
WSBT WSJS WTAR WTOC WWVA
R—Lucky Strike—Jack Pearl

R — Lucky Strike—Jack Pearl KDYL KPSD KFYR KGO KGU KGW KIIQ KOA KOMO KPRC KSD KSTP KTAR KTBS KTHS WAPI WBAP WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEI WFBR WFI WFLA WGY WIBA WIOD WIS WJAR WILLY WILLY WIM WMAO WJAX WJDX WKY WLW WMAQ WMC WOAI WOW WRC WRVA WSB WSMB WTAG WTAM WTMJ WWJ

B — Jamboree—Variety Show KDKA KOIL KSO KWCR KWK KYW WBAL WCKY WGAR WHAM WJR WJZ WMAL WREN WSYR

F — Concert Program Stations same as 9:00 Monday

E-9:15 p. m., C-8:15, M-7:15, P-6:15 F - Events of Canadian Interest Stations same as 9:00 Monday

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

C — Symphonic Strings
CFAC CFBO CFCF CFCH CFCN
CFCO CFCY CFJC CFNB CFPL CFQC CHAB CHGS CHNS CHRC CHWC CHAB CHGS CHNS CHRC CHWC CHWK CJCA CJOB CJCJ CJGX CJOC CJRM CJRW CKCH CKCK CKNC CKOC CKOC CKOC CKPC CKPC CKPC CKPX CRCA CRCO CKS CRCT CRCV CKLW KFH KIRA KLZ KMBC KMOX KOMA KRLD KSL KTRH KTSA KVOR WABC WADC WBIG WSIC WCAU WCCO WDBJ WDSU WEAN WFBL WFBM WFEA WGST WIAS WHEC WHK WHP WIBW WICC WJAS WISC WHE WHP WIRW WICC WJAS WISC WHK WHP WIBW WICC WJAS WJSV WKBW WLAC WJAS WSBW WKBW WLAC WUKO WQAM WREC WSBT WSJS WTAR WTOC WWVA

WSBT WSJS WTAR WTOC WWVA

R — Leo Reisman; Yachi Club Boys
WBEN WCAE WCSH WDAF WEAF
WEEI WFBR WFI WGY WHO WJAR
WMAQ WOC WOW WRC WSAI
WTAG WTAM WWJ

E-10:00 p.m., C-9:00, M-8:00, P-7:00 C — Columbia Public Affairs Institute

tute
CFRB CKLW KLRA KLZ KMBC
KMOX KOMA KSL KTRH KTSA
KVOR WAAB WABC WADC WBIG
WBRC WCAO WCOO WDBJ WDSU
WEAN WFBL WFBM WFEA WGST
WHAS WHEC WHP WIBW WICC
WJAS WJSV WKBW WLAC WLBW
WLBZ WMBD WMBG WMT WOKO
WPG WQAM WREC WSJS WTAR
WTOC WWYA
R — B. A. Bolle and Orchestra

R - B. A. Rolfe and Orchestra CRCT KDYL KFI KGO KGW KOA KOMO KSD KSTP WBAP WBEN WCAE WCSH WDAF WEAF WEEI WFBR WFI WGY WHO WJAR WJAX WLW WMAQ WOAI WOC WOW WRC WRVA WSB WSMB WTAG WTAM WTMJ WWJ

B — Tales of the Titans—Drama KDKA KOIL KWCR KWK KYW WBAL WBZ WBZA WCKY WGAR WHAM WJR WJZ WMAL WREN WSYR F — Earle Hill's Orchestra

Stations same as 9:00 Monday

E-10:15 p.m., C-9:15, M-8:15, P-7:15
C— Ann Leaf at Organ
CFRB CKLW KFH KLRA KLZ
KMBC KOMA KRLD KSL KTRH
KTSA KVOR WAAB WABC WADC
WDBJ WDSU WEAN WFBL WFEA
WGST WHEC WHP WIBW WICC
WJAS WJSV WKBW WLAC WLBW
WLEZ WARD WMBG WOKO WPG WLBZ WMBD WMBG WOKO WPG WQAM WREC WSJS WTAR WTOC

E-10:30 p.m., C-9:30, M-8:30, P-7:30 C — George Jessel CFRB CKLW KFH KLRA KLZ KMBC KMOX KOMA KRLD KTRH KTSA KVOR WAAB WABC WADC WBIG WBRC WCAO WCAU WCCO WDBJ WDSU WEAN WFBM WFEA WOST WHAS WHEC WHE WHP WIBW WICC WISN WJAS WJSV WIBW WICC WISN WJAS WJSV WKBW WLAC WLBW WLBZ WMBD WMBG WOKO WPG WQAM WREC WSBT WSJS WTAR WTOC WWVA

B — Cuckoo — Ray Knight KOIL KSO KWCR KYW WBAL WBZ WBZA WCKY WGAR WJZ WMAL WREN WSYR

E-11:00 p.m., C-10:00, M-9:00, P-8:00 - Isham Jones and Orchestra

CFRB CKLW KLRA KLZ KMBC KMOX KOMA KTRH KTSA KVOR WAAB WABC WADC WBIG WBRC WCAO WCAU WCCO WDBJ WDSU WEAN WEST WEST WHAS
WHP WIBW WICC WISN WJAS
WJSV WKBW WIAC WISN WJAS
WJSV WKBW WIAC WISN WIAS
WMBD WMBG WMT WOKO WPG
WQAM WREC WSBT WSJS WTAR WTOC

R — One Man's Family—Sketch R—One Man's Family—Sketch
CFCF KDYL KPI KFYR KGO KGW
KHQ KOA KOMO KPO KPRC KSD
KSTP KTBS KTHS KVOO WBEN
WCAE WDAF WDAY WEAF WFBR
WFI WFLA WGY WHO WIBA WIOD
WIS WJAR WJAX WJDX WKY
WMAQ WMC WOAI WOC WOW
WRC WRVA WSAI WSB
WTAG WTAM WWJ WWNC
B—WIS BARD BARC

B — WLS Barn Dance KDKA KOIL KSO KWCR KWK WBZ WBZA WGAR WHAM WJR WJZ WLS WLW WMAL WREN WSYR — Saturday Night Frolic Stations same as 9:00 Monday

E-11:15 p.m., C-10:15, M-9:15, P-8:15 C — El mer E. Yess, See Tuesday

E-11:30 p.m., C-10:30, M-9:30, P-8:30 E-11:30 p.m., C-10:30, M-3:30, P-8:30
C— Glen Gray and Orchestra
CFRB CKLW KLRA KLZ KMBC
KOMA KSL KTRH KTSA KVOR
WABC WADC WBRC WCAO WDBJ
WDSU WEAN WFBL WFBM WGST
WHCC WHP WIBW WIP WISN WHEC WHP WIBW WIP WISN WJSV WKBW WLAC WLBW WLBZ WMBD WMBG WMT WNAC WOKO WPG WQAM WREC WSBT WSJS

SUNDAY

E-11:15 a.m., C-10:15, M-9:15, P-8:15
R — Major Bowes' Capitol Family
KDYL KFYR KOA KPRC KSTP
KTBS RVOO WAPI WCAE WDAF
WDAY WEAF WEBC WFAA WFBR
WFLA WGY WHO WIOD WJAR
WIAX WKY WMAQ WMC WOAI
WOC WRC WRYA WSAI WSMB
WTAG WTAM WWNC

E-11:30 a.m., C-10:30, M-9:30, P-8:30 C — Salt Lake Tabernacle Choir

CKLW KLRA KLZ KMBC KOMA
KSI, KTRII KTSA KVOR WABC
WACO WADC WBIG WBRC WCAO
WCCO WDBJ WDRC WDSU WEAN WCCO WDBJ WDRC WDSO WEAS WFBA WFEA WGN WGR WGST WIAS WHEC WHP WIBW WICK WISN WJAS WJSV WLAC WLBW WMBD WMT WNAC WOKO WORC WFG WQAM WSBT WSFA WSJS WTAQ WTAR WWVA

E-12:15 p. m., C-11:15, M-10:15, P-9:15 R — Seeing the Other Americas KDYL KFSD KFYR KGO KHQ KOA KOMO KPRC KSTP KVOO WAPI WBAP WBEN WCSH WDAY WEAF

WBAP WBEN WCSH WDAY WEAF WEBC WFI WFLA WGY WHO WIBA WIOD WIS WJAR WJAX WJDX WMC WOAI WOC WRC WSAI WSB WSMB WTAG WTAM

E-12:30 p. m., C-11:30, M-10:30, P-9:30 C — Tito Guizar's Serenade WABC WCAU WDRC WEAN WFEA WLBZ WNAC WORC

SUNDAY—(Continued)

B— Radio City Concert
CFCF CRCT KDKA KDVL KFI
KFYR KGO KGW KHQ KOA KOIL
KOMO KPRC KSO KVOO WAPI
WBAL WBZ WBZA WCKY WDAY
WEBC WGAR WIIAM WIS WJDX
WJR WJZ WKY WMAL WOAI WREN
WSME WSVE WWAL WSMB WSYR WWNC

E-12:45 p. m., C-11:45, M-10:45, P-9:45 C - Madison Ensemble

C-Madison Ensemble
CFRB CKLW KLRA KLZ KMBC
KOMA KSL KTRH KVOR WACO
WADC WBIG WCAO WCAU WDBJ
WDRC WDSU WEAN WFBL WFEA
WGR WGST WHAS WHEC WIBW
WMSN WJAS WJSV WLAC WLBW
WMBD WMT WNAC WOKO WPG
WQAM WRLC WSBT WSJS WTAQ
WTAR WTOC WWVA

E-1:00 p. m., C-12:00, M-11:00, P-10:00 Church of the Air

CFRB CKLW KLRA KLZ KOMA KTRH KTSA KVOR WAAB WABC WACO WADC WCCO WDBJ WDRC WDSU WFBL WGR WGST WHAS WHEC WHP WIBW WJAS WJSV MALO WADE WCCO WDB/ WDR/ WDSU WFBL WGR WGST WHAS WHEC WHP WIBW WJAS WJSV WLAC WLBW WMT WOKO WPG WQAM WREC WSBT WSJS WTAQ WTAR WTOC WWVA

E-1:30 p. m., C-12:30, M-11:30, P-10:30

E-1:30 p. m., C-12:30, M-11:30, F-10:30 C— Lazy Dan, Minstrel Man CKLW KMBC KMOX KRLD WABC WBBM WCAH WCAO WCAU WCCO WHAS WHK WJAS WJSV WKBW WKRC WMBG

WOC WRC WTAG WTAM WWJ

B — Highlights of the Bible

KDKA KDYL KFI KFYR KGHL

KGIR KGO KGW KOA KOIL KOME

KPRC KSO KYOO KWK WAP! WBAL

WBZ WBZA WDAY WEBC WHAM

WIOD WIS WJAX WJDX WJR WJZ

WMAL WOAI WREN WRVA WSM

WSMB WSYR WWNC

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

- broadway Melodies; Helen Mor-gan CFRB CKLW KDB KFPY KFRC KGB KHJ KLZ KMBC KMOX KOIN KOL KRLD KSL KYI WABC WBBM WCAO WCAU WCCO WDSU WHK WJAS WJSV WKBW WKRC WLAC WNAC

Gene Arnold and Commodores K— Gene Arnold and Commodores KDYL KFI KGO KGW KHQ KOA KOMO KPRC KVOO WBEN WCAE WCSH WEAF WEBC WEEI WFAA WFBR WGY WIBA WJAR WKY WLW WMAQ WOAI WOW WPTF WRC WRVA WTAG WTAM WWJ WWNC

B — Autumn 1dyll
CFCF KDYL, KFL KFYR KGO KGW
KHO KOA KOIL KOMO KSO KSTP
KTBS KTHS KVOO KWCR KWK
KYW WAPI WBAL WBZ WBZA
WCKY WDAY WEBC WFAA WFLA
WGAR WIOD WIS WJAX WJDX
WJR WJZ WKY WLW WMAL WMC
WOAI WREN WSB WSM WSMB
WWNC B — Autumn Idyll

E-2:30 p. m., C-1:30, M-12:30, P-11:30 C — Abe Lyman's Orchestra

CFRB CKLW KMBC KMOX WABC
WBBM WCAO WCAU WCCO WDRC
WEAN WFBL WFBM WHEC WHK
WJSV WKBW WKRC WNAC WOKO

B - Yeast Foamers; Jan Garber B — Yeast Foamers, van KDKA KDYL KFI KFSD KFYR KGHL KGIR KGO KGW KHQ KOA KPRC KSO KSTP KOLL KOMO KPRC KSO KSTP KTAR KTBS KTHS KVOO KWCR KWK KYW WAPI WBAL WBZ WBZA MOR KIW WAPI WBAL WBZ WBZA
WDAY WEBC WFAA WFLA WGAR
WHAM WIBA WIOD WIS WJAX
WJDX WJR WJZ WKBF WKY WLW
WMAL WMC WOAI WPTF WREN
WRVA WSB WSM WSMB WSYR
WTMJ WWNC

E-2:45 p.m., C-1:45, M-12:45, P-11:45
R — Gems of Melody; Muriel Wilson
WBEN WCAE WCSH WDAF WEAF
WEEI WFBR WGY WHO WJAR
WMAQ WOC WOW
WTAG WTAM WWJ

E-3:00 p.m., C-4:00, M-1:00, P-12:00 C - New York Philharmonic Orch, CFAC CFBO CFCF CFCH CFCN CFCO CFCY CFJC CFNB CFPL

R — Wayne King and Orchestra KDYL KFI KGO KGW KHQ KOA KOMO KPRC KSD KSTP KYOO WBEN WCAE WCSH WDAF WEAF WFAA WGY WHO WJAR WKY WLIT WLS WLW WOC WOW WRC WTAG WEEL WKBF WKBF WKY WLIZ WOAI WOC WOW WTAM WTMJ WWJ

WTAM WTMJ WWJ

B— National Opera Concert
CFCF CRCT KDKA KOIL KSO
KWCR KWK WBAL WBZ WBZA
WCKY WFLA WGAR WHAM WIOD
WIS WJAX WJDX WJR WJZ WMAL
WMC WREN WRVA WSB WSM
WSMB WSYR WWXC

E-3:30 p.m., C-2:30, M-1:30, P-12:30 R — Radio Pulpit KDYL KFI KFSD KFYR KGHI

KGIR KGO KGW KHQ KOMO KPRC KTBS KTHS KVOO KYW WAPI WBEN WCAE WCSH WDAF WDAY WEAF WEBC WEEL WFAA WFBR WFLA WGY WIBA WIOD WIS WJAR WJAX WJDX WKY WLIT WOAI WOW WRC WRVA WSAI WSB WSM WTAG WTAM WWJ WWNC

E-4:00 p.m., C-3:00, M-2:00, P-1:00 R — Fiddlers Three CFCF CRCT KDYL KFI KFSD

CFCF CRCT KDYL KFI KFSD
KFYR KGO KGW KHQ KOA KOMO
KSD KSTP KFAR KTBS KYW
WAPI WBEN WCAE WDAF WDAY
WEAF WEBC WEEL WFLA WGY
WHO WIBA WIOD WIS WJAR
WJDX WKY WLIT WOAI WOC

WOW WRC WRVA WSAI WSB WSM WTAG WTAM WWJ WWNC

WTAG WIAM WWJ MING Rev. Charles E. Coughlin KMOX KSTP KYW WCAO WCAU WDRC WEAN WFBL WFEA WGAR WCR WHB WHO WICC WJAS WJR WLBZ WLW WMAS WNAC WOC WOL WOR WORC

B - Gould and Shefter-Piano Duo KDKA KOIL KWCR KWK WBAL WGAR WHAM WJZ WMAL WREN

E-4:15 p. m., C-3:15, M-2:15, P-1:15
R — Wildroot; Vee and Johnny
KDYL KPI KFVR KGO KGW KHQ
KOA KOMO KPRC KTBS KVOO
WBEN WCAE WCSH WDAP WDAY
WEAF WEBC WEEL WFAA WFBR WEAR WEBG WEET WAA WIDE WGY WIBA WJAR WKY WLIT WLS WOAI WOW WRC WSAI WTAG WTAM WTMJ WWJ

WIAM WTMJ WWJ
B— Morin Sisters, Harmony Trio
CFCF CRCT KDKA KOLL KSO
KWCR KWK KYW WBAL WBZ
WBZA WCKY WFLA WGAR WHAM
WIOD WIAX WJDX WJR WJZ WLW
WMAL WIEN WRVA WSB WSM WSYR WWNC

E-4:30 p.m., C-3:30, M-2:30, P-1:30 R — Hoover Sentinels

R— Hoover Sentinels
CFCF CRCT KDYL KFI KGO KGW
KIIQ KOA KOMO KPRC KVOO
WBAP WBEN WCAE WCSH WDAF
WEAF WEBC WEEL WFBR WFI
WGY WIBA WJAR WKY WMAQ
WOAI WOW WRC WTAG WTAM

WWJ

B — Dion Kennedy, Organist
GFCF CRCT KDKA KFSD KFYR
KGO KGW KHQ KOA KOIL KOMO
KPRC KSO KSTP KTBS KVOO
KWCR KWK KYW WBAL WBZ
WBZA WCKY WDAY WEBC WFAA
WFLA WGAR WHAM WIBA WIOD
WIS WJAX WJDX WJR WJZ WKY
WMAL WMC WOAI WREN WRVA
WSB WSM WSYR WWNC

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

CKLW KFAB KLRA KLZ KMBC
KMOX KOMA KRLD KTRH KTSA
WAAB WABC WADC WBBM WBRC
WCCO WDSU WGST WHAS WHK
WJAS WJSV WKRC WREC

WARS WARY WRITE WARDS

R — Big Ben Dream Drama
WBEN WCAE WCSH WDAF WEAF
WEEI WFBR WGY WJAR WMAQ
WOW WRC WSAI WTAG WTAM WWJ

WWJ
B— Friendly Hour
RDYL KFSD KFYR KGHL KGIR
KGO KGW KHQ KOA KOIL KFRC
KSO KSTP KTAR KTBS KVOO
KWCR WKW WBAL WBZ WBZA
WGEL WCKY WDAY WEBC WFLA
WGAR WHAM WIBA WIOD WIS
WJAX WJDX WJR WJZ WKY WMAL
WMC WOAI WPTF WREN WRVA
WSB WSMB WSYR WWNC
F— Vesper Hour

F - Vesper Hour

Stations same as 9:00 Monday

E-5:15 p. m., C-4:15, M-3:15, P-2:15

SUNDAY—(Continued)

E-5:30 p. m., C-4:30, M-3:30, P-2:30 C— Frank Crumit; Julia Sanderson CKLW KFAB KFH KMBC KMOX KOMA WAAB WABC WADC WCAH WCAO WCAU WDRC WDSU WEAN WFBL WFBM WGR WHEC WHK WICC WJSV WMAS WOKO WORC

WICC WJSV WMAS WOKO WORC
WSPD WTAR WWVA

R — Talkie Picture Ti me — Sketch
WCAE WCSH WDAF WEAF WEEI
WFBR WFI WGY WJAR WMAQ
WMC WOW WRC WSAI WSM WTAG

B — Grand Hotel — Drama
KDKA KDYL KFI KGO KGW KHQ
KOA KOIL KOMO KSO KSTF KWCR
KUYK WBJI WPZA WCEY

KWK WBAL WBZ WBZA WCKY WEBC WENR WGAR WHAM WJR WJZ WKBF WMAL WREN WSYR WTMJ

E-6:90 p.m., C-5:00, M-4:00, P-3:00 Jacques Renard's Orchestra CKLW KMBC KMOX WABC WBBM WCAO WCAU WCCO WFBM WGR WHK WJAS WJSV WKRC

WHK WJAS WJSV WKRC

R—Catholic Hour
KDYL KECA KFYR KGHL KGIR
KGW KOA KOMO KPO KPRC
KSTP KTAR KTBS KVOO WAPI
WBAP WBEN WCAE WCSH WDAF
WDAY WEAF WEBC WEEL WENR
WFBR WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WKY WLIT WMC WOAL WOC WOW
WRC WRVA WSAI WSB WSM
WSMB WTAG WTAM WYJ WWNC

— Richard Himber and Orchestra B— Richard Himber and Orchestra CFCF CRCT KDKA KOIL KSO KWCR KWK WBAL WCKY WGAR WHAM WJR WJZ WMAL WMAQ WREN

E-6:30 p.m., C-5:30, M-4:30, P-3:30

E-6:30 p.m., G-5:30, M-4:30, P-3:30

— Smiling Ed McConnell
CKLW KDB KERN KPAB KFBK
KFH KFPY KFPC KGB KHJ KLZ
KMBC KMOX KOIN KOL KRLD
KSL KVI KWG WAAB WABC WBBM
WET WCAH WCAU WCCO WDSU
WEAN WFBL WHAS WHEC WHP
WJAS WJSV WKBW WKRC WLAC
WMT WOKO WQAM WSPD WTAR WWVA

R - Our American Schools CFCF CRCT KDYL KECA KFSD KFYR KGW KOMO KPO KPRC KSD KEYR KGW KOMO KPO KPRC KSD
KSTP KTAR KTBS KVOO WAPI
WBAP WBEN WCAE WCSH WDAF
WDAY WEAF WEBO WEEI WFBR
WFLA WGY WHO WIBA WIOD
WJAR WJAX WJDX WKY WLIT
WMAQ WMC WOAI WOC WRV
WYA WSAI WSB WSM WSMB
WTAG WTAM WWJ WWNC
R- Herri Deevin Carrent Birita

B—Henri Deering, Concert Pianist
KDKA KOIL KSO KWCR KWK
WCKY WENR WGAR WHAM WJR
WJZ WLW WMAL WREN WSYR
F—Dinner Hour, See Monday

E-6:45 p.m., C-5:45, M-4:45, P-3:45 C — Willard Robison, Syncopated

C—WIllard Hodison, Syncopage Sermons
CKLW KFH KLRA KLZ KMBC
KMOX KOMA KRLD KSL KTRH
KTSA KVOR WAAB WACO WADC
WBIG WBRC WCAO WCCO WDBJ
WDRC WDSU WEAN WFBL WFEA
WGR WGST WHAS WHEC WHP
WIBW WICC WIP WAS WJSV WLAC WLBW WOKO WORC WOAM

WREC WSBT WSFA WSJS WTAQ WTAR WTOC WWVA

B - Trio Romantique KDKA KOIL KSO KWCR KWK WCKY WENR WGAR WHAM WJR WJZ WLW WMAL WREN WSYR

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

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

R — Blue Coal Program

CRCT WBEN WEAF WEEI WFBR
WGY WJAR WLIT WRC WTAG

B — Vincent Lopez, Alice Joy
KDKA KDYL KFI KFYR KGO KGW
KHQ KOA KOLL KOMO KPRC KSO
KSTP KTHIS KWCR KWK WBAL
WBZ WBZA WDAY WEBC WFAA
WGAR WHAM WIBA WJDX WJZ
WKY WLS WLW WMAL WOAI
WPTF WREN WSB WSM WSMB
WSYR WTMI WSYR WTMJ

E-7:15 p.m., C-6:15, M-5:15, P-4:15
C—The Gauchos; Tito Guitar
CKLW KFH KLRA KLZ KMBC
KMOX KOMA KSL KTHH KTSA
KVOR WABC WACO WADC WBIG
WBRC WCAO WCAU WCCO WBBIG
WBRC WCAO WCAU WCCO WBIG
WBRC WCAO WCAU WCCO WBIG
WDRC WCAO WCAU WCCO WBIG
WDRC WCAO WCAU WCCO WBIG
WDRC WCAO WCAU WFBM
WFEA WGR WGST WHAS WHEC
WHP WIBW WICC WISN WJAS
WJSV WLAC WLBW WMT WNAC
WOKO WORC WPG WQAM WREC
WSBT WSFA WSJS WTAQ WTAR
WTOC WWVA WTOC WWYA

E-7:30 p.m., C-6:30, M-5:30, P-4:30 B — Ozzie Nelson; Joe Penner KDKA KDYL KFI KFYR KGO KGW ADJA ADJA KET KEYR KGO KGW
KHQ KOA KOIL KOMO KPRC KSO
KSTP KTAR KVOO KWCR KWK
WBAL WBZ WBZA WDAY WEBC
WFAA WFLA WGAR WHAM WIBA
WIOD WJAX WJDX WJZ WKY
WLS WLW WMAL WMC WOAI
WITF WREN WRVA WSB WSM
WSMB WTMJ WWNC

E-7:45 p. m., C-6:45, M-5:45, P-4:45 C — Rin Tin Tin Thriller CKLW KMOX WABO WCAU WFBL WFBM WGN WGR WHAS WHK WJAS WJSY WKRC WNAC

WARD WARD WARD WARD HAIL CECF KSD WBEN WCAE WCSH WDAF WEAF WFBR WGY WHO WJAR WLIT WMAQ WOC WOW WRC WSAI WTAG WTAM WWJ

E-8:00 p. m., C-7:00, M-6:00, P-5:00
C—Freddie Rich; Mildred Bailey
CKLW KLRA KLZ KMBC KMOX
KOMA KSL KTRH KTSA KVOR
WAAB WABC WACO WADC WBRC
WCAO WCAU WCCO WDBJ WDRC
WDSU WFBM WFEA WGR WGST
WHAS WHEC WHK WHP WIBW
WISN WJAS WJSV WLAC WLBW
WMT WORO WORC WQAM WREC
WSFA WSJS WTAR WTOC WWYA
R—Chase and Sanborn Hour

- Chase and Sanborn Hour R—Chase and Sanborn Hour CFCF CRCT KDYL KFI KFYR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KTAR KTHS KVOO WBEN WCAE WCSH WDAF WDAY WEAF WEBC WFAA WFBR WFLA WGY WHO WIOD WIS WJAR WJAX WJDX WKY WLIT WLW WMAQ WMC WOAI WOC WOW WPTF WRG WRVA WSB WSM WSMB WTAG WTAM WTIO WTMJ WWJ WWNC B—Light Opera Nights

B — Light Opera Nights KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR

WHAM WJR WREN WSYR WJR WJZ WLS WMAL F - Albert Pratz, Violinist Stations same as 6:30 Monday

E-9:00 p.m., C-8:00, M-7:00, P-6:00
C—Erno Rapee; Nino Martini
CKLW KDB KERN KFPK KFPK
KFPK KGB KHJ KLRA KLZ KMBC
KMJ KMOX KOIN KOL KOMA
KRLD KSCJ KSI, KTPH KVI KWG
WABC WADC WBBM WCAO WCAU
WCCO WDRC WBBM WCAO WCBU
WCCO WDRC WBSU WEAN WFBL
WFBM WGR WGST WHAS WHK
WISN WJAS WJSV WKRC WMT
WNAC WNAX WOKO WORC WOWO
WREC WSPD WTAR
R—Manhattan Merty-Go-Round

WREC WSPD WIAR

R — Manhattan Merry-Go-Round

KDYL KFI KGO KGW KHQ KOA

KOMO KSD WDAF WEAF WFBR

WFI WGY WHO WJAR WMAQ WOC

WOW WRC WSAI WTAM WTIC

WWJ B — Gulf Headliners; Al Goodman KDKA KPRC WBAL WBZ WBZA WFAA WFLA WGAR WHAM WIOD WIS WJAX WJDX WJR WJZ WLW WMAL WMC WOAI WPTF WRV WSB WSM WSMB WSYR WWNC

E-9:30 p.m., C-8:30, M-7:30, P-6:30 R — Album of Familiar Music R — Album of Familiar music CFCF CRCT KDYL, KFI KGO KGW KHQ KOA KOMO KPRC KSD KSTP WAPI WBEN WCAE WCKY WCSH WDAF WEAF WELI WFAA WFBR WFI WFLA WGY WHO WIOD WIAR WILLY WILLY WAR WJAX WJDX WKY WMAQ WMC WOAI WOC WOW WPTF WRC WRVA WSAI WSB WSM WSMB WTAG WTAM WTMJ WWJ

B — WAITEN WITH WITH WAJ B — WAITEN WITH WITH WAJ WWJ WWJ WWJ WENR WGAR WHAM WJR WJZ WLW WMAL WREN WSYR

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

B — Noveliers Quartet KDKA KOLL KSO KWCR KWK KYW WBAL WBZ WBZA WGAR WHAM WJR WJZ WMAL WREN WSYR

E-10:00 p. m., C-9:00, M-8:00, P-7:00 E-10:00 p. m., c-3:00, M-3:00, P-7:00

R— Chevrolet; Jack Benny

KDYL KFI KFSD KFYR KGHL

KGIR KGO KGW KHQ KOA KOMO

KPRC KSTP KTAR KTBS WAPI

WBAP WBEN WCAE WCSH WDAF

WDAY WEAF WEBC WEEL WFBR

WFI WFLA WGY WIBA WIOD WIS
WJAR WJDX WKY WMAQ WMC
WOAI WOW WRC WRVA WSB WSM
WSMB WTAG WTAM WTIC WTMJ WWI WWNC B — Green Brothers Novelty Orch. CFCF KDKA KOLL KSO KWCR WBAL WENR WGAR WHAM WJZ WMAL WREN

F — Chateau Laurier Musicale Stations same as 9:00 Monday

E-10:30 p. m., C-9:30, M-8:30, P-7:30
C—Angelo Patri—"Your Child"
CKLW KDB KERN KFBK KFPY
KFRC KGB KHJ KLZ KMBC KMJ
KMOX KOIN KOL KSL KVI KWG
WAAB WABC WCAO WCAU WCCO
WDRC WFBL WGN WGR WHAS
WHK WJAS WJSV WKRC WOKO

R—Col. Louis McHenry Howe KDYL KFYR KGHL KGIR KGO KGW KHQ KOA KOMO KPRC KSD KSTP KVOO WBEN WCAE WDAF

SUNDAY—(Continued)

WDAY WEAF WEBC WEEI WFAA WEBR WFI WGY WHO WIBA WJAR WKY WMAQ WMC WOAI WOO WOW WRC WSAI WSB WSMB WTAG WTAM WTIC WTMJ WWJ

B—Phil Duey, Baritone KDKA KOLL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR WJR WJZ WLW WREN

E-10:45 p. m., C-9:45, M-8:45, P-7:45
B— Mountain Music
CFCF KÜRA KOIL KSO KWCR
WBAL WENR WGAR WHAM WIOD
WIS WJAX WJZ WMAL WREN
WRVA WWNC

E-11:00 p.m., C-10:00, M-9:00, P-8:00 C — Vincent Lopez and Orchestra CFRB CKLW KFH KLRA KLZ KMOX KOMA KSL KTRH KTSA WABC WACO WADC WBRC WCAO WDBJ WDRC WDSU WEAN WFBL WFBM WGR WGST WHAS WHEC WHK WHP WICC WIP WISN WJAS WJSV WLAC WLBW WMBD WM WNAC WOKO WPG WQAM WREC WSBT WSJS WTAR WTOC

R—Sunday at Seth Parker's
CRCT KDYL KFSD KFYR KGHL
KGIR KGO KGW KHQ KOA KOMO
KPRC KSD KSTP KTAR KTBS KYW
WAPI WBEN WOAE WCSH WDAF
WDAY WEAF WEHC WEEI WFAA
WFBR WFLA WGY WHO WIBA
WIOD WIS WJAR WJAX WJDX
WMC WOAI WOC WOW WPTF WRC
WRYA WSAI WSB WSM WSMB
WTAG WTAM WTMJ WWJ WWNC

F — Fireside Hour Stations same as 9:00 Monday E-11:15 p. m., C-10:15, M-9:15, P-8:16 B—Roxanne Wallace, Contralto KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR WJR WJZ WLW WREN

E-11:30 p.m., C-10:30, M-9:30, P-8:30
C— Joe Haymes and Orchestra
CFRB CKLW KFH KLRA KLZ
KOMA KSL KTRH KTSA WABC
WADC WBRC WCAO WCAU WDBJ
WDRC WDSU WEAN WFBL WFBM
WGR WGST WHAS WHEC WHK
WHP WIBW WISN WJAS WJSV
WLAC WLBW WMBD WMT WNAC
WOKO WPG WQAM WREC WSBT
WSJS WTAR WTOC
8— Dick Messner and Orchestra

B Dick Messner and Orchestra KDKA KOIL KSO KWCR KWK WBAL WBZ WBZA WCKY WGAR WJR WJZ WŁW WREN

PROGRAM GOSSIP

The same manufacturer from the Middle West who named a shade of blue "Froman blue" because Jane Froman always wears it, has presented her with a lifetime supply of blue linen sheets and pillow cases.

Don't think Taylor Holmes, the fire chief's uncle, is acting when you hear that rickety laugh of his . . . that's the way he laughs in real life. Did you know that he's the father of Phillips Holmes, the famous movie star?

Frank Luther, of the Men About Town, is fussy about writing, and when a magazine asks for a story, Luther insists on writing it all by himself, with no help... Rudy Vallee's another who does that.

Whatever became of . . . Harry Snodgrass, the Wizard of the Ivories, who won his freedom from jail as a radio pianist to find a fortune on the stage? He broke all records when he played the Palace in Cleveland. The second time around he didn't mean a thing because the folks had already seen him. He is running a gasoline station and barbecue in the middle west today.

Moran and Mack . . . The early birds who got the worm. Popular over the air long before Amos 'n' Andy were known. They were the first comedy act to be recruited from

the stage for radio. They started to slip, gave way to guest stars and are now trying a comeback via the movies.

Russ Columbo . . . The singer of romantic songs, who faded with the decline of crooners. He's in Hollywood taking screen tests.

Redferne Holinshead . . . Star of the Majestic hour and at one time the most popular tenor in radio. He still appears occcasionally over Canadian stations.

Wendall Hall . . . The red-headed melodyman. He faded after the Majestic Hour. Is trying to return via a Chicago station.

Pickard Family . . . The flock of hillbillies. They're working on obscure southern stations.

Franklin Baur . . . The Voice of Firestone. Once a great tenor. When his voice started going down to baritone he retired with much money and is in the real estate business in Brooklyn.

Henry Burbig . . . The King of Dialecticians and the outstanding air comic of his time. A comeback failed last winter, so he's making recordings and a personal appearance now and then.

Olive Kline . . . The original La-Palina soprano over Columbia. Kate Smith has her place today.

CLASSIFIED INDEX TO CHAIN PROGRAMS

Time in Eastern Standard

CONCERTS

Autumn Idyll, 2:00 p. m., Sunday, B.
Howard Barlow, 11:00 p. m., Mon., Tues. and Fri., C.
Gauchos, 7:15 p. m., Sunday, C.
Jules Lande, 10:30 p. m., Monday, R.
Light Opera, 8:00 p. m., Sunday, B.
Walter Logan, 6:00 p. m., Mon., Tues., Wed., and Fri., R.
National Opera, 3:00 p. m., Sunday, B.
N. Y. Philharmonic Symphony, 3:00 p. m., Sunday, C.
Radio City Concert, 12:30 p. m., Sunday, B.
Sonata Recital, 1:30 p. m., Sunday, R.
Albert Spalding, 8:30 p. m., Wednesday, C.
String Symphonic, 8:00 p. m., Monday, B.
Symphonic Strings, 9:30 p. m., Saturday, C.
Trio Romantique, 6:45 p. m., Sunday, B. Autumn Idyll, 2:00 p. m., Sunday, B

DANCE BANDS

Paul Ash, 5:15 p. m., Sunday, R.
Ben Bernie, 9:00 p. m., and 12 mid., Tuesday, R.
Meyer Davis, 7:15 p. m., Saturday, R.
Jack Denny, 11:30 p. m., Wed, B; 11:30 p. m., Thurs., R.
Jan Garber, 2:30 p. m., Sunday, B.
Roger Gerston, 6:00 p. m., Thursday, R.
Al Goodman, 9:00 p. m., Sunday, R.
Pri, C. Fri. C. Glen Gray, 11:30 p. m., Saturday, C. Glen Gray, 11:30 p. m., Saturday, C. Green Brothers, 10:00 p. m. Saturday, C. Phil Harris, 9:00 p. m., Friday, B. George Hall, 6:15 p. m., Satarday, C. Phil Harris, 9:00 p. m., Friday, B. Joe Haymes, 11:30 p. m., Sun. and Mon., C. Richard Himber, 6:00 p. m., Sun., Mon., and Sat., B. Ernie Holst, 6:00 p. m., Wednesday, B. Isham Jones, 9:30 p. m., Mon., 11:30 p. m., Tues., Thurs. and Fri.; 11:00 p. m., Sat., C. Wayne King. 9:30 p. m., Thurs., B; 3:00 p. m., Sun.; 8:30 p. m., Tues., R; 10:00 p. m., Mon., C. Guy Lombardo, 9:30 p. m., Wednesday, C. Vincent Lopez, 7:00 p. m., Sun., B; 11:00 p. m., Sun., C. Dick Messner, 11:30 p. m., Wun.; 6:00 p. m., Tues. and Thurs., B. Dick Messner, 11:30 p. m., Sun.; 6:00 p. m., Tues. and Thurs., B.
Jack Miller, 6:00 p. m., Friday, C.
Ozzie Nelson, 7:30 p. m., Sun., B; 11:30 p. m., Wed., C.
George Olsen, 8:00 p. m., Wednesday, R.
Leo Reisman's, 9:30 p. m., Wed. and Sat., R.
Freddie Rich, 8:00 p. m., Sunday, C.
Willard Robison, 6:45 p. m., Sun; 10:00 p. m., Thurs., C.
B. A. Rolfe, 10:00 p. m., Saturday, R.
Phil Spitalny, 8:30 p. m., Saturday, C.
Rudy Vallee, 8:00 p. m., Thursday, R.
Fred Waring, 10:00 p. m., Wednesday, C.
Paul Whiteman, 11:30 p.m., Tues., B; 10:00 p.m., Thurs., R. DIALOG

Fred Allen, 9:00 p. m. and 12:15 a. m., Friday, R. Amos 'n' Andy, 7:00 and 11: p. m., daily, ex. Sat. and Sun., B.
Jack Benny, 10:00 p. m., Friday, B.
Jack Benny, 10:00 p. m., Sunday, R.
Burns and Allen, 9:30 p. m., Wednesday, C.
Cuckoo Program, 10:30 p. m., Saturday, B.
Andrew Kelly, 6:45 p. m., Sunday, R.
Bert Lahr, 8:00 p. m., Wednesday, R.
Lum and Abner, 7:30 and 11:15 p. m., Mon., Tues., Wed.
and Thurs.; 10:30 p. m., Fri., R.
Lulu McConnell, 9:30 p. m., Monday, C.
Maren and Mack 10:00 p. m., Wednesday, C. Lulu McConnell, 9:30 p. m., Monday, C. Moran and Mack, 10:100 p. m., Wednesday, C. Walter O'Keefe, 8:00 p. m., Friday, B. Olsen and Johnson, 10:000 p. m., Friday, C. One Man's Family, 11:00 p. m., Saturday, R. Optimistic Mrs. Jones, 7:30 p. m., Saturday, R. Jack Pearl, 9:00 p. m., Saturday, R. Jose Penner, 7:30 p. m., Saturday, R. Joe Penner, 7:30 p. m., Sunday, B. Potash and Perlmutter, 8:30 p. m., Mon., Wed. and Fri., B. Talkie Picture Time, 5:30 p. m., Sunday, R. Elmer Everett Yess, 8:00 and 11:15 p. m., Tues., Thurs. and Sat., C. and Sat., C.

DRAMA

DRAMA

Billy Bachelor, 7:15 p. m., daily, ex. Sat. and Sun., R.
Big Ben, 5:00 p. m., Sunday, R.
Circus Days, 7:30 p. m., Fri. and Sat., B.
Columbia Dramato Guild, 9:30 p. m., Thursday, C.
Red Davis, 8:45 p. m., Mon., Wed. and Fri., B.
Death Valley Days, 9:00 p. m., Thursday, B.
Eno Crime Clues, 8:00 p. m., Tues, and Wed., B.
First Nighter, 10:00 p. m., Friday, R.
Goldbergs, 7:45 p. m., daily ex. Sat. and Sun., R.
Grand Hotel, 5:30 p. m., Sunday, B.
H-Bar-O Rangers, 6:15 p. m., daily, ex. Sat. and Sun., C.
Live Ball, Rib, Fried, R.
Warden Lawes, 9:00 p. m., Wednesday, B.
Legend of America, 10:00 p. m., Tuesday, C.
Lives at Stake, 10:00 p. m., Tuesday, R.
March of Time, 8:30 p. m., Friday, C.
Myrt and Marge, 7:00 and 10:45 p. m., daily, ex. Sat. and
Sun., C.
Rin Tin Tin, 7:45 p. m., Sunday, C.
Rin Tin Tin, 7:45 p. m., Sunday, C. Rin Tin Tin, 7:45 p. m., Sunday, C Buck Rogers, 6:00 p. m., daily, ex. Fri., Sat., and Sun., C. Roses and Drums, 5:00 p. m., Sunday, C. Soconyland Sketches, 8:00 p. m., Monday, R. Tales of the Titans, 10:00 p. m., Saturday, B.

PIANO AND ORGAN

Henri Deering, 6:30 p. m., Sunday, B.
Fray and Braggiotti, 7:30 p. m., Thursday, C.
Archer Gibson, 10:30 p. m., Thursday, B.
Gould and Shefter, 4:00 p. m., Sunday, B.
Dion Kennedy, 4:30 p. m., Sunday, B.
Ann Leaf, 10:15 p. m., Saturday, C.
Ohman and Arden, 9:30 p. m., Sunday, R.
Twenty Fingers of Harmony, 6:45 p. m., Saturday, R.

POPULAR PRO GRAMS

A. & P. Gypsies, 9:00 p. m., Monday, R. Album of Familiar Music, 9:30 p. m., Sunday, R. Antobal's Cubans, 8:30 p. m., Saturday, R. Armour Program, 9:30 p. m., Friday, B. Blackstone Plantation, 8:00 p. m., Tuesday, R. Plackstone Plantation, 8:00 p. m., Tuesday, R. Plackstone Plantation, 8:00 p. m., Tuesday, R. Armour Program, 9:30 p. m., Friday, B.
Blackstone Plantation, 8:00 p. m., Tuesday, R.
Bluc Coal Program, 7:00 p. m., Sunday, R.
Major Bowes Family, 11:15 a. m., Sunday, R.
California Melodies, 9:00 p. m., Tuesday, C.
Chase and Sanborn, 8:00 p. m., Tuesday, C.
Chase and Sanborn, 8:00 p. m., Sunday, R.
Chevrolet Program, 10:00 p. m., Sunday, R.
Chevrolet Program, 10:00 p. m., Friday, R.
Contented Program, 10:00 p. m., Monday, R.
Evening in Paris, 9:00 p. m., Monday, C.
Fiddlers Three, 4:00 p. m., Sunday, R.
Fleischmann Hour, 8:00 p. m., Thursday, R.
Jack Frost's Melody, 9:30 p. m., Monday, B.
Gulf Headliners, 9:00 p. m., Sunday, B.
Household Musical, 9:00 p. m., Tuesday, B.
Jamboree Variety, 9:00 p. m., Sturday, B.
Lucky Strike, 9:00 p. m., Saturday, B.
Lucky Strike, 9:00 p. m., Saturday, R.
Lum and Abner Sociable, 10:30 p. m., Friday, R.
Manhattan Merry-Go-Round, 9:00 p. m., Sunday, R.
Maxwell House Show Boat, 9:00 p. m., Thursday, R.
Molle Show, 7:00 p. m., Mon., Wed. and Fri., C.
Nestle's Program, 8:00 p. m., Friday, B.
Old Gold, 10:00 p. m., Wednesday, C.
O'Leary's Irish Minstrels, 6:30 p. m., Saturday, B.
Sinclair Minstrels, 9:00 p. m., Friday, R.
Richfield Country Club, 7:30 p. m., Monday, B.
Sinclair Minstrels, 9:00 p. m., Friday, C.
C'Leary's Irish Minstrels, 9:00 p. m., Friday, C.
C'Leary's Irish Minstrels, 9:00 p. m., Friday, R.
Richfield Country Club, 7:30 p. m., Monday, B.
Swift Revue, 10:00 p. m., Friday, C.
Texaco Fire Chief, 9:30 p. m., Tuesday, R.
Threads of Happiness, 9:15 p. m., Friday, C.
Wildroot Institute, 4:15 p. m., Sunday, R.
Threads of Happiness, 9:15 p. m., Friday, C.
Wildroot Institute, 4:15 p. m., Sunday, R.

RELIGIOUS

Catholic Hour, 6:00 p. m., Sunday, R. Church of the Air, 1:00 p. m., Sunday, R. Church of the Air, 1:00 p. m., Sunday, B. High Lights of Bible, 1:30 p. m., Sunday, B. Mid-Week Hymn Sing, 6:30 p. m., Tuesday, R. Old Songs of Church, 6:30 p. m., Thursday, R. Seth Parker's, 11:00 p. m., Sunday, R. Radio Pulpit, 3:30 p. m., Sunday, R. Salt Lake Choir, 11:30 a. m., Sunday, C. Vesper Hour, 5:00 p. m., Sunday, F.

SINGERS

Annie, Judy and Zeke, 7:45 p. m., Saturday, B.
Mildred Bailey, 8:00 p. m., Sun.; 7:15 p. m., Sat., C.
Betty Barthell, 6:30 p. m., Tuesday, C.
Irene Beasley, 6:30 p. m., Wednesday, B.
Betty Boop Frolies, 6:45 p. m., Friday, R.
Jack and Loretta Clemens, 7:45 p. m., Saturday, R.
Mario Cozzi, 10:30 p. m., Friday, B.
Bing Crosby, 8:30 p. m., Monday C.
Jessica Dragonette, 8:00 p. m., Friday, R.
Phil Duey, 10:30 p. m., Sun, B; 9:30 p. m., Wed., R.
Evan Evans, 11:00 p. m., Wednesday, C.
Jane Froman, 9:00 p. m., Sun; 7:30 p. m., Sat., C.
Tito Guizar, 12:30 p. m. and 7:15 p. m., Sun.; 6:45 p. m.,
Sat., C.
Sat., C. Jane Froman, 9:00 p. m., Sun; 7:30 p. m., Sat., C.
Tito Guizar, 12:30 p. m. and 7:15 p. m., Sun.; 6:45 p. m.,
Sat., C.
Wendell Hall, 7:45 p. m., Sunday, R.
Huppy Bakers, 8:00 p. m., Mon., Wed. and Fri., C.
John Herrick, 7:15 p. m., Wednesday, B.
George Jessel, 10:30 p. m., Saturday, C.
Hall Johnson Singers, 8:30 p. m., Thursday, C.
Alice Joy, 7:00 p. m., Sunday, B.
Lazy Dan, 1:30 p. m., Sunday, B.
Lazy Dan, 1:30 p. m., Sunday, C.
Elizabeth Lennox, 6:45 p. m., Thesday, R.
Ruth Lyon, 10:30 p. m., Sunday, B.
Nino Martini, 9:00 p. m., Sun, 9:30 p. m., Tues., C.
Smiling Ed McComell, 6:30 p. m., Sunday, C.
John McCormack, 9:30 p. m., Sunday, C.
John McCormack, 9:30 p. m., Sunday, B.
Frank Munn, 9:30 p. m., Sunday, B.
Frank Munn, 9:30 p. m., Sun, 8:30 p. m., Wed., R.
Kathryn Newman, 6:30 p. m., Tuesday, B.
Gertrude Niesen, 9:30 p. m., Mon.; 10:30 p. m., Tues.;
8:15 p. m., Sat., C.
Noveliers, 9:45 p. m., Sunday, B.
Virginia Rea, 9:30 p. m., Sunday, R.
Phil Regan, 10:30 p. m., Thursday, C.
Revelers, 9:00 p. m., Sunday, B.
Gladys Rice, 11:00 p. m., Thursday, C.
Baby Rose Marie, 7:15 p. m., Monday, B. Lanny Ross, 9:00 p. m., Thursday, R.
Sanderson-Crumit, 8:00 p. m., Tues., R; 5:30 p. m., Sun., C.
Ethel Shutta, 8:00 p. m., Friday, B.
Singin' Sam, 8:15 p. m., Tues. and Thurs., C.
Sizzlers Tro, 6:45 p. m., Thurs. and 6:00 p. m., Sat., R.
Smith Bros., 8:45 p. m., Thursday, B.
Kate Smith, 9:15 p. m., Mon. and Wed., 8:45 p. m., Tues., C.
Songs My Mother Used to Sing, 6:00 p. m., Sunday, C.
Coarad Thibault, 8:30 p. m., Wednesday, C.
Thirteen Male Voices, 8:45 p. m., Thursday, B.
Three X Sisters, 6:30, p. m., Friday, B.
Ortiz Trado, 10:00 p. m., Mon. and Wed., C.
Vee and Johany, 4:15 p. m., Sunday, R.
Lee Wiley, 9:30 p. m., Friday, R.
Muriel Wilson, 2:45 p. m., Sunday, R.
Yacht Club Boys, 9:30 p. m., Sunday, R.

All America Football, 9:30 p. m., Friday, C.
Don Carney's Dog Chats, 7:45 p. m., Tuesday, B.
Boake Carter, 7:45 p. m., daily, ex. Sat. and Sun., C.
Irvin S. Cobb, 9:00 p. m., Wed, and Fri., C.
Columbia News Service, 11:15 p. m., daily, ex. Sunday, C.
Columbia Public Affairs, 10:00 p. m., Saturday, C.
Father Coughin, 4:00 p. m., Sunday,
Eddie Dooley's Football Dope, 6:30 p. m., Thurs., Fri. and
Sat. C. Eddie Dooley's Football Dope, 6:30 p. m., Thurs., Fri. an Sat., C.
Flying Capt. Williams, 6:45 p. m., Saturday, B.
Floyd Gibbons, 10:45 p. m., Fri., B, 8:30 p. m., Mon., R.
William Hard, 6:30 p. m., Wednesday, R.
Edwin C. Hill, 8:15 p. m., Mon., Wed. and Fri., C.
Horliek's Health, 8:30 p. m., Tues, and Thurs., B.
Col. Louis McHenry Howe, 10:30 p. m., Sunday, R.
H. V. Kaltenborn, 6:45 p. m., Friday, C.
John B. Kennedy, 6:30 p. m., Thursday, R.
Meet the Artist, 6:00 p. m., Saturday, C.
Elder Michaux, 9:00 p. m., Saturday, C.
National Radio Forum, 10:30 p. m., Wednesday, R.
Our American Schools, 6:30 p. m., Sunday, R.
Angelo Patri, 10:30 p. m., Sunday, C.
Radio in Education, 7:15 p. m., Tuesday, B.
Grantland Rice, 7:30 p. m., Monday, B.
Irene Rich, 7:45 p. m., Wed. and Fri., B.
Seeing the Other Americas, 12:15 p. m., Sunday, R.
Madame Sylvia, 10:30 p. m., Monday, B.
Lowell Thomas, 6:45 p. m., daily ex. Sat. and Sun., B.
Voice of Experience, 8:30 and 11:45 p. m., Tuesday, C.
Frederic William Wile, 7:00 p. m., Sunday, B.
Alexander Woollcott, 10:30 p. m., Sunday, B.
Alexander Woollcott, 10:30 p. m., Sunday, B. Sat., C.

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 watter third column. Daytime power is shown in parenthesis in fourth column in kilowatts, thus (.25) indicating 250 watts. Some stations outside the United States use a "split frequency." Their exact frequency is shown in fourth column. Time Zones: A—Atlantic, E—Eastern, C—Central, M—Mountain, P—Pacific, L—Local. A. M. time is shown in light face type.

Second Column Symbols

- Verifies reception for return postage. Verifies only occusionally.

- Does not verify.
 Verification 10c; letter 25c.
 Sends Ekko stamp for 10c.
 Sends Ekko stamp for 5c.

- Sends Ekko stamp for postage
- Sends own station stamp for 10c.
- Sends own station stamp for 5c.
- Sends own station stamp for postage.
- Has no stamps.
- No information available.

Fourth Column Symbols

- Amalgamated Broadcasting System. National "Blue" network. Columbia network.

- D Daytime only.
 Dn Daytime with occasional evening hours.
- Trans-Canada network.
- Canadian Radio Brdostg. Commission.
- All Canadian networks.

- Yankee network.
- Orange network.
- Michigan network
- Allengan network.
 Canadian Paeific Ry. network.
 Central Canada network.
 National "Red" and "Blue" networks.
 Has construction permit only.
 Great Lakes network.
 National "Red" network.

- Sunday only Synchronized.
- Sy Don Lee System.
- Dixie network.
- Maritime Broadcasting network.
- All-Florida network.
- 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
- 1-2-3. Figures denote stations sharing time.
- No information.

INDEX BY FI UENCIES AND DIAL NUMBERS wit riday's Time on the Air

```
555.2 neters
540 kilocycles
                                                                         E-7:00-1:00
                                                Win sor, Ont.
Merida, Yuc.
CKLW
                       5000
                         105
                                  546.8
                                        545.1 meters
550 kilocycles
                                                Brookings, S. D. C—12:30-2:00
St. Louis, Mo. C
Bismarck, N. D. C—7:00-12:30; 2:00-11:30
Corvallis, Ore. P=6:30-4:00; 6:30-9:00
St. Louis, Mo. C
San Jose, C. R. C—10:00-1:00; 4:00-11:00
Waterbury, Vt. E—7:30-mid.
Cincinnati Ohio E—7:00-1:00
               ae
                         500
                                  1 (1)
2 (1)
                         500
KFUO
               ae
KFYR
KOAC
                        1000
                                  1N (2.5)
               ah
                       1000
               ak
                                  2R
KSD
               ak
                         500
TISO
                         250
               яk
                                  DCC
WDEV
WGR
                         500
               ae
               aе
                        1000
                                                 Cincinnati, Ohio. E-7:00-1:00
 WKRC
                       1000
               яk
560 kilocycles
                                         535.4 meters
                                                Beaumont, Texas. C—7:00-10:00
Springfield, Mo. C—7:00-7:00
Denver, Colo. M—6:45-11:30
San Francisco, Calif. P—7:00-1:00
Philadelphia, Pa. E—6:45-9:00; 9:45-11:00; 1:00-2:00; 3:00-4:30;
KFDM
                         500
                                  (1)
D
               ak
                         500
KGIZ
KLZ
               яk
                       1000
               ak
KTAB
               ak
                       1000
 WFI
                         500
                                   1R
               ae
                                                    6:00-7:00
                                                                         -5:30-3:30
WIND
                        1000
                                                 Gary, Ind.
               ak
                                                 Philadelphia, Pa. E-9:00-9:45; 11:00-1:00; 2:00-3:00; 4:30-6:00.
                                   ĭR
WLIT
                         500
               ak
                                                   7:00-1:00
                                                7:00-1:00
Knoxville, Tenn. C
Miami, Fla. E—7:15-mid.
Mexicali, B. C. P—8:00-10:00
                                  C (2)
CW
WNOX
                        1000
               ak
                        1000
 WQAM
               ae
XEAO
               ak
                         100
                                  (.15)
570 kilocycles
                                         526.0 meters
                                                Wichita Falls, Texas. C—7:00-1
Hollywood, Calif. P—6:00-12:15
Tacoma, Wash. P—6:00-mid.
                                                                                    C-7:00-10:00
KGKO
               яk
                         250
                                  (.5)
KMTR
KVI
WKBN
WMCA
               ak
                         500
                         500
                                                racoma, Wash. P—5:00-mid.
Youngstown, Ohio. E—7:30-9:00; 11:00-7:00
New York, N. Y. E—8:00-1:00
Yankton, S. D. C—6:00-mid.
Columbus, Ohio. E—9:00-11:00; 7:00-11:30
Syracuse, N. Y. E—7:30-1:00
Asheville, N. C. E—8:00-1:00
               ak
                                  iC
               ae
                         500
               ak
                         500
                                  C (2.5)
 WNAX
               ak
                        1000
                         750
250
 WOSU
               ae
 WSYR
                                  Ē
               яk
 WWNC
                                  N
                       1000
               aе
580 kilocycles
                                         516.9 meters
                         250
                                                Eumonton, Alta.
Toronto, Ont. E—8:00-11:30 (CFCL)
Edmonton, Alta. M
Moncton, N. B. A—12:30-2:00; 8:00-mid.
Santo Domingo, D. R. E—8:10-10:30
Fresno, Calif. P—7:00-mid.
Manhattan, Kans. C—8:00-9:00; 10:00-10:5:30
 CHMA
CKCL
CKUA
               aj
ak
                         100
                                   M
                         500
 CRCA
               ak
                         500
HIX
KM I
                        1500
               ah
                         500
               яk
                                   \bar{2}(1)
                                                                                 C-8:00-9:00: 10:00-10:30: 12:30-1:30: 4:30-
KSÃC
                         500
               ak
                                                    5:30
                                                 Orlando, Fla. E-7:00-mid.
Topeka, Kans. C-6:00-mid.
Charleston, W. Va. E-8:00-mid.
Worcester, Mass. E-8:00-mid.
                                  CW
 WDBO
                         250
               ae
 WIBW
                        1000
                                  C2
               ae
 WOBU
               ak
                         250
                                   (.5)
 WTAG
                         250
                                   R (.5)
               ae
                                                 Piedras Negras, Coah. C-6:00-8:00; 11:00-1:00; 7:00-11:00
XEPN
               ak 75000
                                  585
 590 kilocycles
                                         508.2 meters
 CMW
               яе
                        1400
                                                 Havana, Cuba. E
                                                 Spokane, Wash. P-7:00-1:00
Boston, Mass. E
KHQ
WEEI
                        1000
                                  N (2.5)
               ak
               ak
                        1000
                                  R
                                                 Kalamazoo, Mich. E-7:00-7:00
Omaha, Neb. C-7:00-1:30; 2:00-3:30; 4:00-11:30
 WKZO
                        1000
                                  DK
               ae
 WOW
                        1000
                                  R
               яe
600 kilocycles
                                         499.7 meters
                         500
                                                 Montreal, Que. E-7:30-mid.
CFCF
                                  r Montreal, Que. E—7;30-mid.
Anchorage, Alaska. L—6:00-mid.
San Diego, Calif. P—7:30-mid.
Storrs, Conn. E—12:30-1:00; 7:00-8:00
Baltimore, Md. E—7:00-mid.
C CH(.5) Bridgeport, Gonn. E—7:45-1:00
Waterloo, Iowa. C—6:00-mid.
Memphis, Tenn. C—6:30-mid.
KFOD
KFSD
WCAC
WCAO
                         250
               ck
               ah
                        1000
                         250
250
               ae
               ae
WICC
                         250
               ae
               af
                         500
WREC
               ak
                         500
610 kilocycles
                                        491.5 meters
```

INDEX BY FREQUENCIES AND DIAL NUMBERS With Friday's Time on the Air

With Friday's Time on the An
TIFB z 30 714 San Jose, C. R. C—6:00-10:00 WOR ak 5000 Newark, N. J. E—6:45-12:30 XEN ak 1000 711 Mexico City, D. F. C—9:00-noon; 1:00-4:00; 5:00-mid.
720 kilocycles 416.4 meters
WGN ck 25000 C Chicago, Ill. C-7:00-1:30
730 kilocycles 410.7 meters
CFPL z 100 London, Ont. E CJCA ah 500 F Edmonton, Alta. M CKAC ak 5000 CF Montreal, Que. E-7:30-11:30 CMK ae 3150 Havana, Cuba. E-11:00-1:00; 7:00-mid.
XER ak 150000 735 Villa Acuna, Coah. C-7:15-5:00
740 kilocycles 405.2 meters
KMMJ ae 1000 D Clay Center, Neb. C—5:00-sunset WHEB ak 250 D Portsmouth, N. H. E—8:30-1:30; 3:30-7:45 WSB ah 50000 NX Atlanta, Ga. C—6:55-mid.
750 kilocycles 399.8 meters
KGU aj 2500 N Honolulu, T. H. L.—6:30-10:30 WJR ak 10000 B Detroit, Mich. E.—7:00-1:00 XEAN ae 5000 Juarez, Chih. M XEFD ak 5000 757 Tijuana, B. C. P.—7:00-mid.
760 kilocycles 394.5 meters
KXA ae 250 (.5) Seattle, Wash. P WBAL ae 1000 BSy Baltimore, Md. (See 1060 Kcys.) WEW ae 1000 D St. Louis, Mo. C-7:30-6:00 WJZ ck 50000 BSy New York, N. Y. E-8:00-1:00
770 kilocycles 389.4 meters
KFAB ae 5000 CSy Lincoln, Neb. C-5:00-6:45; 9:00-mid. WBBM ae 25000 CSy Chicago, Iil. C
780 kilocycles 384.4 meters
CHWK ak 100 F Chilliwack, B. C. P—9:00-10:00; 12:00-1:00; 5:30-8:30 (I) P Sudbury, Ont. E—8:00-mid. (E—8:00-mid. CMCQ z 1000 1 (.15) Havana, Cuba. E—10:00-0:00; 7:00-11:00 (EEW ac 500 2 Europe, CMCQ z 1000 1 Havana, Cuba. E—10:00-noon; 7:00-11:00 (EEW ac 500 2 Europe, CMCQ z 1000 1 Europe, CMCQ z 1000 2 Eur
790 kilocycles 379.5 meters
CMJK ak 500 Camaguey, Cuba. E—11:30-12:30; 5:00-11:00 KGO ak 7500 N San Francisco, Calif. P—7:00-mid. WGY ak 50000 R Schenectady, N. Y. E—6:45-1:00
800 kilocycles 374.8 meters
VOAC z 40 St. John's, Newfoundland. L Fort Worth, Texas. C—6:30-7:00; 8:30-10:30; 12:30-3:00; 5:30-6:30;
WFAA ak 50000 Na Dallas, Texas C—7:00-8:30; 10:30-12:30; 3:00-5:30; 6:30-7:00 Aguascalientes, Ags.
810 kilocycles 370.2 meters
VOAS ak 100 St. John's, Nfld. L—11:00-12:30; 4:00-5:30 WCCO ae 50000 C Minneapolis, Minn. C—7:00-mid. WN YC ak 500 N New York, N. Y. E—10:00-7:30
820 kilocycles 365.6 meters
CMGC z 30 Matanzas, Cuba. E
WHAS aj 25000 C Louisville, Ky. C-7:00-mid.

CMGA z 100 8 KOA ak 12500 N TIEA z 7.5 8 WEEU ak 1000 D WHDH ae 1000 D	361.2 meters Colon, Cuba. E Denver, Colo. M—7:00-mid. San Jose, C. R. L Deading, Pa. E—8:00-6:15 Boston, Mass. E—7:00-sunset in Denver Gaincsville, Fla. E—8:00-6:45 Mexico City, D. F. C—Noon-11:00	KC YS .
840 kilocycles		900
CJOC ak 100 F CMC ae 500 . XFX ak 500 .	Exthbridge, Alta. M—7:30-8:00 Havana, Cuba. E—10:30-11:30; 6:45-11:00 Mexico City, D. F. C—7:00-noon; 4:30-10:30	DIAL
850 kilocycles	352.7 meters	
KIEV ak 100 D KWKH ac 10000 1 WWL ac 10000 1	2 27011-2410, 241111 2 0,000 04110-00	
860 kilocycles		į
TIVL z 30 80 WABC ae 50000 C WHB ae 500 D XETH ak 100		
870 kilocycles		
WENR ak 50000 N	Na Chicago, III. C	į
	Na Chicago, III. C—5:30-9:15; 10:45-2:30; 6:00-7:30 Mexico City, D. F. C	Ì
880 kilocycles		1
CJCB ak 50 CJRM z 500 CJRW ak 500 F	Sydney, N. S. A10:00-11:00; noon-2:00; 5:00-10:00 Moose Jaw, Sask. C Fleming, Sask. C-8:00-9:00; 10:00-10:45; 1:00-1:15; 2:15-2:30; 5:30-7:30	CUT
KLX ae 1000 KPOF ac 500 2 WCOC ac 500 (0 WGBI ac 250 1 WQAN ac 250 1 WSUI ac 500	Ottawa, Ont. E Greeley, Colo. M=6:00-7:30; 9:00-2:30; 4:30-6:00; 8:00-mid. Oakland, Calif. P=8:00-11:00 Denver, Colo. M=7:30-9:00; 2:30-4:30; 6:00-8:00 Meridian .Miss. C=7:30-2:00 5:00-10:30 Scranton, Pa. E=9:30-12:30; 1:30-4:30; 5:30-8:00	OUT ON DOTTED LINES
890 kilocycles		
KSEI ck 250 (KUSD ae 500 2 WGST aeh 250 C WILL ak 250 2 WJAR ae 500 R	Havana, Cuba. E—5:00-8:00; 9:00-11:00 Havana, Cuba. E—Noon-2:00; 8:00-9:00 Little Rock, Ark. C—7:00-2:30; 4:30-9:00 2 (1) Shenandoah, Iowa. C—7:00-10:00; 11:00-5:00; 6:00-10:00 Pocatello, Idaho. M—7:30-11:00 Vermillion, S. D. C—8:00-9:00 C (5) Atlanta, Ga. C—7:00-mid. (.5) Urbana, III. C—10:00-12:15; 5:00-6:00	VES
900 kilocycles	333.1 meters	į
KGBU ak 500 KHJ ae 1000 C VOWR ak 500 S WBEN ae 1000 R WJAX aeh 1000 N WKY ak 1000 N WLBL ae 2500 D	R Buffalo, N. Y. E—6:45-Mid. N Jacksonville, Fla. E—7:00-12:30 N Oklahoma City, Okla. C—6:45-mid.	

```
910 kilocycles
                                       329.6 meters
CFRC
                        100
                                 915
                                               Kingston, Ont. E
               яk
                                               Winnipeg, Man.
LaPrairie, Que. E
San Jose, C. R. C
Mexico City, D. F.
CKY
CRCM
               ak
                       5000
                                                                           C-8:30-1:30: 4:00-11:00
                                 Ė...
                                                                         E
                      5000
               z
TICR
                         75
                                 911
                      5000
               ak
920 kilocycles
                                       325.9 meters
CMCD
CMDE
                        500
                                 (.25)
925
                                               Havana, Cuba. E—Noon-11:30
Havana Cuba. E
               ah
                        150
                                               Port-au-Prince, Haiti. E—8:00-9:00
Denver, Colo. M—6:30-8:30; 10:00-12:30; 3:00-4:30; 9:00-mid.
Denver, Colo. M—8:30-10:00; 12:30-3:00; 4:30-6:00; 7:30-9:00
Seattle, Wash. P—6:55-mid.
                       1000
HHK
               ae
                        500
KFEL
               ak
KFXF
                        500
               ae
KOMO
KPRC
WAAF
WBSO
                      1000
               яk
                                               Seattle, Wash. P—0:30-mid.
Houston, Texas. C—6:30-mid.
Chicago, Ill. C—0:00-sunset
Babson Park, Mass. E—8:30-5:15
Detroit, Mich. E—7:30-mid.
              ае
                       1000
                                 N (2.5)
                        500
                                 D
               ak
                        500
                                 D
               ae
wwJ
                      1000
                                 \bar{\mathbf{R}}
               96
930 kilocycles
                                        322.4 meters
                                               North Bay, Ont. E—Noon-1:30; 5:30-mid.
Prescott, Ont. E—8:00-10:00; noon-2:00; 5:00-10:00
Preston, Ont. E—6:45-mid.
                        100
CFCH
                                 F
               ak
CFCH
CFLC
CKPC
CKX
CMJF
KFWI
                        100
               ae
                                 FG
               ae
                        100
                                                Brandon, Man.
               яk
                        500
                                               Camaguey, Cuba.
                        200
                                               San Francisco, Calif. P
               ak
                        500
                                 2 (1)
2 (1)
KGBZ
               ak
                        500
                                                York, Neb.
                                                                                C-6:00-7:30; 9:30-11:00; 12:30-2:00; 3:30-
                                               Shenandoah, Iowa.
KMA
               ak
                        500
                                               Snenandoan, 10wa. C→::00-7:30; 9:30-11:00; 12
5:00; 6:30-8:30; 10:00-mid.
Oakland, Calif. P—8:00-9:00; 1:00-6:00; 7:30-8:30
Birmingham, Ala. C→7:00-11:00
Roanoke, Va. E—8:00-mid.
Glenside, Pa. E—9:00-sunset.
                                 1 (1)
C (1)
C (.5)
D
KROW
               ak
                        500
                        500
WBRC
               ak
                        250
WDBJ
               ae
WIBĞ
               ae
                         25
                                        319.0 meters
940 kilocycles
                                               Portland, Ore. P—6:30-mid.
Jersey City, N. J. E—6:00-6:00
Portland, Maine. E—8:00-mid.
Fargo, N. D. C—7:00-mid.
Hopkinsville, Ky. C—5:00-7:45; 11:30-1:00; 6:30-9:30
Madison, Wis. C—8:00-sunset
Mexico City, D. F. C—1:00-3:00; 6:25-mid. (XEO)
KOIN
                      1000
                                 CT
               ak
WAAT
WCSH
                        300
               ae
                       1000
                                 R (2.5)
               вe
WDAY
WFIW
                                 Ñ
                       1000
               ae.
                       1000
               ak
WHA
               ak
                       1000
                                 Ď
                      5000
XEFO
950 kilocycles
                                        315.6 meters
                                 (.25) Caibarien, Cuba. E—Silent
Hollywood, Calif. P—7:30-12:30
NJ (2.5) Billings, Mont. M—8:00-11:00
C Kansas City, Mo. C—6:00-mid.
CMHD
                        500
               dk
KFWB
               ak
                       1000
KGHL
               ak
                       1000
                                               Kansas City, Mo. C—6:00-mid. Washington, D. C. E—6:30-1:00
KMBC
               ak
                       1000
WRC
                        500
                                 R
               ае
960 kilocycles
                                        312.3 meters
CMBD
CMCW
CMJL
CRCT
                                               Havana, Cuba. E—Noon-6:00
Havana, Cuba. E—6:00-mid.
                        250
                                  965
               ak
                        150
                                  965
                          50
                                                Camaguey, Cuba.
               z
                      5000
                                 NF
                                               Toronto, Ont. E
Reynosa, Tams. C-5:00-1:00
Caracas, Venz. L-11:00-1:30; 5:30-10:15
                                  965
XEAW
                     10000
 YVIBC
                      5000
970 kilocycles
                                        309.1 meters
                                               Matanzas, Cuba. E—3:00-5:00; 8:00-10:30
Seattle, Wash. P—6:55-mid.
Chicago, Ill. C—7:00-mid.
CMGF
                        100
                       5000
KJR
WCFL
                                  BX
               aе
                       1500
980 kilocycles
                                        303.9 meters
                                               Pittsburgh, Pa. E—7:00-1:00
Tijuana, B. C. P—9:00-mid.
KDKA
XEAE
               ak 50000
               ak
                        800
990 kilocycles
                                        302.8 meters
                         7.5
                                  999
                                                San Jose, C. R. C
Boston, Mass. E
Springfield, Mass.
                                                                         C-3:00-5:00: 7:00-11:00
TITV
               z
WBZ
               ak
                     25000
                                  BSy
ŴĎŽA
                      1000
                                  BSv
               ak
WJEM
                        500
                                               Tupelo, Miss. C
Mexico City, D. F. C-11:00-4:00; 6:00-2:00
               z
               āk
                        100
```

INDEX BY FREQUENCIES AND DIAL NUMBERS With Friday's Time on the Air

KFVD ae 250 Dn WHO-	299.8 meters Los Angeles, Calif. P—6:30-sunset; 10:00-mid.	
WOC ak 50000 R WORK ak 1000 D XEA ak 250 XEC z 50 XEFE z 100 XEFJ ak 100 XEFS ak 40 XEL ak 40	Des Moines, Iowa. C—7:00-mid. York, Pa. E—8:00-6:45 Guadalajara, Jal. C—8:30-9:00; 6:00-11:00 Toluca, D. F. C Nuevo Laredo, Tams. C Monterrey, N. L. C—11:00-2:00; 7:00-10:00 Queretaro, Qro. C—8:00-10:00 Saltillo, Coah. C—10:30-1:00; 6:00-9:00	
1010 kilocycles	296.9 meters	
CHML aei 50 M CHWC ae 500 3F CKCD ak 100 CKCK ak 500 3F CKCO z 100 CKIC ak 50 CKIC ak 50 CKWX ach 100 LZ CMBZ ak 150 KGGF ak 500 2 (1) KOW ae 500 TIGA z 30 1014 WHN ae 250 1 WIS ae 500 N (1) WNAD ae 500 N (1) WPAP ae 250 1 WOAO ae 250 1 WRNY ae 250 1 XEJ ak 500 1015 XEU ak 100	Hamilton, Ont. E—8:00-11:00 Regina, Sask. M—7:00-9:00; 10:00-11:00; noon-1:00; 3:30-6:30 Vancouver, B. C. P—8:30-9:00 Regina, Sask. M—9:00-10:00; 11:00-noon; 1:00-3:30; 5:30-11:00 Ottawa, Ont. E Wolfville, N. S. A—Noon-1:00; 6:00-7:00 Vancouver, B. C. P—7:00-8:30; 9:00-mid. Havana, Cuba. E—1:00-1:00; 4:00-6:00; 8:30-11:00 Ciego de Avila, Cuba. E—9:00-1:00; 6:00-10:00 Coffeyville, Kans. C—7:30-2:00; 5:00-10:30 San Jose, Calif. P—7:00-8:00; 9:00-3:00; 4:30-10:00 Cartago, C. R. New York, N. Y. E—9:30-1:00 Columbia, S. C. E—8:00-mid. Norman, Okla. C—Silent New York, N. Y. E—9:30-3:30 New York, N. Y. E—9:30-3:30 New York, N. Y. E—1:00-1:30; 3:30-9:30 Juarez, Chih. C Veracruz, Ver. C—7:00-9:00; 10:00-2:00; 5:00-11:00	KCYS. 1070 DIAL
	Veracruz, Ver. C—7:00-9:00; 10:00-2:00; 5:00-11:00 293.9 meters	1
1020 kilocycles		į
WRAX ak 250 D XES dk 250	Chicago, III. C—8:00-1:00 Philadelphia, Pa. E—7:00-7:00 Tampico, Tams. E—10:00-2:30; 5:00-10:00]
1030 kilocycles	291.1 meters	
CFCN ak 10000 CFNB ae 500 FE CKNC ak 100 F CMHI ak 250 1037 CMKC z 150 1034 XEB ak 10000	Calgary, Alta. M Fredericton, N. B. A—8:30-9:30; 12:30-2:00; 7:30-10:00 Toronto, Ont. E—8:00-11:00 Santa Clara, Cuba. E—11:00-noon; 8:00-9:00 Santiago, Cuba. E Mexico City, D. F. C—9:30-10:00	
1040 kilocycles	288.3 meters	TUO
CMGH ak 15 KRLD ae 10000 1C KTHS ae 10000 1N WESG ak 1000 D WKAR ak 1000 D	Matanzas, Cuba. E—2:00-3:00; 5:00-6:00; 7:30-8:30 Dallas, Texas. C Hot Springs, Ark. C Elmira, N. Y. E—8:00-7:00 East Lansing, Mich. E	2
1050 kilocycles	285.5 meters	TED TED
CHNS ac 500 FL CMJG z 50 KFBI ak 5000 Dn KNX ak 25000 XEFC ak 100	Halifax, N. S. A—8:00-1:30; 2:30-4:30; 6:00-mid. Camaguey, Cuba. E Abilene, Kans. C—6:00-sunset Hollywood, Calif. P—6:45-11:00 Merida, Yuc. C—8:00-10:00	DOTTED LINES
1060 kilocycles	282.8 meters	i
KWJJ ak 500 WBAL ac 10000 1B WJAG ak 1000 D WTIC ak 50000 1R	Portland, Ore. P—6:00-8:00; 9:00-2:00 Baltimore, Md. E—7:30-3:00 Norfolk, Neb. C—6:45-sunset Hartford, Conn. E	
1070 kilocycles	280.2 meters	i
CMBG z 225 CMCB ak 150	Havana, Cuba. E Havana, Cuba. E	1

INDEX BY FREQUENCIES AND DIAL NUMBERS With Friday's Time on the Air

KJBS ac 100 D WCAZ ac 50 D WDZ ak 100 D WTAM ck 50000 R XEG z 500 1073	San Francisco, Calif. P—12:01-sunset Carthage, III. C Tuscola, III. C—8:00-4:00 Cleveland, Ohio. E—6:30-1:00 Mexico City, D. F. C—(Mail returned)
1080 kilocycles	277.6 meters
VOKW z 30 108 WBT ac 25000 CU WCBD ac 5000 1Dr WMBI ac 5000 1Dr XEFG ak 500 108.	5 St. John's, Nfld. L—Noon-2:00; 9:00-mid. Charlotte, N. C. E—7:00-mid. Zion, III. C—7:30-10:30: 1:30-sunset Chicago, III. C—7:00-7:30; 10:30-1:30; 3:00-4:00; mid1:00
1090 kilocycles	275.1 meters
KMOX ak 50000 C XEAI z 100	St. Louis, Mo. C—6:30-12:30 Mexico City, D. r. (Aîl mail returned)
1100 kilocycles	272.6 meters
CMCU ak 500 F CRCV ak 500 F KGDM ak 250 D TIRCA ak 500 1 WPG ak 5000 1C	Havana, Cuba. E—6:00-mid. Vancouver, B. C. P—10:00-1:00; 5:30-11:00 Stockton, Calif. P—6:00-6:30 San Jose, C. R. C—11:00-1:00 5:00-10:30 New York, N. Y. E—2:00-3:00; 6:00-8:00 Atlantic City, N. J. E—9:00-2:00; 3:00-6:00; 8:00-1:00
1110 kilocycles	270.1 meters
	(2.5) Sioux Falls, S. D. C—6:00-6:30 Richmond, Va. E—7:00-mid. Nuevo Laredo, Tams. C—6:00-8:00; 10:00-2:00; 5:00-10:00
1120 kilocycles	267.7 meters
CHGS ae 100 F	Summerside, P. E. I. A-7:30-8:45; 10:30-2:00; 4:30-7:30; 9:00-
CHLP 2 100 CKOC ae 500 F CMHJ ae 60 1124 KFIO ae 100 D KFSG ag 500 a KRKD ae 500 a KRSC ak 100 D KTRH 2 1000 2C WDEL ak 250 (.55) WHAD ak 250 1C WISN ak 250 1 WTAW ae 500 2	Spokanë, Wash. P—7:90-sunset Los Angeles, Calif. P—6:30-7:15 Los Angeles, Calif. P—7:45-mid. Seattle, Wash. P—6:45-6:30 Houston, Texas. C—6:30-11:30
1130 kilocycles	265.3 meters
KSL ae 50000 C WJJD ae 20000 Dn WOV ag 1000 D XEH ak 250 1133	Salt Lake City, Utah. M—6:45-mid. Chicago, III. C—6:30-10:00 New York, N. Y. E—8:00-2:00; 3:00-6:00
1140 kilocycles	263.0 meters
CMBJ z 500 CMBW ak 600 KVOO ae 5000 1N WAPI ae 5000 1N	Havana, Cuba. E—Noon-7:00 Havana, Cuba. E—Silent Tulsa, Okla. C—6:30-7:00; 9:00-mid. Birmingham, Ala. C—6:00-9:00
1150 kilocycles	260.7 meters
CMJH ak 50 WHAM ae 25000 B XED ak 500 1155 10-AT ak 25 1155	Ciego de Avila, Cuba. E-8:00-8:30; 10:00-3:00; 5:30-10:30 Rochester, N. Y. E-8:00-mid. Guadalajara, Jal. C-Noon-3:30; 7:00-mid.
1160 kilocycles	258.5 meters
WOWO ac 10000 1C WWVA ac 5000 1C	Fort Wayne, Ind. C—8:30-5:45; 7:30-10:00 Wheeling, W. Va. E—6:30-8:30; 10:00-mid.
	FAGT

INDEX BY FREQUENCIES AND DIAL NUMBERS With Friday's Time on the Air

			_	with friday's finite on the fin	
1170	kil	осус	les	256.3 meters	
CMJE WCAU		50 50000	117 5 C	Camaguey, Cuba. E. Philadelphia, Pa. E—8:00-1:00	
1180	kil	ocyc	les	254.1 meters	
CMBN CMCJ HIJK KEX KOB WDGY WINS WMAZ XETA	ak ak z ak ae ak ae	150 500 15000 5000 10000 1000 500 500 250	1185 1185 2N 2 Dn	Havana, Cuba. Havana, Cuba. E—Noon-2:00; 4:00-6:00; 7:00-10:00 Santo Domingo, D. R. Portland, Ore. P—7:00-4:45; 8:00-mid. Albuquerque, N. M. M-Noon-1:00; 5:00-9:00 Minneapolis, Minn C—6:30-8:15 New York, N. Y. E—6:00-7:00 Macon, Ga. E7:30-3:00; 5:00-8:15 Mexico City, D. F.	
1190	kile	осус	les	252.0 meters	
HIJ VONF WOAI WSAZ	z ak ae ak	15 400 50000 1000	1195 1195 N	Santo Domingo, D. R. E—12:30-2:30; 6:30-8:30 St. John's, Nfid. L—Noon-2:00; 6:00-9:00 San Antonio, Texas. C—6:30-11:30 Huntington, W. Va. E—8:00-8:00	
1200	kile	осус	les	249.9 meters	
CHAB	ak	25	F	Moose Jaw, Sask. M—5:30-7:00 Kelowna, B. C. P	
CKOV CKTB	ak ae	100 100	F GP	St. Catharines, Ont. E	
CMGB KBTM	z ak	30 100	1205 D CT	Matanzas, Cuba. E Paragould, Ark. C-7:30-1:30; 2:30-5:30	
KERN KF JB	ak ak	$\frac{100}{100}$	(.25)	Paragould, Ark. C-7:30-1:30; 2:30-5:30 Bakersfield, Calif. P7:00-mid. Marshalltown, IowaC-6:00-9:00; noon-3:00; 6:00-9:00	
KFJB KFXD KFX I	ae ak	100 100		Nampa, Idaho, M-7:00-9:00	RCYS.
KGDE	ak	100 100	(.25)	Grand Junction, Colo. M Fergus Falls, Minn. C—7:00-9:00	1210
KGEK KGFJ	ak ae	100	1 224	Yuma, Colo. M—11:30-1:30; 7:15-8:45 Los Angeles, Calif. P—24 hours Little Rock, Ark. C—7:00-1:00; 4:00-10:00 Missoula, Mont. M8:00-8:30	DIAL
KGHI KGVO	ak ak	100 100	(.25)	Little Rock, Ark. C—7:00-1:00; 4:00-10:00 Missoula, Mont. M8:00-8:30	DIAL
ŘMLB KSUN	ak ae	100 100	D	Monroe, La. C	
KVOS	ak	100		Lowell, Ariz. M—Sunrise-sunset Bellingham, Wash. P—7:00-10:00 Stockton, Calif. P—7:00-mid.	ĺ
KWG WABI	ae ak	100 100	CT	Stockton, Calif. P—7:00-mid. Bangor, Maine. E—9:00-2:00: 6:00-10:00	-
WBBX	ak	100 100	1	Bangor, Maine. E=9:00-2:00; 6:00-10:00 New Orleans, La. C=Noon-5:00; 8:00-11:00 Ponca City, Okla. C=6:30-9:00	1
WBHS	ak z	100	4	Huntsville, Ala. C	1
WCAT WCAX	ak ak	100 100	D A	Rapid City, S. D. C—12:30-1:30 Burlington, Vt. F.—Noon-1:00: 6:00-8:00	
WCLO	ak	100		Janesville, Wis. C-7:30-2:00; 5:00-8:30	!
WCOD WFAM	ak ak	$\frac{100}{100}$	3 8C	Huntsville, Ala. C Rapid City, S. D. C—12:30-1:30 Burlington, Vt. E—Noon-1:00; 6:00-8:00 Janesville, Wis. C—7:30-2:00; 5:00-8:30 Harrisburg, Pa. E—7:00-10:00; 2:00-5:00; 7:00-11:00 South Bend, Ind. C—6:30-mid. Greenville, S. C. E—7:30-2:30; 5:30-10:30	CUT
WFBC	ak	100	4 (.25)	C1 1 1 OI 1 - F 7.00 11 30	ļä
WFBE WHBC	ak ak	100 100	(.25)	Cincinnati, Ohio. E—7:00-11:30 Canton, Ohio. E—7:00-9:00; noon-3:00; 6:00-9:00	TUO
WHBY WIBX	ak ae	100 100	(.3)	Canton, Ohio. E—7:00-11:30 Canton, Ohio. E—7:00-9:00; noon-3:00; 6:00-9:00 Green Bay, Wis. C—7:30-9:45 Utica, N. Y. E—8:00-11:00	Ħ
WIL	ak	1.00	5 (.25) St. Louis, Mo. C/:00-mid.	OZ IZ
WJBC WJBL	ae ae	100 100	6 6		
WJBW	ak	100 100	1 3	New Orleans, La. C—8:00-noon; 5:00-8:00	iŠ
WKJC WLAP	ae	100	(.25)	Lancaster, Pa. E—11:00-3:00; 6:00-8:00 Louisville, Ky. C—7:30-11:30 Silverhayen, Pa. E—9:00-noon; 3:00-6:00; 9:00-mid.	i≓
WNBO WNBW	ae z	100 10	2 (.1)	Silverhaven, Pa. E—9:00-noon; 3:00-6:00; 9:00-mid, Carbondale, Pa. E	ĮΘ
WPHR	ak	100	(.25)	Petersburg, Va. E—8:00-5:00; 6:00-9:00	DOTTED LINE
WRBL WWAE	z ae	$\frac{100}{100}$	8		lé
YV3BC 10-AK	ak ak	1000 15		Caracas, Venz. L—11:00-2:00; 5:00-10:30 Stratford, Ont. E—Noon-1:00; 5:30-7:00	1,,,
10-BI	ak	25		Prince Albert, Sask, M	1
10-BP 10-BQ	ak ak	15 5		Wingham, Ont. E-7:15-9:00 Brantford, Ont. E-11:00-8:00	1
10-BU	z	15	0.63 + 6	Canora, Sask. C	1
	kil	ocyc	les	247.8 meters	
CFBO CFCO	z ak	100 100	FL	St. John, N. B. A. Chatham, Ont. E-7:15-10:00	

```
CHINC
                                                    100
                                                                       PF
                                                                                                     New Carlisle, Que. A-1:00-mid. Vancouver, B. C. P-7:30-10:30
                               ak
CJOR
                                                    500
                                ak
                                z
                                                    100
                                                                                                     Hull, Que. E
                                                                        . . . . .
 CKMC
                                                    100
                                                                                                    Cobalt, Ont. E
Elk City, Okla. C—6:30-1:30; 5:00-7:00
Devils Lake, N. D. C—8:00-2:15; 6:00-8:00
Klamath Falls, Ore. P—8:30-9:00
Lincoln, Neb. C—7:00-10:00
Fort Smith, Ark. C—7:00-2:00; 5:00-10:00
Cape Girardeau, Mo. C—9:00-noon; 4:00-8:30
San Bernardino, Calif. P—6:00-mid.
Watertown, S. D. C
Olympia, Wash. P—6:00-mid.
Eureka, Calif. P—7:45-sunset
Pasadena, Calif. P—Silent
Shreveport, La. C
                                                                                                      Cobalt, Ont.
                                                                        . . . . .
 KASA
                                ak
                                                    100
                                                                        . . . . .
KDLR
KFJI
KFOR
                               ak
                                                    100
                                                                        . . . . .
                                                    100
                                                                        (.25)
                                ak
                                                    100
KFOR
KFPW
KFVS
KFXM
KGCR
KGY
                                                    100
                                ak
                                ae
                                                    100
                                                    100
                                яk
                                                                        0
                                ak
                                                    100
                                                                        . . . . .
                                ak
                                                    100
                                                                        . . . . .
                                ak
                                                    100
KPPC
KWEA
KWFV
                                                      50
                                                                        ġ.
                                ak
                                                    100
                                                                                                     Shreveport, La.
Hilo, Hawaii. L
                                Z.
                                                                        . . . . .
                                                                                                     Hilo, Hawaii. L
Zanesville, Ohio. E
Wilkes Barre, Pa. E
Richmond Va. E—Silent
Springfield, Ill. C—11:15-3:00; 6:45-9:00
Chicago. Ill. C—11:00-2:00:5:00-7:00
Harrisburg, Ill. C—6:00-9:00; noon-4:00; 8:30-mid.
Chicago, Ill. C—8:30-10:00; 3:30-5:00; 7:00-8:00; 10:00-11:00;
mid.-2:00
White Blains N. V. E. C.
                                                    100
                                z
                                                                        . . . . .
WALR
WBAX
WBBL
                                                    100
                                ae
                                                                         . . . . .
                                                    100
                                ae
                                                                       7S
                                ak
                                                    100
 WCBS
                                ak
                                                    100
 WCRW
                                ae.
                                                    100
 WEBO
                                                    100
                                                                        6
                                ae
                                                    100
                                                                        4
                                ae
                                                                                                    mid.-2:00
White Plains, N. Y. E—Silent
Freeport, N. Y. E—Silent
Mississippi City, Miss. C—Silent until Dec. 29
Chester, N. Y. E
Rock Island, III. C—7:30-10:00
Anderson, Ind. C—7:00-7:15
Troy, Ala. C—9:00-sunset
WFAS
WGBB
WGCM
WGNY
                                                    100
                                                                        3A
                                яk
                                ae
                                                    100
                                                                        (.25)
                                                    100
                                                    100
                                                                        . . . . .
 WHBF
                                                    100
                                ak
                                                                        ....
                                                                     D
 WHBU
                                                                                                   Anderson, Anders
                                яh
                                                    100
 WHET
                                ak
                                                    100
                                                                      3A...
 WIBU
                                                    100
                                я
WIBU
WJBI
WJBY
WJEJ
WJW
WKFI
                               ak
                                                    100
                                                                      Ď....
                                ak
                                                    100
                                ah
                                                    100
                                                                                                    Akron, Ohio. E—9:00-11:30
Greenville, Miss. C—7:00-7:00
Sunbury, Pa. E
Richmond, Va. E—7:00-mid.
Jamestown, N. Y. E—Noon-n
Manitowoc Wis. C
                                ak
                                                    100
                                                                        Ÿ ...
                                                    100
                               ak
WKOK
WMBG
                                                    100
                                                                        īΡ
                                ak
                                                   100
                                                                                                                                                                 –7:00-mid.
E—Noon-mid.
C
                               ak
                                                                       7Ĉ
 WOCL
                                ak
                                                                       . . . . .
 WOMT
                               ae
                                                    100
                                                                       Α ...
                                                                                                     Nantowoc ws. C=9:00-2:00; 4:00-11:15

Thomasville, Ga. E=8:00-9:00

Chicago, Ill. C=6:00-8:30; 10:00-11:00; 2:00-3:30; 8:00-10:00;
 WPRO
                                ak
                                                    100
WODX
WSBC
                                ae
                                                    100
                                                                         . . . . .
                                                    100
                                                                        4
                                                                                                            11:00-mid.
WSEN
WSIX
WSOC
                                                                                                     Columbus, Ohio. E—8:00-mid.
Springfield, Tenn. C—6:00-4:00; 6:00-9:00
Charlotte, N. C. E
                                ak
                                                    100
                                                                        . . . . .
                               ak
                                                    100
                                                                        . . . . .
                                                    100
                                                                      ·····
                                86
WTAX
XEX
                                                   100
                                                                                                     Springfield, Ill. C
Mexico City, D. F.
                                ae
                                                    500
                                                                                                                                                                     (All mail returned)
                                z
1220 kilocycles
                                                                                           245.8 meters
CMHK
                                                      50
                                                                        1225
                                                                                                      Cruces, Cuba. E-10:00-11:30
                                яk
                                                                                                     Cruces, Cuba. E—10:00-11:30
Lawrence, Kans. C—2:30-3:00; 6:00-6:15
Seattle, Wash. P—Silent
Pullman, Wash. P—Noon-2:30; 4:30-8:00
Canton, N. Y. E—12:30-1:30; 3:00-4:00
Pittsburgh, Pa. E—6:45-1:00
Tampa, Fla. E—8:00-mid.
Lawrence, Kas. C—7:00-mid.
KFKU
KTW
                                ae
                                                    500
                                                                       Š2
                                                1000
                               яk
KWSC
WCAD
WCAB
WDAB
                                                                       2(2)
D
                                                 1000
                                ae
                                                    500
                                ak
                               ae
                                                1000
                                                                       R
                                                                        ĉ₩
                                ae
                                                1000
 WREN
                                ak
                                                1000
                                                                       Ba
1230 kilocycles
                                                                                           243.8 meters
                                                    250
                                                                                                     Havana, Cuba.
Havana, Cuba.
 CMCA
                                                    150
                                z
KGGM
KYA
WFBM
                                                                                                     Havana, Cuba. B. M—6:00-noon; 4:00-8:00

San Francisco, Calif. P—7:30-mid.

Indianapolis, Ind. C—7:30-10:15; noon-3:00; 5:30-11:30

Boston, Mass. E—6:30-1:00

South Bend, Ind. C—6:30-mid.
                                                                      (.5)
N
IC
                                                    250
                               ak
                                                1000
                                Яe
                               ae
                                                1000
WNAC
WSBT
                                                1000
                                                                        CH
1C
                                ak
                                ak
                                                    500
                        kilocycles
 1240
                                                                                           241.8 meters
CMAB
CMJN
KGCU
                                                      20
50
                                                                       1249
                                z
                                                                                                     Pinar del Rio, Cuba.
                                                                                                     Camaguey, Cuba. B
Mandan, N. D. M—Noon-5:00; 6:45-9:00
Minot, N. D. C—7:00-1:00:6:00-7:45
Fort Worth, Texas. C—7:00-mid.
                                z
                                                  250
250
                               ak
KLPM
                               ak
                                                                        ī
C
KTAT
                                                1000
```

```
With Friday's Time on the Air
                                                                                   Twin Falls, Idaho. M-6:00-mid. San Juan, P. R. A-12:15-3:15; 6:30-10:00 Detroit, Mich. E-7:30-mid.
                                       1000
 KTFI
 WKAQ
WXYZ
                          ac
ak
                                       1000
                                       1000
 1250 kilocycles
                                                                           239.9 meters
                                                                                  Long Beach, Calif. P—6:00-mid.
Newark, N. J. E—7:00-9:00; 10:00-ncon; 2:00-4:30; 9:00-mid.
Northfield, Minn. C—9:45-10:15; 8:00-10:00
New Orleans, La. C—7:00-11:45
Newark, N. J. E—2:00-5:00: 8:00-10:00
Minneapolis, Minn. C—12:30-1:00; 4:00-5:00
                          ae
WAAM
WCAL
WDSU
WGCP
                                        1000
                                                           la (2.5)
                          ae
                          ah
                                        1000
                                       1000
                          яk
                                          250
                          ak
                                                           1
 WLB
                          ak
                                        1000
 WODA
                                        1000
                                                           la (2.5)
                                                                                   Paterson, N. J.
                                                                                                                              Е
                                                                                   Minneapolis, Minn. C-6:15-9:45; 10:35-12:30; 1:00-4:00; 5:00-
 WRHM
                          ak
                                        1000
                                                                                         8:00: 9:00-mid.
                                                                                   Mexico City, D. F.
XEFA
                                          500
                          7
 1260 kilocycles
                                                                           238.0 meters
                          ak
                                        1000
                                                                                   Council Bluffs, Iowa.
                                                                                                                                                C--6:00-1:00
                                                                                                                                     C—7:00-9:30; 12:30-3:30

C—7:00-6:30
 KRGV
                                          500
                                                           1
                                                                                   Harlingen, Texas.
                          ae
 KUOA
                                        1000
                          ak
                                                                                   Fayetteville, Ark.
                                                           . . . . .
KVOA
                                                                                   Tucson, Ariz. M-6:00-9:00; noon-3:00; 6:00-9:00
                          ak
                                          500
 KWWG
                                                                                   Brownsville, Texas. C
Erie, Pa. E—8:00-1:00
Springfield, Vt. E—7:30-sunset
Savannah, Ga. E—7:00-1:00
                          z
                                          500
                                                           1
 WLBW
                                          500
250
                                                           C(1)
                          ae
 WNBX
                                                           Ď
                          ak
 WTOC
                                          500
                                                           C
                          ae
 XEFI
                          ak
                                           250
                                                                                   Chihuahua, Chih. C-1:00-3:00; 8:00-10:30
 1270 kilocycles
                                                                          236.1 meters
CMBC
                                          150
                                                                                   Havana, Cuba. E
Havana, Cuba. E
                          ae
CMBC
CMCP
KGCA
KOL
KVOR
KWLC
                                          150
                                                                                   Decorah, Iowa. C—8:30-9:45; 10:45-11:30; 12:30-2:30
Seattle, Wash. P—6:45-mid.
Colorado Springs, Colo. M—7:00-11:00
Decorah, Iowa. C—7:30-8:30; 9:45-10:45; 11:30-12:30; 2:30-3:30
Grand Rapids, Mich. E—7:00-mid.
                                                           ŽP
CT
C
                          ak
                                          100
                          ae
                                        1000
                                        1000
                          ae
                                          100
                                                           žD
                          ak
 WASH
                          ak
                                          500
                                                           Ka
                                                                                  Jackson, Miss. C-7:00-11:00
Grand Rapids, Mich. E-7:00-mid.
 WFBR
                                          500
                          ae
 WJDX
WOOD
                          ae
                                        1000
                                          500
                          ak
 1280 kilocycles
                                                                           234.2 meters
                                                                                  Ciego de Avila, Cuba. E
Great Falls, Mont. M—8:00-3:00; 5:00-10:00
Camden, N. J. E—11:00-noon; 2:00-5:00; 9:00-mid.
Asbury Park, N. J. E—9:00-11:00; noon-1:00; 8:00-9:00
Chattanooga, Tenn. C—7:00-11:00
                                                                                                                                                                                                                                                                KCYS.
CMJI
KFBB
                                             45
                          ak
                                       1000
                                                           (2.5)
                                                                                                                                                                                                                                                                 1310
                          яe
WCAM
WCAP
WDOD
                                          500
                                                          ÌA
                          ae.
                                          500
                                                           1 A
                          ae
                                                                                   Assury Fara, 1. J. E = 7.00-11:00, noor. Chattanooga, Tenn. C = 7.00-11:00 Madison, Wis. C = 7.30-mid. Worcester, Mass. E = 8.00-mid. Dallas, Texas. C = 7.00-11:00 Trenton, N. J. E = 1:00-2:00; 5:00-8:00 Trenton, Texas. E = 8.00 10:00: population of the results of the results
                                                          C(2.5)
N (1)
CH
                                                                                                                                                                                                                                                                DIAL
                          ae
                                       1000
 WIBA
                                          500
                          ae
WORC
                                          500
                          ak
WRR
                                          500
                          ak
WTNJ
                          яk
                                          500
XEFW
                          ak
                                             70
                                                                                   Tampico, Tams. E-8:00-10:00; noon-2:00; 5:00-6:00; 7:00-10
1290 kilocycles
                                                                          232.4 meters
                                                                                  Cienfuegos, Cuba. E-10:00-noon; 6:00-9:00
Salt Lake City, Utah. M-6:30-1:00
Blytheville, Ark. C
CMHL
                          ak
                                             20
                                       1000
KDYL
                                                          NJ
                          ae
KLCN
                                          100
                                                          D
                          Z
                                                                                  San Antonio, Texas. C—7:00-mid.
Superior, Wis. C—7:00-mid.
Pittsburgh, Pa. E—7:30-12:30
Saranac Lake, N. Y. E
San Luis Potosi, S. L. P.
Jalapa, Ver. C—8:00-9:00; 1:00-2:30; 8:00-11:30
                                       1000
                          ak
WEBC
                                                          N (2.5)
                                                                                                                                                                                                                                                              Tuo
                          ae
                                       1000
WJAS
WNBZ
XEAC
XFB
                          ak
                                       1000
                                                           C (2.5)
                                            50
                                          100
                                                           1295
                                                                                                                                                                                                                                                              ¦₽
                          ak
                                       1000
1300 kilocycles
                                                                          230.6 meters
                                                                                                                                                                                                                                                               DOTTED
                                                                                  Guantanamo, Cuba. E
Portland, Ore. P—7:00-10:30; 2:30-5:00; 6:00-7:00
Los Angeles, Calif. P—7:00-mid.
Wichita, Kans. C—78:30; 9-11; 11:30-2; 3-6; 7-9; 10-11
Portland, Ore. P—10:30-2:30; 5:00-6:00; 7:00-mid.
Brooklyn, N. Y. E—6:00-7:00; 10:00-ncon; 6:00-8:00
New York, N. Y. E—4:00-6:00
Isew York, N. Y. E—9:00-10:00; noon-3:00; 9:00-10:00
Troy, N. Y. E—Silent
Miami, Fla. E—7:15-mid.
Kansas City, Mo. C—6-7; 8:35-9:05; 11-11:30; 2-3; 6-7; 9-10; 11-mid.
CMKJ
                                            20
KALE
KFAC
                                          500
                                                           3CT
                          ak
                                       1000
                         ae
                                       1000
                                                           C2
KFH
                          ak
KFJR
WBBR
                                          500
                                                           3
                          ag
                          aej
                                       1000
WEVD
                         ak
                                          500
                                       1000
                         яe
WHAZ
WIOD
                                          500
                         ae
                                       1000
                                                          N
                         ae
WOQ
                                       1000
                         96
                                                                                        mid.
```

```
1310 kilocycles
                                                          228.9 meters
                                                                 Kamloops, B. C. P—7:30-10:30; noon-2:00; 6:00-7:30
Charlottetown, P. E. I. A—Noon-1:30
Quebec, Que. E—Noon-2:00; 6:30-8:00
Jerome, Ariz. M—7:30-9:30; noon-1:00; 4:30-6:00
Sacramento, Calif. P—7:00-11:00
CFJC
CHCK
CKCV
KCRJ
KFBK
                                 100
                    ak
                    яk
                                 100
                    ak
                                   50
                                             D
C
7
                                 100
                    ak
                    яk
                                 100
KFGQ
                     ak
                                 100
                                                                 Boone, Iowa.
                                                                 Dublin . Texas. C-6:30-8:30 .9:00-3:15; 7:00-10:45
KFPL
                     ak
                                 100
                                                                 Greenville, Texas. C—7:45-9:00; 1:00-2:45; 6:00-9:00 Oklahoma City, Okla. C—7:30-2:00; 4:30-11:00 Lubbock, Texas. C—7:00-2:00; 4:00-10:00
KFPM
KFXR
KFYO
                                   15
                    ae
                                 100
                                              (.25)
                    ak
                                              (.25)
                    ak
                                 100
                                                                 Springfield, Mo. C
Wolf Point, Mont. M—7:30-9:0
Kalispell, Mont. M—8:00-9:00
Kearney, Neb. C—7:00-9:00
KGBX
KGCX
KGEZ
                                 100
                    80
                                 100
                                              (.25)
                                                                                                           M-7:30-9:00: 11:30-3:00: 6:00-7:00
                    яk
                                 100
                    aj
KGFW
                    ak
                                                                Kearney, Neb. C—7:00-9:00 Juneau, Alaska. L Yakima, Wash. P—7:00-11:00 Medford, Ore. P—8:00-8:00 Shreveport, La. C—7:00-1:00; 5:00-8:00 El Paso, Texas. M—7:00-1:30; 3:00-10:00 Aberdeen Wash. P—7:30-10:00 Laurel, Miss. C—7:00-10:00; 11:00-2:00; 4:00-7:00 Marquette, Mich. C—9:30-1:15; 5:00-7:00 Terre Haute, Ind. C—7:00-11:00 Wilkes Barre. Pa. E—8:00-11:30
                                 100
                                              . . . . .
KIFH
                                 100
KIT
                                 100
                    ak
KMED
                    ck
                                 100
                                              . . . . .
KRMD
                    ak
                                 100
KTSM
KXRO
WAML
                                 100
                    ak
                                              a
                    ak
                                 100
                                               . . . . .
                    ak
                                 100
WBEO
                                 100
                     ae
                                              . . . . .
WBOW
                     ak
                                 100
WBRE
                     ak
                                  100
                                                                  Wilkes Barre, Pa. E-
Joliet, Ill. C-Silent
                                                                                                        E-8:00-11:30
                                                                Wilkes Barre, Pa. E—8:00-11:30
Joliet, III. C—Silent
El Paso, Texas. M
Buffalo N. Y E—7:00-1:00
Royal Oak, Mich. E—7:30-5:00
Altoona, Pa. E—10:30-2:30; 6:15-9:15
Flint, Mich E—7:00-mid
Lancaster, Pa. E—9:30-2:30; 4:30-6:00; 8:00-10:30
Newport News, Va. E—7:00-1:00; 5:00-11:00
Philadelphia, Pa. E—9:00-11:00; 1:00-2:00; 5:00-6:30
WCLS
                                 100
                    ae
 WDAH
                                 100
                                              Sa
                     ck
                                              Q (.25)
 WEBR
                                 100
                    aej
WEXL
                                    50
                     ak
                                 100
                     ae
 WFDF
                                              K
                     ak
                                 100
WGAL
WGH
                                 100
                                              5
                     ae
                     ae
                                 100
WHAT
                     ak
                                 100
                                                                                                       ć
 WIAS
                    ak
                                 100
                                                                  Ottumwa Iowa.
                                                                  Johnstown, Pa. E-9:00-10:30; 4:30-6:15; 9:15-11:15
WJAC
                                 100
                    ae
                                                                                                      -c
                                                                  E. Dubuque, III.
                    ae
                                 100
                                              h
                                                                E. Dubuque, III. C
Birmingham, Ala. C—7:00-10:00
Muncie, Ind. C—7:00-10:00
Auburn, N. Y. E—9:00-9:00
New Bedford, Mass. E—8:00-2:00; 4:00-10:00
Washington, D. C. E—7:00-1:00; 3:00-9:00
Reading, Pa. E—7:00-9:30; 6:00-8:00
Knoxville, Tenn. C—7:00-1:00; 4:00-11:00
Grove City, Pa. E—Silent
Winston-Salem, N. C E—7:45-mid.
Philadelphia, Pa. E—7:00-9:00; noon-1:00; 6:30-9:00
Jackson, Tenn. C—7:00-2:00; 4:00-10:00
Elkhart, Ind. C—6:00-7:30
Monterrey, N. L. C—11:00-2:00; 6:00-11:00
Morelia, Mich. C—2:00-3:30; 9:00-10:00
WKBC
WLBC
                    ak
                                 100
                                              6X
                     ak
                                    50
 WMBO
                    ak
                                 100
 WNBH
                                  100
                                               (.25) A
                     ae
WOL
                                  100
                     ae
 WRAW
                    ak
                                 100
WRAW
WROL
WSAJ
WSJS
WTEL
WTJS
WTRC
                     яk
                                 100
                                 100
                     ae
                                              Ċ ....
                     яk
                                 100
                     ah
                                 100
                                              (.25)
                    ak
                                 100
                    ak
                                   50
                                               6 (.1)
XEFB
XEI
                    ak
                                 100
                                               1315
                     яk
                                  250
1320 kilocycles
                                                           227.1 meters
                                                                 Havana, Cuba. E
Pueblo, Colo. M—6:30-9:30
Honolulu, T. H. L—6:00-11:00
Idaho Falls, Idaho. M—6:00-11:00
Akron, Ohio. E—8:00-mid.
New Orleans, La. C—7:00-mid.
CMCY
                    ak
                                 500
                                              1325
KGHF
KGMB
KID
                                              (.5)
C
                                 250
                    ak
                    ak
                                 250
                                  250
                                              (.5)
C
                     ae
 WADC
                               1000
                     ae
WSMB
                     ak
                                 500
1330 kilocycles
                                                           225.4 meters
                               1000
KGB
                                                                                                       P-7:00-1:00
                     agj
ak
                                                                 San Diego, Calif. P—7:00-1:00
Tacoma, Wash. P—6:45-11:00
KMO
                                  250
                                                                 Sioux City, Iowa. C—7:30-11:00
Hartford, Conn. E—8:00-mid.
Cincinnati Ohio. E—8:00-mid.
Eau Claire, Wis. C—7:00-7:45
Mexico City, D. F.
                                              1C (2.5)
CH
 KSCJ
                     aj
                                1000
 WDRC
                               1000
                    ae
WSAI
                    ak
                               1000
                                              R (2.5)
1C
 WTAQ
                               1000
                    ae
ΧEQ
                                 500
1340 kilocycles
                                                          223.7 meters
                                                                 Spokane, Wash. P—6:45-mid.
Huron S. D. C.
Dodge City, Kans. C—6:30-9:00
Pensacola, Fla. E—9:00-10:00
Portland, Maine. E—(Mail returned)
Toledo, Ohio. E—7:00-1:00
KFPY
                               1000
                                               C
                     яk
KGDY
KGNO
WCOA
                    ak
                                 250
                                  250
                    ak
                                              . . . . .
                                 500
                     ae
 WLEC
                                              (.5)
C
                                  250
WSPD
                     ae
                               1000
```

1350	kilo	ocyc	les	222.1 meters	
KIDO	ak	1000 1000	В	Boise, Idaho. M—8:00-8:30 St. Louis, Mo. C—7:00-mid.	
KWK TGW	ak ak	500		Guatemala City .Gua L—Noon-1:00; 6:00-7:00; 9:00-11:00	
WAWZ WBNX	ae ae	250 250	1 1 A	Zarephath, N. J. E-6:00-9:00; 5:00-6:30 New York, N. Y. E-9:00-11:30	
WEHC	ae	500	D	Charlottesville, Va. E	
1360	kil	ocyc	1es	220.4 meters	
CMJP KGER	ak ak	75 1000		Moron, Cuba. E—10:00-noon; 8:00-10:00 Long Beach, Calif. P—6:00-mid. Butte, Mont. M—7:00-mid. Charleston, S. C. E—8:00-10:30; noon-2:00; 7:00-10:00 Svracuse, N. Y. E—8:00-1:00 Chicago, III. C—5:45-11:00; 5:00-8:00	
KGIR	ak	500	N (1)	Butte, Mont. M-7:00-mid.	
WCSC WFBL	ae ak	500 1000	C (2.5)	Charleston, S. C. E—8:00-10:30; noon-2:00; 7:00-10:00 Syracuse, N. Y. E—8:00-1:00	
WGES	ae	500 500		Chicago, III. C-5:45-11:00; 5:00-8:00	
WQBC	ak	300	****	Vicksburg, Miss. C	
1370	kilo			218.8 meters	
CMCN CMCR	z ak	250 150	1375 1375	Havana, Cuba. E Havana, Cuba. E—Noon-1:00; 4:00-5:00; 9:00-11:00	
CMGE	z	30	1375	Cardenas, Cuba. E	
KCRC KFBL	ak ae	100 50	2(.25) 3	Enid, Okia. C—0:00-9:00; 11:00-2:00; 5:00-7:45; 10:00-mid.	
KFJM	ak	100		Grand Forks, N. D. C.—7:00-9:00 Fort Worth, Texas. C.—7:00-11:00 Tucson, Ariz. M.—7:00-9:00	
KFJZ KGAR	ae ae	100 100	(.25)	Tucson, Ariz. M—7:00-9:00	
KGFG KGFL	bk ak	100 100	2 4	Oklahoma City, Okla. C Roswell, N. M. —6:00-9:30; 2:00-7:30 San Angelo, Texas. C=8:00-4:30; 6:00-10:00 Clovis, N. M. —9:30-2:00; 7:30-9:30	
KGKL	ak	100		San Angelo, Texas. C-8:00-4:30; 6:00-10:00	
KICA KLUF	ak z	100 100	4	Clovis, N. M. M—9:30-2:00; 7:30-9:30 Galveston, Texas. C	
KMAC	ak	100	5	San Antonio, Texas. C-7:00-8:30; 10:00-11:00; noon-1:30; 4:00-	
KONO	ak	100	5	6:00; 7:00-8:00; 10:00-12:30 San Antonio, Texas. C—6:00-7:00; 8:00-10:00; 11:00-noon; 1:30- 4:00; 6:00-7:00; 8:00-10:00 Marshfield, Ore. P—7:00-9:00 Berkeley, Calif. P—6:30-9:30; noon-3:00; 6:00-9:00	
KOOS KRE	ae	100 100		Marshfield, Ore. P—7:00-9:00	
KSO	ak ak	100	B(.25)	Des Moines, Iowa, C-6:30-mid.	
KUJ KVL	ak ak	100 100	· · · ·	Walla Walla, Wash. P—6:45-9:00 Seattle, Wash. P—6:00-9:00; noon-3:00; 6:00-9:00	
KWKC	z	100	7	Kansas City Mo C	
WBTM WCBM	ak ae	100 100	(.25)A	Danville, Va. E—8:00-1:00; 4:00-6:30 Baltimore, Md. E—7:00-mid.	
WDAS	ae	100	(.25)	Philadelphia, Pa. E-9:00-11:00	
WGL WGLC	ae ak	100 100	(.25) C C	Hudson Falls, N. Y. E—7:30-mid.	
WHBD WHBQ	ak ak	100 100		Mount Orab, Ohio. E-8:00-11:30; noon-9:00 Memphis Tenn. C-7:55.2:00:4:00-10:30	
WHDF	ak	100	(.25)	Calumet, Mich. E-7:00-9:00; 11:30-1:30; 5:30-8:30	
WIBM WJBK	ae ae	100 50	iK i	Jackson, Mich. E-7:30-9:00 Detroit, Mich. E-7:00-sunset: 9:00-mid.	KCYS.
WJTL	ae	100		Kansas City Mo C Danville, Va. E—8:00-1:00; 4:00-6:30 Baltimore, Md. E—7:00-mid. Philadelphia, Pa. E—9:00-11:00 Fort Wavne, Ind. C—6:30-mid. Hudson Falls, N. Y. E—7:30-mid. Hudson Falls, N. Y. E—7:30-mid. Mount Orab, Ohio. E—8:00-11:30; noon-9:00 Memphis, Tenn. C—7:55-2:00; 4:00-10:30 Calumet, Mich. E—7:00-9:00; 11:30-1:30; 5:30-8:30 Jackson, Mich. E—7:00-sunset; 9:00-mid. Atlanta, Ga. E Lexington, Mass. E—Noon-3:00; 6:00-9:00	1380
WLEY WLVA	ak ck	100	(. 25) 7	Lexington, Mass. E—Noon-3:00; 6:00-9:00 Lynchburg, Va. E—7:00-11:00; 1:00-3:00; 6:30-11:00 Tampa, Fla. E—7:00-9:30	1000
WMBR WPFB	ak ak	100 100		Tampa, Fla. E—7:00-9:30 Hattiesburg, Miss. C.	DIAL
WQDM	ae	100	D	The state of the s	
WRAK WRAM	ak ae	100 100		Williamsport, Pa. E—8:30-3:00; 5:00-10:30 Wilmington, N. C. E—7:30-mid.	
WRDO WR JN	ae	100 100		Augusta, Maine. E—9:00-1:00; 4:30-8:30	
WSVS	ae ak	50	D	Buffalo, N. Y. E—8:30-10:00; 2:00-3:00	<u></u>
XEFV XEFZ	ae ae	100 100	11111		ç
					<u>8</u> c
1380		ocyc]		217.3 meters	CUT OUT
СМЈС КОН	z ak	500	1382 C 2	Camaguey, Cuba. E Reno, Nev. P—8:00-10:00 Pittsburgh, Pa. E—7:00-10:00 Guatemala City, Guat. LaCrosse, Wis. C—7:30-10:00 Dayton Objo. E—7:00-8:00:10:00-mid	95
KQV TGX	ak z	500 75	2	Pittsburgh, Pa. E-7:00-10:00	LIT T
WKBH	ae	1000	Ç	LaCrosse, Wis. C-7:30-10:00	E
WSMK XETB	ak z	200 125	2	Dayton, Ohio. E—7:00-8:00; 10:00-mid. Torreon, Coah.	0.

```
1390 kilocycles
                                                         215.7 meters
                                                               San Pedro de Macoris, D. R. L—12:15-2:00; 10:00-11:00
Little Rock, Ark. C—7:00-mid.
Phoenix, Ariz. M
Cleveland, Ohio. E—7:00-mid.
HIH
                    яk
                                             1395
KLRA
KOY
WHK
                              1000
                    ae
                                             (1)
C(2.5)
                                 500
                    ae
                              1000
                    ae
1400 kilocycles
                                                         214.2 meters
                                                               Ogden, Utah. M
Tulsa, Okla. C
St. John's, Nfld.
Brooklyn, N. Y.
                                                                                              M---8:30-10:30
                                 500
Kočw
                                 250
75
                                             (.5)
                                                                                                    L-10:30-11:30; 1:00-2:00; 6:15-8:00
VOGY
                    ak
                                                               Brooklyn, N. Y. E
Brooklyn, N. Y. E—1:30-4:00; 9:00-10:00
 WARD
                                 500
                    ak
WBAA
                                 500
                                             1
                    7.
WBBC
                                 500
                    ae
                                             2
WFOX
                   ak
                                 500
                                            ĩN
                                                                                                       C-6:00-7:00: 8:00-mid.
WKBF
                                 500
                   ak
WLTH
                   ak
                                 500
1410 kilocycles
                                                         212.6 meters
                                                               Vancouver, B. C. P—3:00-4:30

Vancouver, B. C. P

Havana, Cuba. E

Havana, Cuba. E

Rockford, III. C—10:00-12:30 3:00-6:00 8:00-10:45

Amarillo, Texas. C—6-8; 10-12:30; 2:15-7:30; 9-10

Boston, Mass. E—8:30-mid.
CKFC
                                  50
                    ak
CKMO
CMCH
CMCM
KFLV
                                100
                    7.
                                  50
15
                    ak
                    z
                                500
                    ak
KGRS
                              1000
                    ae
                                             CH
WAAB
                                500
                    ae
                                                               Boston, Mass. E—8:30-mid.
Bay City, Mich. E—8:00-mid.
Amarillo, Texas. C—8-10; 12:30-2:15; 7:30-9; 10-mid.
Sheboygan, Wis. C—7:00-10:00; 12:30-3:00; 6:00-8:00
Bluefield, W. Va. E—7:00-9:00; noon-3:00; 6:00-8:00
Mobile, Ala. C—7:00-6:15; 7:45-10:30
Roanole Va. F.
WBCM
                                 500
                   ae
WDAG
                    ae
                              1000
WHBL
                                 500
                    ae
WHIS
                                 250
                    яk
WODX
                                500
                                             ãС
                    ae
                                250
                                                                                             Ē
WRBX
                                                                Roanoke, Va.
                    ae
                                             ãС
                                                                                                       C-6:00-7:45
WSFA
                    ck
                                 500
                                                               Montgomery, Ala.
1420 kilocycles
                                                         211.1 meters
KABC
                                 100
                                                                San Antonio, Texas.
                                                                                                            C-6:00-mid
KABC
KBPS
KCMC
KFIZ
KGFF
KGGC
KGIW
KGIX
                                                               Portland, Ore. P-11:00-12:30; 3:00-5:00
Texarkana, Ark. C-7:00-2:00; 4:00-9:00
                   aj
ak
                                 100
                                 100
                                             . . . . .
                                                               Fond du Lac, Wis. C—10:00-1:00; 4:00-10:00
Shawnee, Okla. C—7:30-3:00; 5:00-9:00
San Francisco, Calif. P—9:00-1:00; 4:00-9:00
                                 100
                    ak
                                             . . . . .
                                 100
                    ak
                                             . . . . .
                    ak
                                 100
                                             1 Y
                                                                Trinidad, Colo.
                    ak
                                 100
                                                                                                  M
                                                               Las Vegas, Nev.
                    ak
                                 100
                                                                                                 M
                                             . . . . .
                                                               Carter Lake, Iowa. C
Lamar, Colo. M—8:00-10:00; 7:00-10:00
Eugene, Ore. P—7:45-9:00
KICK
                                 100
                                              . . . .
KIDW
                                 100
                                             1
                                                              Lamar, Colo. M—8:00-10:00; 7:00-10:00
Eugene, Ore. P—7:45-9:00
Yuma, Ariz. M—7:00-9:00; 11:00-2:00; 6:00-10:00
Cedar Rapids, Iowa. C—6:30-mid.
Portland, Ore. P—7:00-1:00
Waco, Texas. C—8:00-2:00; 5:00-10:30
Presque Isle, Maine. E—11:00-1:00; 4:00-7:00
Anniston, Ala. C—7:00-9:00
Hazelton, Pa. E—11:00-9:00
Greenville, N. C. E—9:00-6:00
Cicero, Ill. C—4:00-6:00
Battle Creek, Mich. E—9:00-9:30
Americus, Ga. C—7:00-6:15
Tupper Lake, N. Y. E
Cicero, Ill. C—7:00-1:30; 6:00-9:00; 11:00-1:00
Wilmington, Del. E—7:00-11:00; 2:00-5:00; 9:00-mid.
Baton Rouge, La. C
Ironwood, Mich. C—7:30-1:30; 4:30-7:00
Cicero, Ill. C—1:30-4:00
Kansas City, Kans. C—7:00-11:00
Springfield, Mass. E—8:00-mid.
Detroit, Mich. E—7:30-mid.
Detroit, Mich. E—7:30-mid.
Joplin, Mo. C—7:30-2:00; 6:00-9:30
Muscle Shoels, Ala. C—7:00-1:00
                    яе
                                 100
                                             . . . . .
KUMA
KWCR
KXL
WACO
                                 100
                    ak
                                             B (.25)
                    ak
                                 100
                                 100
                    ae
                    ak
                                 100
WAGM
                                 100
                    ae
WAMC
WAZL
WEED
                    ae
                                 100
                    ak
                                 100
                                 100
                                             D
                    ak
WEHS
                    ak
                                100
                                            а
WELL
                    ak
                                  50
WENC
WHDL
                                            D
                                 100
                    ak
                                100
                                             D
                    ae
WHFC
                    ae
                                 100
WILM
                                 100
                    aj
WJBO
WJMS
WKBI
                    z
                                 100
                                             D
                    ak
                                 100
                                 100
                    яk
                                             я
WLBF
                                 100
                    ak
WMAS
                                             CH(.25)
                    ak
                                 100
WMBC
                    ag
ak
                                 100
                                             (.25)
WMBH
                                 100
WNRA
                                 100
                                                               Muscle Shoals, Ala. C-7:00-10:00
Paducah, Ky. C
                    ak
WPAD
WSPA
                                                               Paducah, Ky. C
Spartanburg, S. C. E-7:30-2:00; 4:00-9:30
Cumberland, Md. E-9:00-7:00
                                 100
                    ak
                                 100
                    ae
WTBO
                                100
                    ae
1430 kilocycles
                                                         209.7 meters
                                                               Victoria, B. C. P—8:00-12:30; 6:00-8:00; mid.-2.0°
Los Angeles, Calif. P—7:00-11:00
North Platte, Neb. C—7:00-sunset
CFCT
                                  50
                   ae
KECA
KGNF
                    ak
                              1000
                                500
                                             D
```

```
Harrisburg, Pa. E Columbus, Ohio. E=8:00-mid. Manchester, N. H. E=7:30-11:00 Rochester, N. Y. E =8:30-10:30;\ 11:30-1:30;\ 2:30-4:00;\ 4:30-1:00 Memphis, Tenn. C=8:00-1:00;\ 3:00-10:00 Albany, N. Y. E=7:30-1:00
 WBAK
              ak
                       500
                                I (I)
IC
WCAH
              ae
                       500
WFEA
                                ĆH
                       500
              ae
WHEC
                       500
              яе
WHP
WNBR
                       500
                                1C(1)
              ak
                       500
                               c ....
              ae
WOKO
              ae
                       500
1440 kilocycles
                                         208.2 meters
                                             Havana, Cuba. E
Havana, Cuba. E—Noon-1:00; 6:00-8:00
Casper, Wyo. M—7:30-2:00; 3:30-9:00
Oakland, Calif. P—8:00-sunset
Houston, Texas. C—6:30-1:00; 2:30-11:00
Cartago, C. R. L
CMBK
CMBL
                                1445
                        15
              ak
                       200
                                1445
KDFN
              ak
                       500
KLS
KXYZ
                                D
                       250
              ae
              ak
                       250
TIFS
                          7.5
                               1441
              z
                                             Carrago, C. R. E. Greensboro, N. C. E—8:00-11:00
Allentown, Pa. E—7:30-mid.
Peoria, III. C—6:00-11:00, 8:00-mid.
Allentown, Pa. E—7:30-mid.
Quincy, III. C—11:00-8:00
                                C(1)
WBIG
                       500
              ae
WCBA
                       250
              аj
WMBD
                                3C(1)
                       500
              ae
WSAN
                       250
WTAD
                       500
                                1
1450 kilocycles
                                         206.8 meters
                                             Shreveport, La. C—7:00-mid.
San Jose, C. R. L
Cleveland, Ohio. E—6:00-1:00
Jersey City, N. J. E—8:00-mid.
Fall River, Mass. E—8:00-3:30; 5:00-10:00
Athens, Ga. E—8:00-9:00
Neuvo Laredo, Tams. C—10:00-3:00; 4:00-7:00
KTBS
              ck
                     1000
TIEP
                          7.5
              7.
WGAR
WHOM
                       500
                                B(1)
              ak
                       250
              ae
WSAR
WTFI
                       250
                                Α
              ae
              ak
                       500
              ak
1460 kilocycles
                                         205.4 meters
                               (N 10)
                                             St. Paul, Minn. C-6:45-12:30
Washington, D. C. E-6:30-mid.
KSTP
WJSV
              ae 25000
ak 10000
1470 kilocycles
                                         204.0 meters
                                             Spokane, Wash. P-6:00-mid.
Nashville, Tenn. C-7:00-mid.
KGA
WLAC
                     5000
                     5000
              ae
1480 kilocycles
                                         202.6 meters
                     5000
KOMA
             ak
                                             Oklahoma City, Okla. C-6:30-mid. Buffalo, N. Y. E-10:00-1:00
WKBW
              ae.
                     5000
                                        201.2 meters
1490 kilocycles
WCKY ae
                    5000
                                             Covington, Ky. E-7:00-mid.
1500 kilocycles
                                        199.9 meters
CRCS
                       100
                                             Chicoutimi, Que.
                               CT
KDB
                                             Santa Barbara, Calif. P—7:30-mid.
Corpus Christi, Tex. C—7:00-3:00; 6:00-10:00
Moorhead, Minn. C—8:00-9:00
                       100
                                            KGFI
KGFK
                                (.25)
                       100
              ak
                       100
              ak
KGFK
KGKB
KGKY
KNOW
KPJM
KPQ
KREG
              ak
                       100
                                . . . . .
              ck
                       100
                                . . . . .
              ak
                       100
                                . . . . .
              ak
                       100
                                . . . . .
              аj
                       100
                                . . . . .
              ak
                       100
                                . . . . .
KXO
              al
                       100
WCNW
                                1A
              ak
                       100
WFDV
                       100
              ak
WHEF
WKBV
                                P (.25)
                       100
                                                                                                                                            KCYS.
              z
                       100
              z
                                                                                                                                            1500
WKBZ
WKEU
              ak
                       100
                                . . . .
              ak
                       100
                               í ····
WMBQ
                       100
                                                                                                                                           DIAL
WMPC
                       100
              ak
WNBF
              96
                       100
WOPI
                       100
              ae
                                (.25)A
WPEN
                       100
              ck
                               A ...
WRDW
WSYB
                       100
                                            Augusta, Ga. E
Rutland, Vt. E-10:00-1:00; 5:00-9:00
Woodside, N. Y. E-8:00-9:00; 11:00-2:00; 10:00-12:30
Pittsburgh, Pa. E-8:00-11:45
              ae
                       100
              ae
WWRL
              ak
                       100
wwsw
                                (.25)
              ae
                       100
```

INDEX BY LOCATIONS

Frequency in kilocycles in second column. Night power in watts in third column. Network affiliations in fourth column: C Columbia, R National Red, B National Blue, N National Red and Blue. A Amalgamated. F Canadian.

ALABAMA	Hollywood	Storrs	Chicago
Anniston	KFWB 950 1000	WCAC 600 250	KYW 1020 10000 N
WAMC 1420 100	KMTR 570 500	DELAWARE	WAAF 920 500
Birmingham	KNX 1050 25000	Wilmington	WBBM 770 25000 C
WAPI 1140 5000 N	Long Beach	WDEL 1120 250 A	WCFL 970 1500 B
WBRC 930 500 C	KFOX 1250 1000	WILM 1420 100	WCRW 1210 100
WKBC 1310 100	KGER 1360 1000	DISTRICT OF	WEDC 1210 100
Gadsden	Los Angeles	COLUMBIA	WENR 870 50000 N
WJBY 1210 100	KECA 1430 1000 N	Washington	WGES 1360 500
Huntsville	KFAC 1300 1000	WJSV 1460 10000 C	WGN 720 25000 C
WBHS 1200 100	KFI 640 50000 N	WMAL 630 250 B	WJJD 1130 20000
Mobile	KFSG 1120 500	WOL 1310 100 A	WLS 870 50000 N
WODX 1410 500 C	KFVD 1000 250	WRC 950 500 R	WMAQ 670 5000 N
Montgomery	KGFJ 1200 100	FLORIDA	WMBI 1080 5000
WSFA 1410 500 C	KHJ 900 1000 C	Clearwater	WSBC 1210 100
Muscle Shoals	KRKD 1120 500	WFLA 620 1000 N	Cicero
WNRA 1420 100	KTM 780 500	Gainesville	WEHS 1420 100
Trov	Oakland	WRUF 830 5000	WHFC 1420 100
WHET 1210 100	KLS 1440 250	Jacksonville	WKBI 1420 100
ALASKA	KLX 880 1000	WJAX 900 1000 N	Decatur
Anchorage	KROW 930 500	Miami	WJBL 1200 100
KFOD 600 250	Pasadena	WIOD 1300 1000 N	East Dubuque
Juneau	KPPC 1210 50	WOAM 560 1000 C	WKBB 1310 100
KIFH 1310 100	Sacramento	Orlando	Harrisburg
Ketchikan	KFBK 1310 100 C	WDBO 580 250 C	WEBQ 1210 100
KGBU 900 500	San Bernardino	Pensacola	Joliet
	KFXM 1210 100	WCOA 1340 500	WCLS 1310 100
ARIZONA	San Diego	St. Petersburg	LaSalle
Jerome	KFSD 600 1000 N	WSUN 620 1000 N	WJBC 1200 100
KCRJ 1310 100	KGB 1330 1000 C	Tampa	Peoria
Lowell KSUN 1200 100	San Francisco	WDAE 1220 1000 C	WMBD 1440 500 C
	KFRC 610 1000 C	WMBR 1370 100	Quincy
Phoenix KOY 1390 500	KFWI 930 500	GEORGIA	WTAD 1440 500
	KGGC 1420 100	Americus	Rockford
KTAR 620 500 N Prescott	KGO 790 7500 N	WENC 1420 100	KFLV 1410 500
KPJM 1500 100	KIBS 1070 100	Athens	Rock Island
	KPO 680 50000 N	WTFI 1450 500	WHBF 1210 100
Tucson KGAR 1370 100	KTAB 560 1000	Atlanta	Springfield
KVOA 1260 500	KYA 1230 1000 N	WGST 890 250 C	WCBS 1210 100 WTAX 1210 100
Yuma	San Jose	WJTL 1370 100	
KUMA 1420 100	KQW 1010 500	WSB 740 50000 N	Tuscola WDZ 1070 100
	Santa Ana	Augusta	
ARKANSAS	KREG 1500 100	WRDW 1500 100	Urbana WILL 890 250
Blytheville	Santa Barbara	Columbus	
KLCN 1290 100	KDB 1500 100 C	WRBL 1200 100	Zion WCBD 1080 5000
Fayetteville	Stockton	LaGrange	
KUOA 1260 1000	KGDM 1100 250	WKEU 1500 100	INDIANA
Fort Smith KFPW 1210 100	KWG 1200 100 C	Macon	Anderson
Hot Springs	COLORADO	WMAZ 1180 500	WHBU 1210 100
KTHS 1040 10000 N	Colorado Springs	Rome	Connersville
Little Rock	KVOR 1270 1000 C	WFDV 1500 100	WKBV 1500 100
KARK 890 250	Denver	Sayannah	Elkhart
KGHI 1200 100	KFEL 920 500	WTOC 1260 500 C	WTRC 1310 50
KLRA 1390 1000 C	KFXF 920 500	T.homasville	Evansville
Paragould	KLZ 560 1000 C	WQDX 1210 100	WGBF 630 500
KBTM 1200 100	KOA 830 12500 N	HAWAII	Fort Wayn
Texarkana	KPOF 880 500	Hilo	WGL 1370 100 C
KCMC 1420 100	Grand Junction	KWFV 1210 100	WOWO 1160 10000 C
CALIFORNIA	KFXJ 1200 100	Honolulu	Gary
Bakersfield	Greeley	KGMB 1320 250 C	WIND 560 1000 C
KERN 1200 100 C	KFKA 880 500	KGU 750 2500 N	
Berkeley	Lamar	IDAHO	Hammond WWAE 1200 100
KRE 1370 100	KIDW 1420 100	Boise	
Beverly Hills	Pueblo	KIDO 1350 1000	Indianapolis
KMPC 710 500	KGHF 1320 250	Idaho Falls	WFBM 1230 1000 C
Burbank	Trinidad	KID 1320 250	WKBF 1400 500 N
KELW 780 500	KGIW 1420 100	Nampa	Muncie
El Centro	Yuma	KFXD 1200 100	WLBC 1310 50
KXO 1500 100	KGEK 1200 100	Pocatello	South Bend
Eureka	CONNECTICUT	KSEI 890 250	WFAM 1200 100 C
KIEM 1210 100	Bridgeport	Twin Falls	WSBT 1230 500 C
Fresno	WICC 600 250 C	KTFI 1240 1000	Terre Haute
KMI 580 500 C	Hartford	ILLINOIS	WBOW 1310 100
Glendale	WDRC 1330 1000 C	Carthage	West Lafayette
KIEV 850 100	WTIC 1060 50000 R	WCAZ 1070 50	WBAA 1400 500
		1	

Wilson W		l) _	l	
Work General General Work General Work General	IOWA	Bangor	WRHM 1250 1000	WOW 590 1000 R
Wolf		WABI 1200 100	Moorhead	Scottsbluff
Portland Properties Prope	WOI 640 5000	WLBZ 620 500 C	KGFK 1500 100	KGKY 1500 100
Carter Late	Boone			
Carter Lake Cit Ci	KFGQ 1310 100	WCSH 940 1000 R		
Coder Rapids Code	Carter Lake	WLEC 1340 250	St. Paul	
Codar Rapids CWCR 120 100 B MARYLAND Baltimore WAAD 100 100 C Codard 1270 100 C WADD 1270 100 C WCBM 1370 100 C WCBM	KICK 1420 100	Presque Isle		
Council Buffs Council Buff		WAGM 1470 100		Las vegas
Council Bluffs				KGIX 1420 100
ROLL 1260 1000 B Dacorath RCCA 1270 100 RCCA 127			WKEL 1210 100	
Decorath CGCA 1270 100 CGC 600 250 C CGCBM 1370 100 A CGCM CGC		WBAL 1060 10000 B		
KWLC 1270 100 WFBR 1370 100 A WFBR 1370 100 A WFBR 1270 500 R				
Name				
Des Moines KSO 1307 5000 NT 100 Mass 130 100 Mass	KULC 1270 100		Jackson	
Wide	Dos Maines			
Wido				
WHO fow a City WSS 100 MASSACHUSETTS Babson Park WBS 100 Ottum WABL 110 500 WABL		W1BO 1420 100		
Marshalltown Mars		W.IE.L. 1310 100	Laurei	Asbury Park
WSUI 880 500 Marshalltown WBS 1200 100 Marshalltown WBS 1300 Cottumwa WAS 1310 100 MSET 1300 100 WAB 1410 500 C WBZ 990 25000 B WEEL 590 1000 R WHEH 830 1000 A WHEH 830 1			WAML 1310 100	
Marshalltown KFJB 1200 100 Coftumwa WAB 1410 500 C WAZ 500 Coftward WASH 1410 500 C WASH 1420 100 C Warshard Wash				Atlantic City
Section Cottumba				WPG 1100 5000 C
Octumwa WIAS 1310 100 WABB 1410 500 C WILEY Tupele Soundard WAPP 300 WAPP 300 WAPP 300 WAPP 300 WHOM 1450 250 WHOM 240 250 WHOM 240 250 WHOM 240 250 240 240 240 240 240 240 240		WBSO 920 500	Mississippi City	
Wilson 1310 100		Boston		
Ward 100 War		WAAB 1410 500 C	i upelo	Jersey City
KFNF 890 500 KMA 30 500 Sloux City WhDM 830 1000 C Waterloo Wolf 1310 100 A Springfield WbZa 990 1000 C Waterloo W		WBZ 990 25000 B		WAAT 940 300
Sioux City Sio	MENE POO FOO			
Signate City Waterloo Water				Newark
Solux City Waterloo Waterlo	CIVIA 930 300	WNAC 1230 1000 C		WAAM 1256 1000
Water 100 Wake 100 Wa			Cape Girardeau	WGCP 1250 250
WHT 600 500 C			KEVS 1210 100	WOR 710 5000
Ahllene Ahll		Lexington A		Paterson
Wildling		WLEY_1370 100		WODA 1250 1000
Springfield WZA		New Bedford	Jefferson City	
WBZA				
WMAS 1420 100 C		Springfield	Joplin	
March Marc	Coffeyville			
WORC 1280 500 C WORC 1370 100 C			Kansas City	Zarephath
WHB 1420 100	Dodge City	Worcester	KMBC 950 1000 C	
WHB 1420 100			KWKC 13/0 100	
Carrente KFKU 1220 500 WREN 1220 1000 B Manhattan KSAC 580 500 Topeka WIDF 1370 100 WIDW 580 1000 C WIDW 580 100		W 1 AG 580 250 R	WDAF 610 1000 K	Albuquerque
Weight 1220 500 Weight 1420 50 Bay City Weight 1420 50 Bay City Weight 1420 50 St. Louis KEVO 550 500 Kentucky Weight 1370 100 Wei			WHB 860 300	KGGM 1230 250
WREN 1220 1000 B Manhattan KSAC 580 500 Topeka WIBW 580 1000 C WIBW 580 1000 C Wichita KFENTUCKY Covington WCKY 1490 5000B Hopkinsville WFIW 940 1000 Louisville WHAS 820 25000 C WLAP 1200 100 Paducah WPAD 1420 100 LOUISIANA Baton Rouge WJBX 1270 500 KMLB 1200 100 Monroe KMLB 1200 100 Mew Orleans WBBX 1200 100 New Orleans WBBX 1200 100 New Orleans WBBX 1200 100 Shreveport KMMB 1310 100 KWKH 850 10000 MWKH 850 10000 MAIME MMRE Augusta WGKH 850 10000 MAIME Augusta WGKH 180 1000 MINNESOTA Fergus Falls WCCO 810 50000 C Manuscape WGKYH 180 1000 Month Plate WGKYH 180 1000 Minnespolis WCCO 810 50000 C Manuscape WGKYH 180 1000 Month Plate WGKYH 180 1000 Minnespolis WCCO 810 50000 C Manuscape WGKYH 180 1000 Month Plate WGKYH 180 1000 WGKYH	Lawrence		WOQ 1300 1000	
Calumet Calu		WELL 1420 50	VEEC 600 2500	
Calumet Calu	WREN 1220 1000 B	WDCM 1410 500	KFEQ 680 2300	
Wight S80 1000 C Wight Wight S80 1000 C Wight Wight S80 1000 C Wight S80 1000 C Wight S80 1000 C Wight S80		WBCM 1410 300	IZELIO EEO COO	Roswell
WilbW 580 1000 C Wilchita WilbW 1370 50 Wilchita WilbW 1370 1000 B Wilchita WilbW 1370 1000 B Wilchita WilbW 1370 1000 B Wilchita 1200 100 Wilchita 1200 Wilchita 1200 100 Wilchita 1200 1200 Wilchita 1200			KFUU 550 700	
Wichita Wight 1370 50 Wight 1370 1000 B Wight 1000 B W	Topeka			NEW YORK
Wilst		WIDE 1270 FO		Albany
WMBC 1420 10	Wichita	WYD 750 10000 B		WOKO 1430 500 C
Covington WWJ 920 1000 R WYZ 1240 1000 Ratansing WARD 1000 Louisville WHAS 1270 500 RATAN Butte WFIW 1200 100 RATE 1270 500 RATE 1270 500 RATE 1270 100 RATE 1270	KFH 1300 1000 C	WARC 1430 100		Auburn
Covington WCKY 1490 5000B Hopkinsville WF1W 940 1000 Louisville WHAS 820 25000 C WLAP 1200 100 Paducah WPAD 1420 100 LOUISIANA Baton Rouge WJBO 1420 100 Monroe KMLB 1200 100 New Orleans WBBX 1200 100 New Orleans WBBX 1200 100 WSMB 1300 100 WKZO 590 1000 WKZO 590 1000 WKZO 590 1000 WMSMB 1300 100 WMSMB 1300 100 WKZO 590 1000 WKZO 1250 1000 WKZO 590 1000 WKZO 1200 100 WKZO 590 1000 WKZO 1200 100 WKZO 1200 100 WKZO 590 1000 WKZO 1200 100 WKZO 1200 1	KENTUCKY	WWI 920 1000 B	Springfield	
Hopkinsville	Covington		VCBY 1310 100	
Mortinsville			KGBA 1310 100	WNBF 1500 100
WFIW 940 1000 Louisville WHAS 820 25000 C WLAP 1200 100 Paducah WPAD 1420 100 Louisiana WASH 1270 500 WASH 1270 100 WASH 1200 100 WASH	Hopkinsville	WKAD 1040 1000	MONTANA	
WHAS 820 25000 C WLAP 1200 100 WASH 1270 500 Wash 1270 100 Wash 1270	WFIW 940 1000			WARD 1400 500
WHAS 820 25000 C WLAP Grand Rapids Butte WBR 1300 1000 WCNW 1500 1000 WCNW WBR 1300 1000 WCNW 1500 1000 WCNW WBR 1300 1000 WCNW 1500 1000 WCNW 1500 <th< td=""><td></td><td>WFDF 1310 100</td><td>KGHL 950 1000 N</td><td>WRRC 1400 500</td></th<>		WFDF 1310 100	KGHL 950 1000 N	WRRC 1400 500
WASH 1270 500 WOOD 1270 500 WFOX 1400 500 WFOX				WRRR 1300 1000
Paducah WOOD 1270 500 Great Falls KFBB 1280 1000 WLTH 1400 500 WLT	WLAP 1200 100			
WPAD 1420 100	Paducah			WFOX 1400 500
Columbia	WPAD 1420 100			WLTH 1400 500
Marquette WBMD 1310 100 WBMD 1310 100 WBMD 1370 100 WBMD 1300 100 WBMD 1310	LOUISIANA			
WJBO 1420 100 Monroe Kalamazoo WKZO 590 1000 CKJO 100 Moroe WBEX 100 100 WMPC 1500 100 CMJBW 1200 100 CMJBW 1200 100 CMJBW 1200 100 CMJBW 1200 100 CMJBW 1300 500 N WWL 850 10000 Shreveport KRMD 1310 100 KWBM 1310 500 KWBM 1310 100 KWBM 1310 100 KMMD 1310 100 KMMD 1310 100 KMMD 1310 100 KMMD 1310 100 KMSD 1310 100 KFAB 770 5000 CMSD 1000 KMSW 1310 100 KFAB 770 5000 CMSD 1200 Morofolk WJAG 1060 1000 KGBB 1210 100 Morofolk WJAG 1060 1000 Morofolk WGBB 1210 100 Mor	Baton Rouge		KGEZ 1310 100	Buffalo
Monroe KMLB 1200 100 WKZO 590 1000 Wolf Point KGCX 1310 100 WGR 550 1000 CMBW 1250 1000 CMBW 1250 1000 WMBZ 1500 100 WMBZ 1500 100 WMBZ 1500 100 WMBZ 1500 100 WMBZ 1310 100 WGR 550 1000 CMSWS 1370 50 CMSWS 1370 100 CMSWS 1370	W IBO 1420 100			
WKZO 590 1000 WKZO 590 1000 Lapeer WGCX 1310 100 WKBW 1480 5000 C WGM 1250 1000 C WMPC 1500 100 Ludington WKBZ 1500 100 WKBZ 1310 100 WKBZ 1310 100 WGAD 1220 500 C Canton WCAD 1200 C Canton WCAD 1220 500 C Canton WCAD 1200 C Canton WCAD 1220 500 C Canton WCAD 1200 C Canton Canto			KGVO 1200 100	
WBX 1200 100 Ludington WKBZ 1500 100 Ludington WKBZ 1500 100 WSMB 1320 500 N WBEO 1310 100 WSMB 1320 500 N WBEO 1310 100 KTBS 1450 1000 N KWEXL 1310 50 KTBS 1450 1000 N KWKH 850 10000 Minneapolis MAINE Augusta WBCY 1380 1000 Minneapolis WCCO 810 50000 C Marquette WSVS 1370 50 Canton WCAD 1220 500 Canton Canton WCAD 1220 500 Canton Cant				WGR 550 1000 C
WBX 1200 100 Ludington WKBZ 1500 100 Ludington WKBZ 1500 100 WSMB 1320 500 N WBEO 1310 100 WSMB 1320 500 N WBEO 1310 100 KTBS 1450 1000 N KWEXL 1310 50 KTBS 1450 1000 N KWKH 850 10000 Minneapolis MAINE Augusta WBCY 1380 1000 Minneapolis WCCO 810 50000 C Marquette WSVS 1370 50 Canton WCAD 1220 500 Canton Canton WCAD 1220 500 Canton Cant				WKBW 1480 5000 C
WDSU 1250 1000 C WKBZ 1500 100 WKBZ 1310 100 WEXE 1310 50 WEXE 1310 100 WEXE	New Urieans	WMPC 1500 100		WSVS 1370 50
WJBW 1200 100 WKBZ 1500 100 KMMJ 740 1000 WCAD 1220 500 WSMB 1320 500 N WWL 850 10000 Shreveport KRMD 1310 100 KTBS 1450 1000 N WEXL 1310 50 KFAB 770 5000 C Elmira WESG 1040 1000 Elmira WESG 1040 1000 Wilnesport WGDY 1210 100 Elmira WESG 1040 1000 Elmira WESG 1040 1000 Wilnesport WGDY 1210 100 Norfolk WJAG 1060 1000 North Platte WGDY 1180 1000 WGBB 1210 100 Hudson Falls WGC Magusta WGSY 1430 500 Magusta WGSY MGSY	WDDA 1400 100	Ludington	Clay Center	
WSMB 1320 500 N WSMB 1320 500 N WWL 850 10000 Shreveport KRMD 1310 100 KTBS 1450 1000 N KWEA 1210 100 KWKH 850 10000 Minneapolis MAINE	W 130 1230 1000 C	WKBZ 1500 100	KMMJ 740 1000	WCAD 1220 500
WK	W SMB 1320 FOO N	Marquette		
Royal Oak WEXL 310 50 KFAB 770 5000 C KFAB 1210 100 KFAB 1210 100 KWKH 850 10000 KWKH 850 10000 Minneapolis MAINE Augusta WEGY WEXL 1310 50 KFAB 1210 100 KFAB 1210	W 2010 1340 300 N		KGFW 1310 100	
WEXL 1310 50 KFAB 770 5000 C KFNID 1310 100 KTBS 1450 1000 KWKH 850 10000 KWKH 8			Lincoln	
KRMD 1310 100 KTBS 1450 1000 N Fergus Falls KGDE 1210 100 Norfolk WEA 1210 100 KWKH 850 10000 Minneapolis WCC 810 50000 C Augusta WDGY 1180 1000 Omaha WESG 1040 1000 Freeport WGBB 1210 100 Hudson Falls WCC 1370 100 C Jamestown		WEXL 1310 50	KFAB 770 5000 C	
RTBS 1450 1000 N Fergus Falls KGDE 1200 100 KWKH 850 10000 Minneapolis WCCO 810 50000 C Augusta WDGY 1180 1000 Main Main Main Morth Platte WGC 1370 100 C Main Morth Platte WGC 1370 100 C Main Morth Platte WGC 1370 100 C Main Morth Platte Morth Platte WGLC 1370 100 C Main Morth Platte Morth Platte WGLC 1370 100 C Morth Platte Mor	KRMD 1310 100	MINNESOTA	KFOR 1210 100	
KWEA 1710 100 KGDE 1200 100 WJAG 1060 1000 WGBB 1210 100 WIND Hudson Falls WCCO 810 50000 C KGNF 1430 500 WGLC 1370 100 C Augusta WDGY 1180 1000 Omaha Jamestown	KIBS 1450 1000 N		Norfolk	Freeport
Minneapolis		KGDE 1200 100	WJAG 1060 1000	
MAINE WCCO 810 50000 C KGNF 1430 500 WGLC 1370 100 C Augusta WDGY 1180 1000 Omaha Jamestown		Minneapolis	North Platte	
Augusta WDGY 1180 1000 Omaha Jamestown		WCCO 810 50000 C	KGNF 1430 500	WGLC 1370 100 C
WRDO 1370 100 WLB 1250 1000 WAAW 660 500 WOCL 1210 50	Augusta		Omaha	Jamestown
	WRDO 1370 100		WAAW 660 500	

New Yeek	WSAI 1330 1000 R	Hazelton	Yankton
New York WABC 860 50000 C	Cleveland	WAZL 1420 100	WNAX 570 1000 C
WABC 860 50000 C WBNX 1350 250 A	WGAR 1450 500 B	Johnstown	TENNESSEE
WBOO 860 50000	WHK 1390 1000 C	WJAC 1310 100	Bristol
WEAF 660 50000 R	WIAY 610 500	Lancaster	WOPI 1500 100
WEVD 1300 500	WTAM 1070 50000 R	WGAL 1310 100	Chattanooga
WFAB 1300 1000	Columbus	WKJC 1200 100	WDOD 1280 1000 C
WHN 1010 250	WAIU 640 500 _	Philadelphia	Jackson
WINS 1180 500	WCAH 1430 500 C	WCAU 1170 50000 C	WTJS 1310 100
WJZ 760 50000 B	WOSU 570 750	WDAS 1370 100	Knoxville
WLWL 1100 5000	WSEN 1210 100	WFI 560 500 R	WNOX 560 1000 C
WMCA 570 500	Dayton	WHAT 1310 100 WIP 610 500 C	WROL 1310 100
WNYC 810 500	WSMK 1380 200	WLIT 560 500 R	Memphis
WOV 1130 1000	Mount Orab WHBD 1370 100	WPEN 1500 100 A	WHBQ 1370 100
WPAP 1010 250		WRAX 1020 250	WMC 780 500 N
WQAO 1010 250	Toledo WSPD 1340 1000 C	WTEL 1310 100	WNBR 1430 500
WRNY 1010 250	Youngstown	Pittsburgh	WREC 600 500 C
Rochester WHAM 1150 25000 B	WKBN 570 500 C	KDKA 980 50000 B	Nashville
WHEC 1430 500 C	Zanesville		WLAC 1470 5000 C WSM 650 50000 N
Saranac Lake	WALR 1210 100	KQV 1380 500 WCAE 1220 1000 R	WSM 650 50000 N Springfield
WNBZ 1290 50		WJAS 1290 1000 C	WS1X 1210 100
Schenectady	OKLAHOMA	WWSW 1500 100	
WGY 790 50000 R	Elk City	Reading	TEXAS
Syracuse	KASA 1210 100	WEEU 830 1000	Amarillo
WFBL 1360 1000 C	Enid	WRAW 1310 100	KGRS 1410 1000 WDAG 1410 1000
WSYR 570 250 B	KCRC 1370 100	Scranton	Austin
Troy	Norman WNAD 1010 500	WGBI 880 250	KNOW 1500 100
WHAZ 1300 500	Oklahoma City	WOAN 880 250	Beaumont
Tupper Lake	KFXR 1310 100	Silverhaven WNBO 1200 100	KFDM 560 500
WHDL 1420 100	KGFG 1370 100	Sunbury	Brownsville
Utica 1200 100	KOMA 1480 5000 C	WKOK 1210 100	KWWG 1260 500
WIBX 1200 100 White Plains	WKY 900 1000 N	Vilkes-Barre	College Station
	Ponca City	WBAX 1210 100	WTAW 1120 500
WFAS 1210 100 A Woodside	WBBZ 1200 100	WBRE 1310 100	Corpus Christi
WWRL 1500 100	Shawnee	William sport	KGFI 1500 100
	KGFF 1420 100	WRAK 1370 100	Dallas
NORTH CAROLINA	Tulsa	York	KRLD 1040 10000 C
Asheville WWNC 570 1000 N	KOCW 1400 250	WORK 1000 1000	WFAA 800 50000 N WRR 1280 500 C
	KVOO 1140 5000 N	PHILIPPINES	
Charlotte	OREGON	Cebu	Dublin
Charlotte WBT 1080 25000 C	OREGON	Cebu KZRC 937.5 500	Dublin KFPL 1310 100
Charlotte WBT 1080 25000 C WSOC 1210 100	OREGON Corvallis	Cebu KZRC 937.5 500 Manila	Dublin KFPL 1310 100 El Paso
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro	OREGON Corvallis	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000	Dublin KFPL 1310 100 EI Paso KTSM 1310 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000	Dublin KFPL 1310 100 El Paso
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE (SLAND	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N WIIMIngton WRAM 1370 100 Winston-Salem	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N WIlmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 C KGW 620 1000 N	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A	Dublin KFL 1310 100 El Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen RRGV 1260 500 Houston KPRC 920 1000 N
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 KGW 620 1000 N KGJW 620 1000 C	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen RRGV 1260 500 Houston KPRC 920 1000 N
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 KGW 620 1000 N KOIN 940 1000 C KWJJ 1060 500	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N	Dublin KFL 1310 100 El Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 KGW 620 1000 N KGJW 620 1000 C	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 KGW 620 1000 N KOIN 940 1000 C KWJJ 1060 500 KXL 1420 100	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100	Dublin KPL 1310 100 El Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen RRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WAM 1370 100 C Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devills Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo·ks	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 KGW 620 1000 N KOIN 940 1000 C KWJJ 1060 500	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C W JAR 890 500 R WPRO 1210 100 A Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Forks KFJM 1370 100	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 N KGW 620 1000 N KOIN 940 1000 C KWJJ 1060 500 KXL 1420 100 FENNSYLVANIA	Cebu KZRC 937.5 500 Manila KZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 HOUSTON KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo ks KFJM 1370 100 Mandan	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 C KGW 620 1000 N KOIN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA	Dublin KFPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Antonio KABC 1420 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo·ks KFJM 1370 100 Mandan KGCU 1240 250	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KGW 620 1000 N KGW 620 1000 N KOIN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 Altoora	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings	Dublin KFPL 1310 100 E1 Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Antonio KABC 1370 100 KMAC 1370 100 KMAC 1370 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo-ks KFJM 1370 100 Mandan KGCU 1240 250 Minot	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Marshfield KOOS 1370 100 Portland KALE 1300 500 C KBPS 1440 100 KEX 1180 5000 N KFJR 1300 500 KGW 620 1000 N KGJN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 Altoona WFBG 1310 100	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500	Dublin KPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen RRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 SAN Antonio KABC 1420 100 KMAC 1370 100 KMAC 1370 100 KMONO 1370 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo·ks KFJM 1370 100 Mandan KGCU 1240 250	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 C KBPS 1420 1000 N KGW 620 1000 N KOIN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 WAN 1440 250 Altoona WFBG 1310 100 Carbondale	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron	Dublin KFPL 1310 100 E1 Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 KMAC 1370 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo-ks KFJM 1370 100 Mandan KGCU 1240 250 Minot	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 N KFJR 1300 500 KGW 620 1000 N KOIN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 WSAN 1440 250 Altoona WFBG 1310 100 Carbondale WNBW 1200 10	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron KGDY 1340 250	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 HOUSTON KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 KABC 1420 100 KABC 1420 100 KMAC 1370 100 KONO 1370 100 KONO 1370 100 KTSA 1290 1000 C KWOAI 1190 50000 N
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo ks KFJM 1370 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 OHIO	Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 C KBPS 1420 1000 N KFJR 1300 500 KGW 620 1000 N KFJR 1300 500 KGW 620 1000 N KGJN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 Altoona WFBG 1310 100 Carbondale WNBW 1200 10 Erie	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron KGDY 1340 250 Pierre	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Antonio KABC 1370 100 KABC 1370 100 SAN ACT 100 KABC 1370 100 KONO 1370 100 KTSA 1290 1000 C WOAI 1190 50000 N Tyler
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo-ks KFJM 1370 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 OHIO Akron	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1310 500 N KFJR 1310 500 C KBY 1420 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 WAN 1440 250 Altoona WFBG 1310 100 Carbondale WNBW 1200 10 Erie WLBW 1260 500 C	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron KGDY 1340 250 Pierre KGFX 630 200	Dublin KFPL 1310 100 E1 Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 KMAC 1370 100 KONO 1370 100 KTSA 1290 1000 C WOAI 1190 50000 N Tyler KGKB 1500 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo-ks KFJM 1370 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 OHIO Akron	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 C KBPS 1420 1000 N KFJR 1300 500 K KJJ 1060 500 KGW 620 1000 N KGJN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 Altoona WFBG 1310 100 Carbondale WBW 1200 10 Erie WLBW 1260 500 C Glenside	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron KGDY 1340 250 Pierre KGFX 630 200 RABOOK A 1100 ROWN 1340 250 Pierre KGFX 630 200 RABOOK A 1100 ROWN 1340 250 Pierre KGFX 630 200 RABOOK A 1100	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen RRGV 1260 500 Houston KPR 920 1000 N KTRH 1120 1000 C KYYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 KABC 1420 100 KMAC 1370 100 KABC 1420 100 KMAC 1370 100 KMAC 1370 100 KMAC 1370 100 KMAC 1370 100 KMAC 1490 50000 N Tyler KGKB 1500 100 WAGO 1100 KONO 1370 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo ks KFJM 1370 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 OHIO Akron WADC 1320 1000 C WJW 1210 100	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 C KGW 620 1000 N KGJN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 WSAN 1440 250 WSAN 1440 250 Altoona WFBG 1310 100 Carbondale WNBW 1200 10 Eile WLBW 1260 500 C Glenside WIBG 930 25	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Hurron KGDY 1340 250 Pierre KGFX 630 200 Rapid City WCAT 1200 100	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Antonio KABC 1370 100 San Antonio KABC 1370 100 KABC 1420 100 KTSA 1290 1000 C WOAI 1190 50000 N Tyler KGKB 1500 100 Waco WACO 1420 100 C
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo-ks KFJM 1370 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 OHIO Akron WADC 1320 1000 C WJW 1210 100 Canton	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Marshfield KOOS 1370 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 KGW 620 1000 N KFJR 1300 500 KGW 620 1000 N KFJR 1300 500 KGW 620 1000 N KJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 Altoona WFBG 1310 100 Carbondale WNBW 1200 10 Erie WLBW 1260 500 C Glenside WIBG 930 25 Grove City	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron KGDY 1340 250 Pierre KGFX 630 200 Rapid City WCAT 1200 100 Sioux Falls	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 KMAC 1420 100 KMAC 1370 100 KMAC 1420 100 KMAC 1370 100 KMAC 1420 100 C Waco
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo ks KFJM 1370 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 OHIO Akron WADC 1320 1000 C WJW 1210 100 Canton WHBC 1200 100	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 C KBPS 1420 1000 N KFJR 1300 500 KGW 620 1000 N KFJR 1300 500 KGW 620 1000 N KFJR 1300 500 KGW 620 1000 N KFJR 1300 500 KGW 1420 1000 PENNSYLVANIA Allentown WCBA 1440 250 Altoona WFBG 1310 100 Carbondale WNBW 1200 10 Erie WLBW 1260 500 C Glenside WIBG 930 25 Grove City WSAJ 1310 100	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C W JAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron KGDY 1340 250 Pierre KGFX 630 200 Rapid City WCAT 1200 100 Sioux Falls KSOO 1110 1000	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 KABC 1420 100 KMAC 1370 100 KMAC 1420 100 C Wichita Falls KGKO 570 250
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo ks KFJM 1370 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 OHIO Akron WADC 1320 1000 C WJW 1210 100 Canton WHBC 1200 100 CIncinnati WFBE 1200 100 CIncinnati WFBE 1200 100	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 N KFJR 1300 500 N KFJR 1300 500 N KGW 620 1000 N KOIN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 WSAN 140 250 WSAN 140 250 WSAN 140 250 WSAN 140 250 Grove City WSAJ 1310 100 Grove City WSAJ 1310 100 Harrisburg	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron KGDY 1340 250 Pierre KGPX 630 200 Rapid City WCAT 1200 100 Sour Falls KSOO 1110 1000 Vermillion KUSD 890 500	Dublin KPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen RRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 KABC 1420 100 KABC 1420 100 KMAC 1370 100 KTSA 1290 1000 C WOAJ 1190 50000 N Tyler KGKB 1500 100 WACO WACO 1420 100 C WICHITE FAILS KGKO 570 250
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devlis Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand Fo ks KFJM 1370 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 Minot WADC 1320 1000 C WJW 1210 100 Canton WHBC 1200 100 Clncinnati WFBE 1200 100 WKRC 550 1000 C	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1310 500 N KFJR 1310 500 N KGW 620 1000 N KOJN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 WSAN 1440 1000 WSAN 1430 1000	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron KGDY 1340 250 Pierre KGFX 630 200 Rapid City WCAT 1200 100 Sioux Falls KSOO 1110 1000 Vermillion KUSD 890 500 Watertown	Dublin KFJL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen KRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 SAN 1370 100 KMAC 1420 100 KMAC 1370 100
Charlotte WBT 1080 25000 C WSOC 1210 100 Greensboro WBIG 1440 500 C Greenville WEED 1420 100 Raleigh WPTF 680 5000 N Wilmington WRAM 1370 100 Winston-Salem WSJS 1310 100 C NORTH DAKOTA Bismarck KFYR 550 1000 N Devils Lake KDLR 1210 100 Fargo WDAY 940 1000 N Grand fo ks KFJM 1370 100 Mandan KGCU 1240 250 Minot KLPM 1240 250 OHIO Akron WADC 1320 1000 C USALEA WHBC 1200 100 CIncinnati WFBE 1200 100 CIncinnati WFBE 1200 100	OREGON Corvallis KOAC 550 1000 Eugene KORE 1420 100 Klamath Falls KFJI 1210 100 Marshfield KOOS 1370 100 Medford KMED 1310 100 Portland KALE 1300 500 C KBPS 1420 100 KEX 1180 5000 N KFJR 1300 500 C KBPS 1420 1000 N KFJR 1300 500 N KGJN 620 1000 N KGJN 940 1000 C KWJJ 1060 500 KXL 1420 100 PENNSYLVANIA Allentown WCBA 1440 250 Altoona WFBG 1310 100 Carbondale WNBW 1200 10 Erie WLBW 1260 500 C Glenside WIBG 930 25 Grove City WSAJ 1310 100 Harrisburg WBAK 1430 1000	Cebu KZRC 937.5 500 Manila RZEG 618.5 1000 KZKA 1110 1000 KZRM 618.5 50000 PORTO RICO San Juan WKAQ 1240 1000 RHODE ISLAND Providence WEAN 780 500 C WJAR 890 500 R WPRO 1210 100 A SOUTH CAROLINA Charleston WCSC 1360 500 Columbia WIS 1010 500 N Greenville WFBC 1200 100 Spartanburg WSPA 1420 100 SOUTH DAKOTA Brookings KFDY 550 500 Huron KGDY 1340 250 Pierre KGPX 630 200 Rapid City WCAT 1200 100 Sour Falls KSOO 1110 1000 Vermillion KUSD 890 500	Dublin KPL 1310 100 EI Paso KTSM 1310 100 WDAH 1310 100 Fort Worth KFJZ 1370 100 KTAT 1240 1000 C WBAP 800 50000 N Galveston KLUF 1370 100 Greenville KFPM 1310 15 Harlingen RRGV 1260 500 Houston KPRC 920 1000 N KTRH 1120 1000 C KXYZ 1440 250 Lubbock KFYO 1310 100 San Angelo KGKL 1370 100 San Angelo KGKL 1370 100 KABC 1420 100 KABC 1420 100 KMAC 1370 100 KTSA 1290 1000 C WOAJ 1190 50000 N Tyler KGKB 1500 100 WACO WACO 1420 100 C WICHITE FAILS KGKO 570 250

Salt Lake City			
	Huntington	St. John	Fleming
KDYL 1290 1000 N	WSAZ 1190 1000	CFBO 1210 100 F	CJRW 880 500 F
	Wheeling		Moose Jaw
KSL 1130 50000 C		NOVA SCOTIA	
VERMONT	WWVA 1160 5000 C	Glace Bay	CHAB 1200 25 F
	WISCONSIN	VAS 685 2000	CJRM 880 500 F
Burlington	Eau Claire	Halifax	Prince Albert
WCAX 1200 100 A		CHNS 1050 500 F	10-BI 1200 25
Rutland			
WSYB 1500 100 A	Fond du Lac	Sydney	Regina
	KFIZ 1420 100	CJČB 880 50 F	CHWC 1010 500 F
St. Albans	Green Bay	Wolfville	CHWC 1010 500 F CKCK 1010 500 F
WQDM 1370 100	WHBY 1200 100	CKIC 1010 50	
Springfield			Saskatoon
WNBX 1260 250	Janesville	ONTARIO	CFQC 890 500 F
Waterbury	WCLO 1200 100	Brantford	Yorkton
	LaCrosse	10-BO 1200 5	CJGX 630 500 F
WDEV 550 500	WKBH 1380 1000 C	Chatham	
VIRGINIA	Madison	CFCO 1210 100 F	NEWFOUNDLAND
	WHA 940 1000		St. John's
Arlington	WITA 940 1000	Cobalt	
NAA 690 1000	WIBA 1280 500 N	CKMC 1210 100	
Charlottesville	Manitowoc	Fort William	VOAS 810 100
WEHC 1350 500	WOMT 1210 100	CKPR 780 100 F	VOGY 1400 75
Danville	Milwaukee	Hamilton	VOKW 1085 30 VONF 1195 400
Danville	WHAD 1120 250 C	CHML 1010 50	VONF 1195 400
WBTM 1370 100	WISN 1120 250 C		VOWR 900 500
Lynchburg WLVA 1370 100	WISN 1120 250 C	CKOC 1120 500 F	10111 300 300
WLVA 1370 100	WTMJ 620 1000 N	Kingston	CENTRAL
Newport News	Poynette	CFRC 915 100	
WGH 1310 100	WIBU 1210 100	Kitchener	AMERICA
Norfolk	Racine	CKCR 645 100	
	WRJN 1370 100	London	COSTA RICA
WTAR 780 500 C		CFPL 730 100 F	Cartago
Petersburg	Sheboygan		TIFS 1441 7.5
WPHR 1200 100	WHBL 1410 500	North Bay	TIGA 1014 30
Richmond	Stevens Point	CFCH 930 100 F	
WBBL 1210 100	WLBL 900 2500	Ottawa	San Jose
WMBG 1210 100 C	Superior	CKCO 1010 100	TICR 912 75
WRVA 1110 5000 N	WEBC 1290 1000 N	CRCO 880 500 F	TIEA 833 7.5 TIEP 1450 7.5
WRVA IIIO 3000 IV		Prescott	TIEP 1450 7.5
Roanoke	WYOMING	CFLC 930 100	TIFB 714 30
WDBJ 930 250 C	Casper		TIGP 666 75
WRBX 1410 250	KDFN 1440 500	Preston	
MACHINIOTON		CKPC 930 100 F	
WASHINGTON	CANADA	St. Catharines	TISO 550 250
Aberdeen	ALBERTA	CKTB 1200 100	TITV 999 7.5
KXRO 1310 100	Calgary _	Stratford	TIVL 869 30
Bellingham	CFAC 690 500 F	10-AK 1200 15	TIXA 614 7.5
KVOS 1200 100	CFCN 1030 10000 F	Sudbury	GUATEMALA
Everett			
KFBL 1370 50	CJCJ 690 5 00 F		Guatemala City
	Edmonton	Toronto	TGW 1350 500
Olympia 100	CHMA 580 250	CFRB 690 10000 C	TGX 1380 75
KG1 1210 100	CJCA 730 500 F	CKCL 580 100	EL SALVADOR
	CKUA 580 500 F	CRCT 960 5000 N	
Pullman			San Salvador
Pullman KWSC 1220 1000	Lethridge	CKNC 1030 100 F	Sali Salvauvi
KWSC 1220 1000 Seattle	Lethridge	CKNC 1030 100 F	RUS 664 500
KWSC 1220 1000 Seattle	CJOC 840 100 F	Windsor	RUS 664 500
KWSC 1220 1000 Seattle KIR 970 5000 N	CJOC 840 100 F BRT. COLUMBIA	Windsor CKLW 540 5000 C	RUS 664 500 MEXICO
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C	CJOC 840 100 F	Windsor CKLW 540 5000 C Wingham	RUS 664 500 MEXICO
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N	CJOC 840 100 F BRT. COLUMBIA Chilliwack	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15	RUS 664 500 MEXICO AGUASCALIENTES
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD	MEXICO AGUASCALIENTES Aguascalientes
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND	RUS 664 500 MEXICO AGUASCALIENTES
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown	MEXICO AGUASCALIENTES Aguascalientes
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KXA 760 250	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 100 KTW 1220 1000 KVL 1370 100 KVL 1370 100 KXA 760 250 Spokane	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KYL 1370 100 KYL 1370 100 KXA 760 250 Spokane KFIO 1120 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 100 KTW 1220 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KFPY 1340 1000 C	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KVA 760 250 Spokane KFIO 1120 100 KGA 1470 5000 N	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 Vancouver CJOR 1210 500	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA
New Sc 1220 1000	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KYL 1370 100 KYL 1370 100 KYL 1370 100 KYL 1370 100 KYA 760 250 Spokane KFIO 1120 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMO 1410 100	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutim1 CRCS 1500 100 F Hull	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KYL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMO 1410 100 CKWO 1410 100 CKWN 1010 100	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 11120 100 KFPY 1340 1000 C KGA 1470 5000 N Tacoma KMO 1330 250 KVI 570 500 C	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMX 1010 100 CKWX 1010 100 CRCV 1100 500 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KGPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMX 1010 100 CKWX 1010 100 CRCV 1100 500 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull 1210 100 F La Prairie CRCM 910 5000 F Montreal	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEFV 1370 100
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KVL 1370 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 Walla Walla KUJ 1370 100 Wenatchee	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMO 1410 100 CKWX 1010 100 CRCV 1100 500 F Victoria CFCT 1430 50	Windsor CKLW 540 5000 C Wingham 10-BP 1200 ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KYL 1370 100 KYL 1370 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Wenatchee KPO 1500 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria CFCT 1430 50 MANITOBA	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA
New Sc 1220 1000	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMO 1410 100 CKWX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria CFCT 1430 50 MANITOBA Brandon	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KYL 1370 100 KYL 1370 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Wenatchee KPO 1500 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria CRCV 11430 50 MANITOBA Brandon CKX 930 500 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F Hull CKCH 210 100 F CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEJ 1015 500 COAHUILA Piedras Negras
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Yakima KIT 1310 100	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria CRCV 11430 50 MANITOBA Brandon CKX 930 500 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C New Carlisle	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarey XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA Piedras Negras XEPN 585 75000
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KYL 1370 100 KYL 1370 100 KYL 1370 100 KYL 1370 100 KKPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Wenatchee KPQ 1500 100 Yakima KIT 1310 100 WEST VIRGINIA	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria CRCV 11430 50 MANITOBA Brandon CKX 930 500 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C New Carlisle CHNC 1210 100	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEF1 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA Piedras Negras XEPN 585 75000 Saltillo
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Wenatchee KPQ 1500 100 Yakima KIT 1310 100 WEST VIRGINIA Bluefield	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMO 1410 100 CKWX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria CFCT 1430 50 MANITOBA Brandon CKX 930 500 F Winnipeg CKY 910 5000 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C New Carlisle CHNC 1210 100 Quebec	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA Piedras Negras XEPN 585 75000 Saltillo XEL 1000 40
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Wenatchee KPQ 1500 100 Yakima KIT 1310 100 WEST VIRGINIA Bluefield WHIS 1410 250	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKCD 1010 100 CKFC 1410 50 CKWX 1010 100 CRCV 1100 500 F Victoria CFCT 1430 50 MANITOBA Brandon CKX 930 500 F Winnipeg CKY 910 5000 F NEW BRUNSWICK	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C New Carlisle CHNC 1210 100 Quebec CHRC 645 100 F	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA Piedras Negras XEPN 585 75000 Saltillo XEL 1000 40 Torreeon
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KVL 1370 100 KVL 1370 100 KVL 1370 100 KYL 1340 1000 C KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Wenatchee KPQ 1500 100 Yakima KIT 1310 100 WEST VIRGINIA Bluefield WHIS 1410 250 Charleston	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKCD 1010 100 CKFC 1410 500 CKWX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria CFCT 1430 50 MANITOBA Brandon CKX 930 500 F Winnipeg CKY 910 5000 F NEW BRUNSWICK Fredericton	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F Hull CKCH 1210 100 F CCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C New Carlisle CHNC 1210 100 G Quebec CHRC 645 100 F CKCV 1310 50	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA Piedras Negras XEPN 585 75000 Saltillo Saltillo XEL 1000 40 Torreeon XETB 1380 125
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KXA 760 250 Spokane KFIO 1120 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 West VIRGINIA Bluefield WHIS 1410 250 Charleston WOBU 580 2000 N 5000 N 100 WEST VIRGINIA Bluefield Charleston WOBU 580 250	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMO 1410 100 CKWX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria CFCT 1430 50 MANITOBA Brandon CKX 930 500 F Winnipeg CKY 910 5000 F NEW BRUNSWICK Fredericton CFNB 1030 500 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C New Carlisle CHNC 1210 100 Quebec CHRC 645 100 F CKCV 1310 50 SASKATCHEWAN	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA Piedras Negras XEPN 585 75000 Saltillo XEL 1000 40 Torreon XETB 1380 125 Villa Acuna
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KYL 1370 100 KYL 1370 100 KYL 1370 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Wenatchee KPQ 1500 100 Yakima KIT 1310 100 WEST VIRGINIA Bluefield WHIS 1410 250 Charleston WOBU 580 250	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKCD 1010 100 CKFC 1410 50 CKMX 1010 100 CKWX 1010 100 CKWX 1010 500 F Victoria CFCT 1430 50 MANITOBA Brandon CKY 930 500 F Winnipeg CKY 910 5000 F NEW BRUNSWICK Fredericton CFNB 1030 500 F Montton	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C New Carlisle CHNC 1210 100 Quebec CHRC 645 100 F CKCV 1310 50 SASKATCHEWAN Canora	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEF1 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA Piedras Negras XEPN 585 75000 Saltillo XEL 1000 40 Torreon XETB 1380 125 Villa Acuna XER 735 150000
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KYL 1370 100 KYL 1370 100 KYL 1370 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Wenatchee KPQ 1500 100 Yakima KIT 1310 100 WEST VIRGINIA Bluefield WHIS 1410 250 Charleston WOBU 580 250	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKFC 1410 50 CKMO 1410 100 CKWX 1010 100 CKWX 1010 100 CRCV 1100 500 F Victoria CFCT 1430 50 MANITOBA Brandon CKX 930 500 F Winnipeg CKY 910 5000 F NEW BRUNSWICK Fredericton CFNB 1030 500 F	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C New Carlisle CHNC 1210 100 Quebec CHRC 645 100 F CKCV 1310 50 SASKATCHEWAN	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEFI 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA Piedras Negras XEPN 585 75000 Saltillo XEL 1000 40 Torreon XETB 1380 125 Villa Acuna
KWSC 1220 1000 Seattle KJR 970 5000 N KOL 1270 1000 C KOMO 920 1000 N KPCB 650 100 KRSC 1120 1000 KTW 1220 1000 KVL 1370 100 KYL 1370 100 KYL 1370 100 KYL 1370 100 KFPY 1340 1000 C KGA 1470 5000 N KHQ 590 1000 N Tacoma KMO 1330 250 KVI 570 500 C Walla Walla KUJ 1370 100 Wenatchee KPQ 1500 100 Yakima KIT 1310 100 WEST VIRGINIA Bluefield WHIS 1410 250 Charleston WOBU 580 250 Fairmont	CJOC 840 100 F BRT. COLUMBIA Chilliwack CHWK 780 100 F Kamloops CFJC 1310 100 F Kelowna CKOV 1200 100 F Trail 10-AT 1155 25 Vancouver CJOR 1210 500 CKCD 1010 100 CKCD 1010 100 CKFC 1410 50 CKMX 1010 100 CKWX 1010 100 CKWX 1010 500 F Victoria CFCT 1430 50 MANITOBA Brandon CKY 930 500 F Winnipeg CKY 910 5000 F NEW BRUNSWICK Fredericton CFNB 1030 500 F Montton	Windsor CKLW 540 5000 C Wingham 10-BP 1200 15 PRINCE EDWARD ISLAND Charlottetown CFCY 630 500 F CHCK 1310 100 Summerside CHGS 1120 100 F QUEBEC Chicoutimi CRCS 1500 100 F Hull CKCH 1210 100 F La Prairie CRCM 910 5000 F Montreal CFCF 600 500 N CHLP 1120 100 F CKAC 730 5000 C New Carlisle CHNC 1210 100 Quebec CHRC 645 100 F CKCV 1310 50 SASKATCHEWAN Canora	RUS 664 500 MEXICO AGUASCALIENTES Aguascalientes XFC 805 350 BAJA CALIFORNIA Mexicali XEAO 560 100 Tijuana XEAE 980 800 XEFD 757 5000 CHIHUAHUA Chihuahua XEF1 1260 250 Juarez XEAN 750 5000 XEFV 1370 100 XEJ 1015 500 COAHUILA Piedras Negras XEPN 585 75000 Saltillo XEL 1000 40 Torreon XETB 1380 125 Villa Acuna XER 735 150000

			614614 1116 500
D. F.	PUEBLA Puebla	Cardenas	CMCY 1320 500
Mexico City XEAD 875 250	XETH 860 100	CMGE 1375 30	CMDE 925 150 CMK 730 5000
		Ciego de Avila CMJH 1150 50	
XEAI 1090 100 XEB 1030 10000	QUERETARO	CMJI 1280 45	CMQ 630 500 CMW 590 1400
XEFA 1250 500	Queretaro	CMJO 1010 50	CMX 890 1400 CMX 890 1000
XEFG 1085 500	XEFS 1000 40	Cienfuegos	Matanzas
XEFZ 1370 100	SAN LUIS POTOSI	CMH J 1125 60	CMGB 1205 30
XEG 1075 500	San Luis Potosi	CMHL 1290 20	CMGC 820 30
XEK 990 100	XEAC 1295 100	Colon	CMGF 977 100
XEN 711 1000	TAMAULIPAS	CMGA 834 100	CMGH 1040 15
XEO 940 5000	Nuevo Laredo	Cruces	Moron
XEP 780 500	XEAB 1450 7.5	CMHK 1225 50	CMJP 1360 75
XEQ 1330 500	XEFE 1000 100	Guantanamo	Pinar del Rio
XETA 1180 250	XENT 1115 150000	CMKJ 1300 20	CMAB 1249 20
XETR 610 1000	Reynosa	Havana	Santa Clara
XETW 830 500	XEAW 965 10000	CMAF 680 1000	CMHI 1037 250
XEW 910 5000	Tampico	CMBC 1270 150	Santiago
XEX 1210 500	XEFW 1280 70	CMBD 965 250	CMKC 1034 150
XEYZ 780 10000	XES 1020 250	CMBG 1070 42a	DOMINICAN
XFG 638 2000	VERACRUZ	CMBJ 1140 50J	REPUBLIC
XFO 940 5000	Jalapa	CMBK 1445 15	San Pedro de
XFX 840 500	XFB 1290 1000	CMBL 1445 200	Marcoris
Toluca	Veracruz	CMBN 1185 150	HIH 1395 15
XEC 1000 50	XEU 1010 100	CMBS 780 200	Santo Domingo
HIDALGO	YUCATAN	CMBW 1140 600	HIJ 1195 15
Pachuca	Merida	CMBY 1230 250	HIJK 1180 15000
XETU 890 100	XEFC 1050 100	CMBZ 1010 150	HIX 580 1500
1411600	XEY 546.8 10	CMC 840 500	HAJTI
JALISCO	XEZ 630 500	CMCA 1230 150	Port-au-Prince
Guadalajara XEA 1000 250	WEST INDIES	CMCB 1070 150	HHK 920 1000
XEA 1000 250 XED 1155 500	CUBA	CMCD 925 500	1
	Caibarien	CMCF 890 250	SOUTH
MICHOACAN	CMHD 950 500	CMCH 1410 50	AMERICA
Morelia	Camaguey	CMCJ 1185 500	COLOMBIA
XEI 1310 250	CMJC 1382 150	CMCM 1410 15	Bogota
NUEVO LEON	CMJE 1175 50	CMCN 1375 250	HJN 681 500
Monterrey	CMJF 930 200	CMCP 1270 150	VENEZUELA
XEFB 1315 100	CM IG 1050 50	CMCO 780 1000	Caracas
XEFI 1000 100	CM JK 790 500	CMCR 1375 150	YVIBC 960 5000
XEH 1132 250	CMJL 960 50	CMCU 1100 500	YV2BC 882 100
XET 690 500	CMJN 1240 50	CMCW 965 150	YV3BC 1200 1000
			1 323 1200 1000

He COULDN'T

Believe It

(Continued from page 39) and after listening to it for a little while I found it to be 2YA, Wellington, New Zealand. Boy, did my chest swell up then?

I have a ten-tube RCA-Victor, model R-50, and now I can get 2YA whenever I am able to tune in KTM on 780 at good volume. And I am able to tune KTM in five out of every six mornings at about 5:00 a. m., EST.—W. T. R. Morris, Jr., 3219 Garland Ave., Richmond, Va.

"In looking over the May RADEX, I noted the usual letters of skeptics of trans-Pacific reception," comments C. H. Skatzes, 45 Flax St., Delaware, Ohio. "I have received 4QG, 2YA, 3LO. as well as HJN and YVIBC

since the first of this year. Almost any good night between 4:00 and 6:00 a. m. EST., 4QG can be heard, although it has to be an exceptionally good night to receive the program without quite a bit of noise. March 5, the stations 4QG, 2YA, 3LO and one on 630 unidentified, were coming in with exceptional clarity and volume and anyone listening on that morning should have been able to receive them easily. 3LO announced his call at 5 a. m. loud and clear enough to raise the roof. Anvone hearing a station playing Columbia recordings between 4:00 and 6:00 a. m., or broadcasting church services, is advised to stick to the station and see if it isn't one of the Aussies or Zedders. HJN and YV1BC are received more easily than the westcoast stations when they present special programs."

CFAC 690 500 Calgary, Alta.	CKCD 1010 100 Vancouver, B. C. Vancouver Daily Province.
Calgary Herald. CFBO 1210 100 St. John, N. B.	CKCH 1210 100 Hull, Que. Dr. J. L. Chabot,
C. A. Munro, Ltd. CFCF 600 500 Mon@real, Que.	CKCK 1010 500 Regina, Sask. Leader-Post, Ltd.
Canadian Marconi Co. CFCH 930 100 North Bay, Ont.	CKCL 580 100 Toronto, Ont. Dominion Battery Co., Ltd.
Northern Broadcasting Co., Ltd. CFCN 1030 10000 Calgary, Alta.	CKCO 1010 100 Ottawa, Ont. Dr. G. M. Geldert.
W. W. Grant & H. G. Love. CFCO 1210 100 Chatham, Ont.	CKCR 645 100 Kitchener, Ont. William C. Mitchell and G. Liddle.
John Beardall. CFCT 1430 50 Victoria, B. C.	CKCV 1310 50 Quebec, Que. Vandry, Inc.
Victoria Broadcasting Assn. CFCY 630 500 Charlottetown, P. E. I.	CKFC 1410 50 Vancouver, B. C. Radio Service Engineers, Ltd.
Island Radio Broadcasting Co., Ltd. CFJC 1810 100 Kamdoops, B. C.	CKIC 1010 50 Wolfville, N. S. Acadia University.
Review Publishing Co., Ltd. CFLC 930 100 Prescott, Out.	CKLW 540 5000 Windsor, Ont. Western Ontario Broadcasting Co., Ltd.
Radio Assn. of Prescott. CFNB 1030 500 Fredericton, N. B.	CKMC 1210 100 Cobatt, Ont. R. L. MacAdam.
James S. Neill & Sons, Ltd. GFPL 730 100 London, Ont.	CKMO 1410 100 Vancouver, B. C. Sprott-Shaw Radio Co.
Free Press & Printing Co., Ltd. CFQC 890 500 Saskatoon, Sask. Electric Shop, Ltd.	CKNC 1030 100 Toronto, Ont. Canadian National Carbon Co., Ltd.
CFRB 690 10000 Toronto, Ont.	CKOC 1120 500 Hamilton, Ont. Wentworth Radio Broadcasting Co., Ltd.
Canadian Radio Corp., Ltd CFRC 915 100 Kineston, Ont. Queens University	CKOV 1200 100 Kelowna, B. C. Okanagan Broadcasters, Ltd., Box 243.
GHAB 1200 25 Moese Jaw, Sask. Moose Jaw Radio Assn.	CKPC 930 100 Preston, Ont. Cyrus Dolph.
CHCK 1310 100 Charlottetown, P. E. I. J. A. Geener.	CKPR 780 100 Fort William, Ont. Dougall Motor Co., Ltd.
CHGS 1120 100 Summerside, P. E. I. R. T. Holman, Ltd.	CKTB 1200 100 St. Catherines, Om. E. T. Sandell.
CHLP 1120 100 Montreal, Que. La Patrie Publishing Co., Ltd.	CKUA 580 500 Edmonton, Alta. University of Alberta.
CHMA 580 250 Edmonton, Alta. Christian and Missionary Alliance.	CKWX 1010 100 Vancouver, B. C. Western Broadcasting Co., Ltd.
CHML 1010 50 Hamilton, Ont. Maple Leaf Radio Co., Ltd.	CKX 930 500 Brandon, Man. Manitoba Telephone System.
CHNC 1210 100 New Carlisle, Que. Dr. Charles Houde.	CKY 910 5000 Winnipeg, Man. Manitoba Telephone System.
CHNS 1050 500 Halifax, N. S. Maritime Broadcasting Co., Ltd.	CMAB 1249 20 Pinar del Rio, Cuba. Jose Silvera, Marti No. 101.
CHRC 645 100 Quebec, Que. CHRC, Ltd.	CMAF 880 1000 Havana, Cuba. International Broadcasting Co., Miramar.
CHWC 1010 500 Regina, Sask. R. H. Williams & Sons, Ltd.	CMBC 1270 150 Havana, Cuba. Domingo Fernandez, Maximo Gomez No. 139.
CHWK 780 100 Chilliwack, B. C. Chilliwack Broadcasting Co., Ltd.	CMBD 965 250 Havana, Cuba. Luis Perez Garcia. Enamorados y Flores.
CJCA 730 500 Edmonton, Alta. Edmonton Journal, Ltd.	CMBG 1070 225 Havana, Cuba. John L. Stowers, Hospital No. 100
CJCB 880 50 Sydney, N. S. Nathanson's Radio Headquarters.	CMBJ 1140 500 Havana, Cuba. Emilio Perera, Consulado y Virtudes.
CJCJ 690 500 Calgary, Alta. Albertan Publishing Co., Ltd.	CMBK 1445 15 Havana, Cuba. Alberto Alverez, Paula y Oficios.
CJCS 780 500 Sudbury, Ont. George McLeod Cootes	CMBL 1445 200 Havana, Cuba. Julio C. Hidalgo, Vedado.
CJGX 630 500 Yorkton, Sask. Winnipeg Grain Exchange.	CMBN 1185 150 Havana, Cuba. G. de Sequeira, Agrimonte No. 32
CJOC 840 100 Lethbridge, Alta. H. R. Carson, Ltd.	CMBS 780 200 Havana, Cuba. Enrique Artalejo, Calzada y H. St.
G. C. Chandler.	CMBW 1140 800 Havana, Cuba. Alvarez, Moris y Cis, Obrapia No. 13.
CJRM 880 500 Meose Jaw, Sask. James Richardson & Sons, Ltd.	CMBY 1230 250 Havana, Cuba. Callejas-Estefani, Principe No. 33.
CJRW 880 500 Fleming, Sask. James Richardson & Sons, Ltd.	CMBZ 1010 150 Havana, Cuba. Manuel y G. Salas, San Rafael No. 14.
CKAC 730 5000 Montreal, Que. LaPresse Publishing Co., Ltd.	CMC 840 500 Havana, Cuba. Radio Corp. of Cuba.

СМСА 1230 150 Havana, Cuba.	CMJP 1360 75 Moron Cuba
Manuel Cruz, Ave. de Italia No. 102.	
CMOR 1070 450 H	Cesar Canall, Callejas No. 28.
CMCB 1070 150 Havana, Cuba.	CMK 730 5000 Havana, Cuba.
Metropolitan-Radio de Cuba.	National Broadcasting Co. of Cuba.
CMCD 925 500 Havana, Cuba.	CMKC 1034 150 Santiago, Cuba.
Angel Bertematy.	Pinol Batlle y Co.
CMCF 890 250 Havana, Cuba.	
Raoul Karman.	CMKJ 1300 20 Guantanamo, Cuba.
	Luis Morlote, East Giro 11.
CMCH 1410 50 Havana, Cuba.	CMQ 630 500 Havana, Cuba.
Wifredo y Humberto Fontanals Sanchez.	Jose Fernandez, 25 Numero 445.
CMCJ 1185 500 Havana, Cuba.	CMW 590 1400 Havana, Cuba.
Rafael Rodriquez, Estevez No. 4.	Troncoso y Gil, Paseo de Marti 103.
CMCM 1410 15 Havana, Cuba.	
Aurelio Balino, Belas Coain No. 639.	CMX 890 1000 Havana, Cuba.
	Casa "Lavin," Ave. de la Republica 99A.
CMCN 1375 250 Havana, Cuba.	CRCA 580 500 Moncton, N. B.
Antonio Ginard, Reina y Ave. Buen Retiroe	Canadian Radio Broadcasting Commission.
CMCP 1270 150 Havana, Cuba,	CRCM 910 5000 LaPrairie, Que.
Jose A. Yaniz	Canadian Radio Broa leasting Commission
	CRCO 880 500 Ottawa. Ont.
Andres Martinez, Vista Alegre No. 80.	Canadian Radio Broadcasting Commission
CMCR 1375 150 Havana, Cuba.	CRCS 1500 100 Chicautimi, Que.
Aurelio Hernandez.	Canadian Radio Broadcasting Commission.
CMCU 1100 500 Havana, Cuba.	CRCT 960 5000 Toronto, Ont.
Jorge Garcia Serra.	Canadian Radio Broadcasting Commission
	CRCV 1100 500 Vancouver, B. C.
CMCW 965 150 Havana, Cuba. Vilarino y Cervantes.	Canadian Radio Broadcasting Commission.
	Canadian Radio Broadcasting Commission.
CMCY 1325 500 Havana, Cuba.	HHK 920 1000 Port-au-Prince, Haiti.
Manuel D. Autran, Ave. deLa Pdt s.215.	Haitian Government.
CMDE 925 150 Havana, Cuba.	HIH 1395 15 San Pedro de M., D. R.
Ra lio Aerial Ad.	Domingo Dominguez
CMGA 834 100 Colon, Cuba.	HIJ 1195 15 Santo Domingo, D. R.
L. Valdes Figueroa, Marti No. 19.	Tuto Baez, Hostos 34
CMGB 1205 30 Matanzas, Cuba.	HIJK 1180 15000 Santo Domingo, D. R.
Jose Anorga, Magdelena No. 1.	
CMGC 820 30 Matanzas, Cuba.	HIX 580 1500 Santo Domingo, D. R.
Oscar S. Mechoso, Indepencia No. 56.	J. R. Saladin, Director General
CMGE 1375 30 Cardenas, Cuba.	HJN 681 500 Bogota, Colombia
Genaro Sebater, Cespedes No. 180.	Government of Colombia, National Library.
CMGF 977 100 Matanzas, Cuba.	KARC 1420 100 San Antonio Tavas
Bernabe R. de la Torre.	Alamo Broadcasting Co., Inc.
	KALE 1300 500 Portland. Ore.
	KALE 1300 500 Portland, Ore. Kale, Inc., New Heathman Hotel
Octavio y Julio Alvarez.	
CMHD 950 500 Caibarien, Cuba.	KARK 890 250 Little Rock, Ark.
Manuel Alvarez, M. Escobar 17.	Arkansas Radio & Equipment Co.
CMHI 1037 250 Santa Clara, Cuba.	KASA 1210 100 Elk City, Okla, E. M. Woody, Casa Grande Hotel.
Lavis y Paz.	E. M. Woody, Casa Grande Hotel.
CMHJ 1125 60 Cienfuegos, Cuba.	KBPS 1420 100 Portland, Ore.
Victorino Lopez Hontanon.	Benson Polytechnic School
	KBTM 1200 100 Paragould, Ark.
CMHK 1225 50 Cruces, Cuba. Virgilio Villaneuva Fernandez.	Jay P. Beard.
angino vinaneuva rernandez.	
CMHL 1290 20 Cienfuegos, Cuba.	KCMC 1420 100 Texarkana, Ark.
Oscar Zayas, San Carlos 143.	M. P. Mims, Box 865.
CMJC 1382 150 Camaguey, Cuba.	KCRC 1370 100 Enid, Okla.
Feliciano Isaac, Cisneros y G. Gomez.	Enid Radiophone Co.
CMJE 1175 50 Camaguey, Cuba	KCRJ 1310 100 Jerome, Ariz.
Manuel Fernandez, Plaza de Maceo.	Chas. C. Robinson, Drawer D.
CMJF 930 200 Camaguey, Cuba.	KDB 1500 100 Santa Barbara, Calit.
John L. Stowers, Hotel Plaza.	Santa Barbara Broadeasters, Ltd.
CMJG 1050 50 Camaguey, Cuba.	KDFN 1440 500 Casper, Wyo
Jose Antonio Lefran, Martires 133.	
	Donald Lewis Hathaway.
CMJH 1150 50 Ciego de Avila, Cuba.	KDKA 980 50000 Pittsburgh, Pa.
Luis Marauri Mendosa.	Westinghouse Electric & Mfg. Co.
CMJI 1280 45 Ciego de Avila, Cuba.	KDLR 1210 100 Devils Lake, N. D.
Gilberto Gessa Lopez, Independencia 95.	KDLR, Inc., 1025 3rd Street.
CMJK 790 500 Camaguey, Cuba.	KDYL 1290 1000 Salt Lake City, Utah.
Compania Cubana Nacional de Radio S. A.	Intermountain Broadcasting Corp.
CMJL 960 50 Camaguey, Cuba.	KECA 1430 1000 Los Angeles, Calif.
Enrique Artime, Cuba No. 27.	Forle C. Anthony Inc.
Carlos 1040 50 Common C	Earle C. Anthony, Inc.
CMJN 1240 50 Camaguey, Cuba.	KELW 780 500 Burbank, Calif.
Ernesto de Ugarriza, Martires 11.	Magnolia Park, Ltd., 3702 Magnolia
CMJO 1010 50 Ciego de Avila, Cuba.	KERN 1200 100 Bakersfield, Calit.
Jose M. Rey, C. Central & Maceo.	Bee Bakersfield Broadcasting Co.

KEX 1180 5000 Portland, Ore.	KFUO 550 500 St. Louis, Mo.
National Broadcasting Co.	Evangelical Lutheran Church.
KFAB 770 5000 Lincoln, Neb.	KFVD 1000 250 Los Angeles, Calif.
KFAB Broadcasting Co.	E. L. Cord, 645 S. Mariposa.
KFAC 1300 1000 Los Angeles, Calif.	KFVS 1210 100 Cape Girardeau, Mo.
E. L. Cord, 645 So. Mariposa.	Oscar C. Hirsch, Box 275.
KFBB 1280 1000 Great Falls, Mont.	KFWB 950 1000 Hollywood, Calif.
Buttrey Broadcast, Inc.	Warner Bros. Motion Pictures, Inc.
KFBI 1050 5000 Abilene, Kans.	KFWi 930 500 San Francisco, Calif.
Farmers & Bankers Life Ins. Co.	Radio Entertainments, Ltd.
KFBK 1310 100 Sacramento, Calif.	KFXD 1200 100 Nampa, idaho.
James McClatchy Publishing Co.	Frank E. Hurt, 1024 12th Ave., S.
KFBL 1370 50 Everett, Wash.	KFXF 920 500 Denver, Colo.
Leese Bros., 2814 Rucker Ave.	Colorado Radio Corp.
KFDM 560 500 Beaumont, Texas. Sabine Broadcasting Co.	KFXJ 1200 100 Grand Jct., Colo.
KFDY 550 500 Brookings, \$. D.	Western Slope Broadcasting Co.
South Dakota State College.	KFXM 1210 100 San Bernardino, Calif.
KFEL 920 500 Denver, Colo,	Lee Bros. Broadcasting Co.
Eugene P. O'Fallon, Inc.	KFXR 1310 100 Oklahoma City, Okla.
KFEQ 680 2500 St. Joseph, Mo.	Exchange Avenue Baptist Church.
Scroggin & Co. Bank	KFYO 1310 100 Lubbosk, Texas.
KFGQ 1310 100 Boone, lowa.	Kirksey Bros., Hotel Lubbock.
Boone Biblical College.	KFYR 550 1000 Bismarck, N. D. Mayer Broadcasting Co.
KFH 1300 1000 Wichita, Kans.	KGA 1470 5000 Spokane, Wash.
Radio Station KFH Co.	Northwest Broadcasting Co., Inc.
KF1 640 50000 Los Angeles, Calif.	KGAR 1370 100 Tucson, Ariz.
Earle C. Anthony, Inc.	KGAR 1370 100 Tucson, Ariz. Tucson Motor Service Co.
KFIO 1120 100 Spokane, Wash.	KGB 1330 1000 San Diego, Calif
Spokane Broadcasting Corp.	KGB 1330 1000 San Diego, Calif. Don Lee Broadcasting System
KFIZ 1420 100 Fond du Lac, Wis.	KGBU 900 500 Ketchikan, Alaska,
Reporter Printing Co. KFJB 1200 100 Marshalltown, lowa.	Alaska Radio & Service Co., Inc.
KFJB 1200 100 Marshalltown, lowa. Marshall Electric Co.	KGBX 1310 180 Springfield, Mo. KGBX, Inc.
KFJI 1210 100 Klamath Fails, Ore.	KGBX, Inc.
KFJI Broadcasters, Inc., Willard Hotel.	KGBZ 930 500 York, Neb. Dr. Geo. R. Miller, 715 Grant Ave.
KFJM 1370 100 Grand Forks, N. D.	Dr. Geo. R. Willer, 710 Grant Ave.
University of North Dakota.	KGCA 1270 100 Decorat, lowa Charles W. Greenley
KFJR 1300 500 Portland, Ore.	KGCR 1210 180 Watertown, S. D.
Ashley C. Dixon-KFJR, Inc.	KGCR 1210 190 Watertown, S. D. Greater Kampeska Radio Corp.
KFJZ 1370 100 Fort Worth, Texas.	KGCU 1240 250 Mandan, N. D.
Fort Worth Broadcasters, Inc.	Mandan Radio Assn.
KFKA 880 500 Greeley, Colo.	KGCX 1310 100 Welf Peint, Mont.
Mid-Western Radio Corp.	E. E. Krebsbach.
KFKU 1220 500 Lawrence, Kans.	KGDE 1200 180 Fergus Falls, Minn.
University of Kansas. KFLV 1410 500 Rockford, III.	C. L. Jaren.
KFLV 1410 500 Rockford, III. Rockford Broadcasters, Inc.	KGDM 1100 250 Stockton, Calif.
KFNF 890 500 Shenandoah, lowa.	E. F. Peffer, 42 S. Calif. St.
Henry Field Co.	KGDY 1340 250 Huron, S. D.
KFOR 1210 100 Lincoln, Neb.	Voice of S. D., Inc., 347 Dukota Ave.
Howard Shuman	KGEK 1200 100 Yuma, Cole. Elmer G. Beehler, 109 W. 2nd St.
KFOX 1250 1000 Long Beach, Calif.	KGER 1360 1090 Long Beach, Calif.
Nicholas & Warinner, Inc.	Consolidated Broadcasting Co.
KFPL 1310 100 Dublin, Texas.	KGEZ 1310 108 Kalispell, Mont.
C. C. Baxter, Box 176	Donald C. Treloar, Box 1.
KFPM 1310 15 Greenville, Texas.	KGFF 1420 100 Shawnee, Okla.
New Furniture Co. KFPW 1210 100 Fort Smith, Ark.	KGFF Broadcasting Co., Inc.
Southwestern Hotel Co.	KGFG 1370 100 Oklahema City, Okla.
KFPY 1340 1000 Spokane, Wash.	Oklahoma Broadcasting Co., 1113 N. Broadway
Symons Broadcasting Co.	KGFI 1500 100 Cerpus Christi, Texas.
KFQD 600 250 Anchorage, Alaska	Eagle Broadcasting Co., Inc.
Anchorage Radio Club, Inc.	KCFJ 1200 100 Los Angeles, Calif. Ben S. McGlashan, 1417 S. Figueroa.
KFRC 610 1000 San Francisco, Calif.	KGFK 1500 100 Meerhead, Minn.
Don Lee, Inc.	Red River Broadcasting Co., Inc.
KFRU 630 500 Columbia, Mo.	
KFRU, Inc., 9th and Elm Sts.	KGFL, Inc., 507 N. Main St.
KFSD 600 1000 San Diego, Calif.	KGFW 1310 100 Kearney, Neb.
Airfan Radio Corp., Ltd.	Central Nebraska Broadcasting Corp.
KFSG 1120 500 Los Angeles, Calif. Echo Park Evangelistic Assn.	KGFX 630 200 Pierre, S. D.
Echo Fark Evangensur Assn.	Dana McNeil, 510 Summit Ave.

KGGC 1420 100 San Francisco, Calif.	KLCN 1290 100 Blytheville, Ark.
Golden Gate Broadcasting Co.	C. L. Lintzenich, Main and Division St.
KGGF 1010 500 Coffeyville, Kans.	KLO 1400 500 Ogden, Utah.
Hugh J. Powell and Stanley Platz.	Interstate Broadcasting Co.
KGGM 1230 250 Albuquerque, N. M.	KLPM 1240 250 Minot, N. D.
New Mexico Broadcasting Co.	John B. Cooley.
KGHF 1320 250 Pueblo, Colo.	KLRA 1390 1000 Little Rock, Ark.
C. P. Ritchie & Geo. J. Ikelman	Arkansas Broadcasting Co.
KGHI 1200 100 Little Rock, Ark. Lloyd Judd Co., Marion Hotel.	KLS 1440 250 Oakland, Calif.
KGHL 950 1000 Billings, Mont.	Warner Bros., 2201 Telegraph Ave. KLUF 1370 100 Galveston, Texas
Northwestern Auto Supply Co.	KLUF 1370 100 Galveston, Texas. Geo. R. Clough, 3327 Ave. P.
KGIR 1360 500 Butte, Mont,	KLX 880 1000 Oakland, Calif.
KGIR, Inc., 121 W. Broadway.	Tribune Building Co.
KGIW 1420 100 Trinidad, Colo.	KLZ 560 1000 Denver, Colo.
Leonard E. Wilson, 326 N. Commercial	Reynolds Radio Co., Inc.
KGIX 1420 100 Las Vegas, Nev.	KMA 930 500 Shenandoah, lowa
J. M. Heaton, Box 656.	Earl E. May Seed & Nursery Co.
KGIZ 560 500 Springfield, Ma.	KMAC 1370 100 San Antonio, Texas.
Grant City Park Corp.	W. W. McAllister, Blue Bonnet Hotel.
KGKB 1500 100 Tyler, Texas.	KMBC 950 1000 Kansas City, Mo.
East Texas Broadcasting Co.	Midland Broadcasting Co.
KGKL 1370 100 San Angelo, Texas. KGKL, Inc., St. Angelus Hotel.	KMED 1310 100 Medford, Ore. Mrs. W. J. Virgin, Sparta Bldg.
KGKO 570 250 Wichita Falls, Texas.	KMJ 580 500 Fresno, Calif.
Wichita Falls Broadcasting Co.	James McClatchy Co.
KGKY 1500 100 Scottsbluff, Neb	KMLB 1200 100 Monros, La.
Hilliard Co., Inc., 15171/2 Broadway.	Liners Broadcasting Station, Inc.
KGMB 1320 250 Honolulu, T. H.	KMMJ 740 1000 Clay Center, Neb.
Honolulu Broadcasting Co., 119 Merchant St.	The M. M. Johnson Co.
KGNF 1430 500 North Platte, Neb.	KMO 1330 250 Tacoma, Wash.
Great Plains Broadcasting Co.	KMO, Inc., Hotel Winthrop.
KGNO 1340 250 Dodge City, Kans. KGNO Broadcasting Station	KMOX 1090 50000 St. Louis, Mo.
	The Voice of St. Louis, Inc. KMPC 710 560 Beverly Hills, Calif.
KGO 790 7500 San Francisco, Calif. National Broadcasting Co., Inc.	KMPC 710 500 Beverly Hills, Callt, Beverly Hills Broadcasting Corp.
KGRS 1410 1000 Amarillo, Texas.	KMTR 570 500 Hollywood, Calif.
E. B. Gish, Bellaire Park.	KMTR Radio Corp., 915 N. Formosa Ave.
KGU 750 2500 Honolulu, T. H.	KNOW 1500 100 Austin, Texas,
I Advertiser Publishing Co. Ltd	Southwest Broadcasting Co.
KGVO 1200 100 Missoula, Mont. Mosbys, Inc., 240 N. Higgins.	KNX 1050 25000 Hollywood, Calif. Western Broadcast Co., Inc.
Mosbys, Inc., 240 N. Higgins.	Western Broadcast Co., Inc.
KGW 620 1000 Portland, Ore. Oregonian Publishing Co.	KOA 830 12,500 Denver, Colo.
KGY 1210 100 Olympia, Wash,	General Electric Co., 1370 Krameria St. KOAC 550 1000 Corvallis, Ore.
KGY, Inc., 11th and Capitol Way.	Oregon State Agricultural College.
KHJ 900 1000 Los Angeles, Calif.	KOB 1180 10000 Albuquerque, N. M.
Don Lee Broadcasting System.	Albuquerque Journal, Box 667.
KHQ 590 1000 Spokane, Wash,	KOCW 1400 250 Tuisa, Okia.
Louis Wasmer, Inc.	J. T. Griffin.
KICA 1370 100 Clovis, N. M.	KOH 1380 500 Reno, Nev.
Southwest Broadcasting Co.	The Bee, Inc.
KICK 1420 100 Carter Lake, Iowa. Red Oak Radio Corp.	KOIL 1280 1000 Council Bluffs, Iowa.
	Mona Motor Oil Co.
KID 1320 250 Idaho Falls, Idaho. KID Broadcasting Co., Inc.	KOIN \$40 1000 Portland, Ore.
KIDO 1860 1000 Boise, Idaho.	KOIN, Inc., New Heathman Hotel.
C. G. Phillips & Frank L. Hill.	KOL 1270 1080 Seattle, Wash. Seattle Broadcasting Co.
KIDW 1420 100 Lamar, Colo.	KOMA 1480 5000 Oklahoma City, Okla.
Lamar Broadcasting Co., Box 688	National Radio Manufacturing Co.
KIEM 1210 100 Eureka, Calif.	KOMO 920 1000 Seattle, Wash.
Harold H, Hanseth, Vance Hotel.	Fishers Blend Station, Inc.
KIEV 850 100 Glendale, Calif.	NO 1370 100 San Antonio, Texas.
Cannon System, Ltd., Glendale Hotel.	M ion Broadcasting Co., St. Anthony Hotel
KIFH 1310 100 Juneau, Alaska	KOOS 1370 100 Marshfield, Ore.
Juneau Broadcasting Co.	H. H. Hanseth, Hall Bldg.
KIT 1310 100 Yakima, Wash. Valley Broadcasters, Inc.	Frank L. Hill and Curtis G. Phillippe.
KJBS 1070 100 San Francisco, Calit.	KOY 1390 500 Phoenix, Arix,
Julius Brunton & Sons Co.	Nielsen Radio & Sporting Goods Co.
KJR 970 5000 Seattle, Wash	KPCB 650 100 Seattle, Wash,
Fishers Blend Station, Inc.	Queen City Broadcasting Co.

	KPJM 1500 100 Prescott, Ariz.	KUJ 1370 100 Walla Walla, Wash.
-	Frank Mauthe, Box 852 KPO 680 50000 San Francisco, Calif.	KUJ, Inc., Marcus Whitman Hotel. KUMA 1420 100 Yuma, Ariz.
	National Broadcasting Co., Inc.	Dr. A. H. Schermann, Box 267.
	KPOF 880 500 Denver, Colo.	KUOA 1260 1000 Fayetteville, Ark,
	Pillar Of Fire, 1845 Champa St.	KUOA, Inc., Washington Hotel.
	KPPC 1210 50 Pasadena, Calif.	KUSD 890 500 Vermillion, S. D.
	Pasadena Presbyterian Church. KPQ 1500 100 Wenatchee, Wash.	University of South Dakota.
	KPQ 1500 100 Wenatchee, Wash. Wescoast Broadcasting Co.	KVI 570 500 Tacoma, Wash. Puget Sound Broadcasting Co., Tacoma Hotel
-	KPRC 920 1900 Houston, Texas.	KVL 1370 100 Seattle, Wash,
	Houston Printing Co.	KVL, Inc., 5th and Virginia St.
	KQV 1380 500 Pittsburgh, Pa. KQV Broadcasting Co., Investment Bldg.	KVOA 1260 500 Tucson, Ariz. Arizona Broadcasting Co., Inc.
	KQW 1010 500 San Jose, Calif.	KVOO 1140 5900 Tulsa, Okla.
	Pacific Agricultural Foundation, Ltd.	Southwestern Sales Corp.
	KRE 1370 100 Berkeley, Calif.	KVOR 1270 1000 Colorado Springs, Colo
	First Congregational Church. KREG 1500 100 Santa Ana. Calif.	S. H. Patterson
	KREG 1500 100 Santa Ana, Calif. The Voice of the Orange Empire, Inc.	KVOS 1200 100 Bellingham, Wash. KVOS, Inc., Bellingham Hotel.
	KRGV 1260 500 Harlingen Texas	KWCR 1420 100 Cedar Rapids, Iowa.
	KRGV, Inc.	Cedar Rapids Broadcast Co.
	KRKD 1120 500 Los Angeles, Calif.	KWEA 1210 100 Shreveport, La.
-	Fireside Broadcasting Corp. KRLD 1040 10000 Dallas, Texas.	Hello World Broadcasting Corp. KWFV 1210 100 Hilo, Hawaii
	KRLD Radio Corp., Adolphus Hotel.	Hilo Broadcasting Co., Ltd.
	KRMD 1310 100 Shreveport, La. Radio Station KRMD, Inc.	KWG 1200 100 Stockton, Calif.
		McClatchy Newspapers, Inc.
	KROW 930 500 Oakland, Calif. Educational Broadcasting Corp.	KWJJ 1060 500 Portland, Ore. KWJJ Broadcast Co., Inc., 328 Salmon St.
-	KRSC 1120 100 Seattle, Wash.	KWK 1260 1000 St. Louis. Mo.
	Radio Sales Corp., Washington Athletic Club.	KWK 1350 1000 St. Louis, Mo. Thomas Patrick, Inc., Hotel Chase.
	KSAC 580 500 Manhattan, Kans.	KWKC 1370 100 Kansas City, Me. Wilson Duncan Broadcasting Co.
	State College of Agriculture.	Wilson Duncan Broadcasting Co.
	KSCJ 1330 1000 Sioux City, Iowa. Perkins Bros. Co., 415 Douglas St.	KWKH 850 10000 Shreveport, La. International Broadcasting Corp.
	KSD 650 600 St. Louis, Mo.	KWLC 1270 100 Decorah, Iowa.
	Pulitser Publishing Co.	Luther College.
	KSEI 890 250 Pocatello, Idaho. Radio Service Corp., 141 S. 6th Ave.	KWSC 1220 1000 Pullman, Wash. State College of Washington.
	KSL 1130 50000 Salt Lake City, Utah.	KWWG 1260 500 Brownsville, Texas.
	Radio Service Corp. of Utah.	Frank P. Jackson.
	KSO 1870 100 Des Molnes, Iowa.	KXA 760 250 Seattle, Wash.
	Des Moines Register & Tribune. KSOO 1110 1000 Sigux Falls, S. D.	American Radio Tel. Co., 218 Bigelow Bldg. KXL 1420 100 Portland, Ore.
	Jos. Henkin, 1613 S. Duluth Ave.	KXL Broadcasters, 269 Pine St.
	KSTP 1460 25000 St. Paul, Minn.	KXO 1500 100 El Centro, Calif.
	National Battery Broadcasting Co.	E. R. Irey and F. M. Bowles.
	KSUN 1200 100 Lowell, Ariz. Copper Electrical Co.	KXRO 1310 100 Aberdeen, Wash. KXRO, Inc., Hotel Morek.
	KTAB 560 1000 San Francisco, Calif.	KXYZ 1440 250 Houston, Texas.
	Associated Broadcasters, Inc.	Harris County Broadcast Co.
	KTAR 620 500 Phoenix, Ariz.	KYA 1230 1000 San Francisco, Calif. Pacific Broadcasting Corp.
	KTAR Broadcasting Co. KTAT 1240 1000 Fort Worth, Texas.	KYW 1020 10000 Chicago, Ill.
	Southwest Broadcasting Co.	Westinghouse Elec. & Mfg. Co.
	KTBS 1450 1000 Shreveport, La.	KZRM 618.5 50008 Manila, P. I.
	Tri-State Broadcasting System. KTF1, 1240 1000 Twin Falls, Idaho.	Erlanger and Galinger, Inc. (KZEG) NAA 690 1000 Arlington, Va.
	Radio Broadcasting Corp.	United States Navy.
	KTHS 1040 10000 Hot Springs, Ark.	RUS 664 500 San Salvador, E. S.
	Chamber of Commerce.	Republic of El Salvador.
	KTM 780 500 Los Angeles, Calif. Pickwick Broadcasting Corp., Ltd.	TGW 1350 500 Guatemala, Gua.
	KTRH 1120 1000 Houston, Texas.	Gobierno de Guatemala.
	KTRH Broadcasting Co., Rice Hotel.	TGX 1380 75 Guatemala City
	KTSA 1290 1000 San Antonio, Texas.	TICR 912 75 San Jose, C. R. Government of Costa Rica.
	Southwest Broadcasting Co. KTSM 1310 100 El Paso, Texas,	
	Tri-State Broadcasting Co., Inc.	TIEA 833 7.5 San Jose, C. R.
	KTW 1220 1000 Seattle, Wash.	TIEP 1450 7.5 San Jose, C. R.
L	First Presbyterian Church.	1700

	٦	
	TIFB 714 30 San Jose, C. R.	WBAK 1430 1000 Harrisburg, Pa.
	7150 1441 75 0	Commonwealth of Pennsylvania. WBAL 1060 10000 Baltimore, Md.
	TIFS 1441 7.5 Cartago, C. R.	Consolidated Gas, Elec. Light & Power Co.
	TIGA 1014 30 Cartago, C. R.	WBAP 800 60000 Fort Worth, Texas.
	1_	Carter Publications Inc
}	TIGP 666 75 San Jose, C. R.	WBAX 1210 100 Wilkes-Barre, Ca. John H. Stenger, Jr., 70 S. Main St.
	TIRCA 1100 500 San Jose, C. R.	WBBC 1400 500 Brooklyn, N. Y.
	Perry Girton, Apt. 225.	Brooklyn Broadcasting Corp.
	TISO 550 250 San Jose, C. R. P. F. Saborio, Apt. 1354	WBBL 1210 100 Richmond, Va. Grace Covenant Presbyterian Church.
		WBBM 770 25000 Chicago, III.
	TITV 999 7.5 San Jose, C. R.	WBBM Broadcasting Corp., Wrigley Bldg.
	TIVL 869 30 San Jose, C. R.	WBBR 1300 1000 Brooklyn, N. Y.
	-	Peoples Pulpit Assn. WBBX 1200 100 New Orleans, La.
	TIXA 614 7.5 San Jose, C. R.	WBBX 1200 100 New Orleans, La. Samuel D. Reeks, Marberc Hotel.
	VAS 685 2000 Glace Bay, N. S.	WBBZ 1200 100 Ponca City, Okla.
-	Canadian Marconi Co., Ltd.	C. L. Carrell.
	VOAC 800 40 St. John's, Nfld.	WBCM 1410 500 Bay City, Mich. James E. Davidson, Hotel Wenomah.
	VOA8 810 100 St. John's, N. F.	WREN 900 1000 Buffalo N.Y.
	Ayre & Sons, Ltd.	WBEN, Inc. (Buffalo Evening News.)
	VOGY 1400 75 St. John's, N. F. Newfoundland Broadcasting Co.	WBEO 1310 100 Marquette, Mich.
	VOKW 1086 30 St. John's, N. F.	Lake Superior Broadcasting Co., Inc. WBHS 1200 100 Huntsville, Ala.
	Cyril L. Parkins.	Radio Station WBHS, Inc.
	VONF 1195 400 St. John's, N. F.	WBIG 1440 500 Greensboro, N. C.
-	Dominion Broadcasting Co., Ltd., Box 1355.	North Carolina Broadcasting Co., Inc. WBNX 1350 250 New York, N. Y.
	Weeley United Church, Box 157.	Standard Cahill Co., Inc.
	WAAB 1410 500 Roston Mass	WBOQ 860 50000 New York, N. Y.
-	Bay State Broadcasting Corp., 1 Winter Pl. WAAF 920 500 Chicago, III.	Atlantic Broadcasting Corp.
	Chicago Daily Drovers Journal	WBOW 1310 100 Terre Haute, Ind. Banks of Wabash, Inc., 24½ S. 6th.
	WAAM 1250 1000 Newark, N. J.	WBRC 930 500 Birmingham, Ala.
-	WODAAM Corp., 1060 Broad St. WAAT \$40 300 Jersey City. N .I	Birmingham Broadcasting Co., Inc.
	WAAT 340 300 Jersey City, N. J. Bremer Broadcasting Corp., 50 Journal Sq.	WBRE 1310 100 Wilkes-Barre, Pa. Louis G. Baltimore, 16 N. Main.
	WAAW 660 500 Omaha Neb	WBSO 920 500 Babson Park, Mass.
	Omaha Grain Exchange. WABC 860 50000 New York, N. Y.	Broadcasting Service Organization, Inc.
	Atlantic Broadcasting Corp.	WBT 1080 25000 Charlotte, N. C. Station WBT, Inc., Wilder Bldg.
	WABI 1200 100 Bangor, Maine	WBTM 1870 100 Danville, Va.
	First Universalist Society.	Piedmont Broadcasting Corp.
	Southwest Broadcasting Co.	WBZ 990 25000 Boston, Mass. Westinghouse Elec. & Mfg. Co.
	WADC 1320 1000 Akron, Ohio. Allen T. Simmons, P. O. Box 29.	WBZA 980 1000 Springfield, Mass.
	Allen T. Simmons, P. O. Box 29.	Westinghouse Elec. & Mfg. Co.
	WAGM 1420 100 Presque Isle, Me. Aroostook Broadcasting Corp.	WCAC 600 250 Storrs, Conn. Connecticut Agricultural College.
	WAIU 640 500 Columbus, Ohio.	WCAD 1220 500 Canton, N. Y.
	Associated Radiocasting Corp.	St. Lawrence University.
	WALR 1210 100 Zanesville, Ohio. WALR Broadcasting Corp.	WCAE, Inc., Sun-Telegraph.
-	WAMC 1420 100 Anniston, Ala.	WCAE, Inc., Sun-Telegraph. WCAH 1430 500 Columbus, Ohio.
	R. C. Hammett, 1200 Noble St.	International Bible Students Assn.
	WAML 1310 100 Laurel, Miss.	WCAL 1250 1000 Northfield, Minn.
	Southland Radio Corp. WAP! 1140 5000 Birmingham, Ala.	St. Olaf College. WCAM 1280 500 Camden, N. J.
	WAPI Broadcasting Corp.	City of Camden, City Hall.
	WARD 1400 500 Brooklyn, N. Y. United States Broadcasting Corp.	WCAO 600 250 Baltimore, Md.
-	United States Broadcasting Corp. WASH 1270 _ 500 Grand Rapids, Mich.	Monumental Radio Co. WCAP 1280 500 Ashury Park, N. J.
	Kunsky-Trendle Broadcasting Corp.	Radio Industries Broadcast Co.
	WAWZ 1350 250 Zarenhath, N. J.	WCAT 1200 100 Rapid City, S. D.
-	Pillar of Fire.	South Dakota State School of Mines.
	WAZL 1420 100 Hazleton, Pa. Hazleton Broadcasting Service, Inc.	WCAU 1170 50000 Philadelphia, Pa. WCAU Broadcasting Co., 1622 Chestnut.
	WBAA 1400 500 West Lafavette, Ind.	WCAX 1200 100 Burlington, Vt.
	Purdue University.	Burlington Daily News, Inc.

	WCAZ 1070 50 Carthuge, III,		WEBR 1310 100 Buffalo, N. Y.
1	Superior Broadcasting Service, Inc.	1	Howell Broadcasting Co., Inc., 735 Main.
	WCBA 1440 250 Allentown, Pa.		WEDC 1210 100 Chicago, III.
	B. Bryan Musselman, 39-41 10th St.		Emil Denemark, 3860 Ogden Ave.
	WCBD 1080 5000 Zion, III.		
1	Wilbur Glenn Voliva.		WEED 1420 100 Greenville, N. C.
		-	Wm. Avera Wynnc.
	WCBM 1370 100 Baltimore, Md.		WEEL 590 1000 Boston, Mass.
	Baltimore Broadcasting Corp.		Edison Elec. Illuminating Co.
	WCBS 1210 100 Springfield, III.		WEEU 830 1000 Reading, Pa.
	WCBS, Inc., 208½ S. 5th.		Berks Broadcasting Co., 533 Penn.
	WCCO 810 50000 Minneapolis, Minn.		WEHC 1350 500 Charlottesville, Va.
	Northwestern Broadcasting, Inc.		Community Brdestg. Corp.
	_ =:	_	WELLS 1420 100 Girra III
1	WCFL 970 1500 Chicago, III.		WEHS 1420 100 Cicero, III.
	Chicago Federation of Labor.		WEHS, Inc., 6138 W. 22nd St.
	WCKY 1490 5000 Covington, Ky.		WELL 1420 50 Battle Creek, Mich.
	L. B. Wilson, Inc.		Enquirer News Co., 7 N. McCamly St.
	WCLO 1200 100 Janesville, Wis.	1	WENC 1420 100 Americus, Ga.
	WCLO Radio Corp.		Americus Broadcast Corp.
			WENR 870 50000 Chicago, III.
1	WCLS 1310 100 Joliet, III. WCLS, Inc., 301 E. Jefferson St		Great Lakes Broadcasting Co.
	WCNW 1500 100 Brooklyn, N. Y.		WESG 1040 1000 Elmira, N. Y.
			Elmira Star Gazette, Inc.
	Arthur Faske, 1525 Pitkin Ave.		
	WCOA 1340 500 Pensacola, Fla.	1	WEVD 1300 500 New York, N. Y. Jewish Daily Forward, Hotel Claridge.
-	Pensacola Broadcasting Co.	-	Jewish Daily Forward, Hotel Claridge.
	WCOC 880 500 Meridian, Miss.		WEW 760 1000 St. Lauis, Mo.
	Mississippi Broadcasting Co., Inc.		St. Louis University, 221 N. Grand Blvd.
1	WCOD 1200 100 Harrisburg, Pa.	1	WEXL 1310 50 Royal Oak, Mich.
	Keystone Broadcasting Corp		Royal Oak Broadcasting Co.
	WCRW 1210 100 Chicago, III.		WFAA 800 50000 Dallas, Texas.
-	Clinton R. White, 2756 Pine Grove Ave.		Morning News and Journal.
	WCSC 1360 500 Charleston, S. C.		WFAB 1300 1000 New York, N. Y.
	South Carolina Broadcasting Co., Inc.		Fifth Avenue Broadcasting Corp.
	WCSH 940 1000 Portland, Me.		WFAM 1200 100 South Bend, Ind.
	Congress Square Hotel Co., 157 High.	1	South Bend Tribune, 200 W. Colfax.
	Congress Extuare Hotel Co., 157 High.		WFAS 1210 100 White Plains, N. Y.
	WDAE 1220 1000 Tampa, Fla. Tampa Publishing Co., Tampa Terrace.	1	Westchester Broadcasting Corp.
	Tampa Publishing Co., Tampa Terrace.		
1	WDAF 610 1000 Kansas City, Mo.		WFBC 1200 100 Greenville, S. C. Greenville News-Piedmont Co.
<u> </u>	Kansas City Star Co.		
	WBAG 1410 1000 Amarillo, Texas.	1	WFBE 1200 100 Cincinnati, Ohio. WFBE, Inc., Hotel Sinton.
	National Radio & Broadcasting Corp.		WFBE, Inc., riotel Sinton.
	WDAH 1310 100 El Paso, Texas.		WFBG 1310 100 Altoona, Pa.
	Tri-State Broadcasting Co., Inc.		Gable Broadcasting Co. 12th Av. & 13th St.
	WDAS 1370 100 Philadelphia, Pa.		WFBL 1360 1000 Syracuse, N. Y.
	WDAS Broadcatg. Co., Inc., Broadwood Hotel.		Onondaga Radio Broadcasting Corp.
	WDAY 940 1000 Farge, N. D.		WFBM 1230 1000 Indianapolis, Ind.
	WDAY, Inc., Black Bldg., 118 Broadway.		Indianapolis Power & Light Co.
	WDBJ 930 250 Roanoke, Va.		WFBR 1270 500 Baltimore, Md.
-	Times World Corp., 122 W. Church Ave.		Baltimore Radio Show, Inc.
	WDBO 580 250 Orlando, Fla.		WFDF 1310 100 Flint, Mich.
	Orlando Broadcasting Co., Inc.		Flint Broadcasting Co.
	WDEL 1120 250 Wilmington, Del.		WFDV 1500 100 Rome, Ga.
	WDEL, Inc., 10th and King Sts.		Rome Broadcasting Corp., 10 3rd Ave.
	WDEV 550 500 Waterbury, Vt.		WFEA 1430 500 Manchester, N. H.
1	Harry C. Whitehill, Stowe St.		New Hampshire Broadcasting Co.
	WDGY 1180 1000 Minheapolis, Minn.		WFI 560 500 Philadelphia, Pa.
	Dr. Geo. W. Young, 909 W. Broadway.	1	WFI Broadcasting Co., 801 Market.
	WDOD 1280 1000 Chattanooga, Tenn.		WFIW 940 1000 Hopkinsville, Ky.
1	WDOD Broadcasting Corp., Hotel Patten.		WFIW, Inc., 8th and Main Sts.
	WDRC 1330 1000 Hartford, Conn.		WFLA 620 1000 Clearwater, Fla.
1	WDRC 1330 1000 Hartford, Conn. WDRC, Inc., Corning Bldg., 11 Asylum St.		Florida West Coast Broadcasting Co., Inc.
	WDSU 1250 1000 New Orleans, La.		WFOX 1400 500 Brooklyn, N. Y.
	Jos. H. Uhalt, On Hotel DeSoto.		Paramount Broadcasting Co., 1 Nevins St.
	WDZ 1070 100 Tuscola, III.		WGAL 1310 100 Lancaster, Pa.
	James L. Bush.		WGAL, Inc., 8 W. King St.
	WEAF 660 50000 New York, N. Y.	-	WGAR 1450 500 Cleveland, Ohio.
	National Broadcasting Co., Inc.		WGAR Broadcasting Co., Hotel Statler.
	WEAN 780 500 Providence, R. I.		WGBB 1210 100 Freeport, N. Y.
	Shepard Broadcasting Servise, Inc.		H. H. Carman, 64 S. Grove St.
	WEBC 1290 1000 Superior, Wis.		WGBF 630 500 Evansville, Ind.
	Head of the Lakes Broadcasting Co.		WGBF 630 500 Evansville, Ind. Evansville On the Air, Inc.
	WEBQ 1210 100 Harrisburg, III.		WGB1 880 250 Scranton, Pa.
	Harrisburg Broadcasting Co.		Scranton Broadcasters, Inc.
L		1	

WGCM 1210 100 Mississippi City, Miss.	WHOM 1450 250 1
Great Southern Land Co., Gulfport, Miss.	WHOM 1450 250 Jersey City, N. J. New Jersey Broadcasting Corp.
WGCP 1250 250 Newark, N. J.	WHP 1430 500 Harrishurg Pa
May Radio Broadcasting Co. WGES 1360 500 Chicago, III.	WHP, Inc., Harrisburg Telegraph.
Oak Leaves Broadcasting Station, Inc.	WIAS 1310 100 Ottumwa, Iowa. Iowa Broadcasting Co., Hotel Ottumwa.
WGH 1310 100 Newport News, Va.	WIBA 1280 500 Madison, Wis.
Hampton Roads Broadcasting Corp. WGL 1370 100 Fort Wayne, Ind.	Badger Broadcasting Co., Inc. WIBG 930 25 Glenside Pa
F. C. Zieg. 213 W. Main St.	WIBG 930 25 Glenside, Pa. WIBG, Inc., Keswick Bldg.
WGLC 1370 100 Hudson Falls, N. Y. O. T. Griffin & G. F. Bissell.	WIRM 1270 100 leokam Mich
WGN 720 25000 Chicago, III.	WIBM, Inc., Otsego Hotel
WGN, Inc., Tribune Tower.	WiBU 1210 100 Poynette, Wis. Wm. C. Forrest, R. F. D. No. 3.
WGNY 1210 100 Chester, N. Y.	WIBW 580 1000 Topeka, Kans.
Peter Goelet (Orange County). WGR 550 1000 Buffalo, N. Y.	Topeka Broadcasting Assn. Inc. WIBX 1200 100 Utica, N. Y.
Buffalo Broadcasting Corp.	WIBX, Inc., 1st Natl. Bank Bldg.
WGST 890 250 Atlanta, Ga. Georgia School of Technology.	WICC 800 250 Bridgeport, Conn.
WGY 790 50000 Schenectady, N. Y.	Shepard Broadcasting Service, Inc. WIL 1200 100 St. Louis, Mo.
National Broadcasting Co., Inc.	Missouri Broadcasting Corp.
WHA 940 1000 Madison, Wis. University of Wisconsin.	WILL 890 250 Urbana, III.
WHAD 1120 250 Milwaukee, Wis.	University of Illinois. WILM 1420 100 Wilmington, Del.
Marquette University.	Delaware Broadcasting Co., Inc.
WHAM 1150 25000 Rochester, N. Y. Stromberg-Carlson Tel. Mfg. Co.	WIND 560 1000 Gary, Ind.
WHAS 820 25000 Louisville, Ky.	Johnson-Kennedy Broadcasting Corp. WINS 1180 500 New York, N. Y.
Courier Journal & Louisville Times.	American Radio News Corp.
WHAT 1310 100 Philadelphia, Pa. Curtis-Martin Newspapers, Inc.	WIOD 1300 1000 Miami, Fla.
WHAZ 1300 500 Tray, N. Y.	Isle of Dreams Broadcasting Corp. WIP 610 500 Philadelphia, Pa.
Rensselaer Polytechnic Institute.	Pennsylvania Broadcasting Co.
WHB 860 500 Kansas City, Mo. WHB Broadcasting Co., Scarritt Bldg.	WIS 1010 500 Columbia, S. C. Station WIS, Inc., 1811 Main St.
WHRC 1200 100 Center Ohio	WISN 1120 250 Milwaukee, Wis.
Edw. P. Graham, 319 Tusc. St., W.	American Radio News Corp.
WHBD 1370 100 Mount Orab, Ohio. F. P. Moler.	WJAC 1310 100 Johnstown, Pa. WJAC, Inc., Tribune Bldg. Annex.
WHBF 1210 100 Rock Island, III.	WJAG 1060 1000 Norfolk, Neb.
Rock Island Broadcasting Co.	Norfolk Daily News.
WHBL 1410 500 Sheboygan, Wis. Press Publishing Co.	WJAR 890 500 Providence, R. I. Outlet Co., Weybossett St.
WHBQ 1370 100 Memphia, Tenn.	WJAS 1290 1000 Pittsburgh, Pa.
Broadcasting Sta. WNBQ, Inc., Hotel Claridge.	Pittsburgh Radio Supply House.
WHBU 1210 100 Anderson, Ind. Anderson Broadcasting Corp.	WJAX 900 1000 Jacksonville, Fla. City of Jacksonville.
WHBY 1200 100 Green Bay, Wis. WHBY, Inc., Bellin Bldg.	WJAY 610 500 Cleveland, Ohio,
WHBY, Inc., Bellin Bldg. WHDF 1370 100 Calumet. Mich.	Cleveland Radio Broadcasting Corp.
WHDF 1370 100 Calumet, Mich. Upper Michigan Broadcasting Co.	WJBC 1200 100 LaSalle, III. Kaskaskia Broadcasting Co.
WHDH 830 1000 Boston, Mass.	WJBI 1210 100 Red Bank, N. J.
Matheson Radio Co., 62 Boylston. WHDL 1420 100 Tupper Lake, N. Y.	Monmouth Broadcasting Co., Inc. WJBK 1370 50 Detroit, Mich.
Tupper Lake Broadcasting Co.	James F. Hopkins, Inc., Curtiss Bldg.
WHEB 740 250 Portsmouth, N. H.	WJBL 1200 100 Decatur, III.
Granite State Broadcasting Corp. WHEC 1430 500 Rochester, N. Y.	Commodore Broadcasting, Inc. WJBO 1420 100 Baton Rouge, La.
WHEC, Inc., 40 Franklin St.	Baton Rouge Broadcasting Co., Inc.
WHEF 1500 100 Kosciusko, Miss.	WJBW 1200 100 New Orleans, La.
Attala Milling & Produce Co. WHET 1210 100 Troy, Ala.	C. C. Carlson, 2743 Dumaine St. WJBX 1270 1000 Jackson, Miss.
Troy Broadcasting Co.	Lamar Life Insurance Co.
WHFC 1420 100 Cicero, III. WHFC, Inc., 6138 W. 22nd St.	WJBY 1210 100 Gadsden, Ala.
WHIS 1410 250 Bluefield, W. Va.	Gadsden Broadcasting Co., 112 N. 8th St. WJEJ 1210 100 Hagerstown, Md.
Daily Telegraph Printing Co., Inc.	Hagerstown Broadcasting Co., Inc.
WHK 1390 1000 Cleveland, Ohio.	WJEM 990 500 Tupela, Miss.
Radio Air Service Corp. WHN 1010 250 New York, N. Y.	Britt A. Rogers, Jr. WJJD 1130 20000 Chicago, III.
Marcus Loew Booking Agency.	WJJD, Inc., 201 N. Wells St.

	WJMS 1420 100 Ironwood, Mich. WJMS, Inc., St. James Hotel.	WLTH 1400 500 Brooklyn, N. Y. Voice of Brooklyn, Inc.
	WJR 750 10000 Detroit, Mich. WJR, Inc., Fisher Bldg.	WLVA 1370 100 Lynchburg, Va. Lynchburg Broadcasting Corp.
	WJSV 1460 10000 Washington, O. C.	WLW 700 50000 Cincinnati, Ohlo.
-	Old Dominion Broadcasting Co. WJTL 1370 100 Atlanta, Ga.	Crosley Radio Corp. WLWL 1100 5000 New York, N. Y.
	Oglethorpe University.	Missionary Society of St. Paul.
	WJW 1210 100 Akrom, Ohio. WJW, Inc., 41 S. High St.	WMAL 630 250 Washington, O. C. National Broadcasting Co., Inc.
	WJZ 760 50000 New York, N. Y.	WMAQ 670 5000 Chicago, III.
	National Broadcasting Co., Inc. WKAQ 1240 1000 San Juan, P. R.	National Broadcasting Co., Inc. WMAS 1420 100 Springfield, Mass.
	Radio Corp. of Porto Rico.	WMAS, Inc., Hotel Stonehaven.
	WKAR 1040 1000 East Lansing, Mich. Michigan State College.	WMAZ 1180 500 Macon, Ga. Southeastern Broadcasting Co.
	WKBB 1310 100 East Dubque, III.	WMBC 1420 100 Detroit, Mich.
	Richard W. Hoffman WKBC 1310 100 Birmingham, Ala.	Michigan Broadcasting Co. WMBO 1440 500 Peorla, III.
	R. B. Broyles, Tutwiler Hotel.	Peoria Broadcasting Co.
[]	WKBF 1400 500 Indianapolis, Ind. Indianapolis Broadcasting, Inc.	WMBG 1210 100 Richmond, Va. Havens and Martin, Inc.
	WKBH 1380 1000 LaCrosse, Wis.	WMBH 1420 100 Joplin, Mo.
	WKBH, Inc., 409 Main St. WKBI 1420 100 Cicero, III.	W. M. Robertson. WMBI 1080 5000 Chicago, Ill.
	WKBI, Inc., 6138 W. 22nd St.	Moody Bible Institute.
	WKBN 570 500 Youngstown, Ohio. WKBN Broadcasting Corp.	WMBO 1310 100 Auburn, N. Y. WMBO, Inc., Metcalf Bldg.
	WKBV 1500 100 Connersville, Ind.	WMBQ 1500 100 Brooklyn, N. Y.
-	Wm. O. Knox, Box 286 WKBW 1480 5000 Buffato N V	Paul J. Gollhofer, 95 Leonard St. WMBR 1370 100 Tampa, Fla.
	WKBW 1480 5000 Buffalo, N. Y. Buffalo Broadcasting Corp.	F. J. Reynolds, 907 Florida Ave.
	WKBZ 1500 100 Ludington, Mich. Karl L. Ashbacker & Sons.	WMC 780 500 Memphis, Tenn. Commercial Appeal, Inc., Hotel Gayoso.
	WKEU 1500 100 LaGrange, Ga. Radio Station WKEU, 906 Hill St.	WMCA 570 500 New York, N. Y.
	WKFI 1210 100 Greenville, Miss.	Knickerbocker Broadcasting Co. WMMN 890 250 Fairmont, W. Va.
	J. Pat Scully, Box 302. WKJC 1200 100 Lancaster, Pa.	A. M. Rowe, Inc., 325 Main St. WMPC 1500 100 Lapeer, Mich.
	Lancaster Broadcasting Service, Inc.	First Methodist Protestant Church.
	WKOK 1210 100 Sunbury, Pa. Sunbury Broadcasting Co.	WMT 600 500 Waterloo, Iowa. Waterloo Broadcasting Co.
	WKRC 550 1000 Cincinnati, Ohio. WKRC, Inc., Hotel Alms.	WNAC 1230 1000 Boston, Mass. Shepard Broadcasting Service, Inc.
	WKY 900 1000 Oklahoma City, Okla.	Shepard Broadcasting Service, Inc. WNAO 1010 500 Norman, Okia.
	Oklahoma Publishing Co.	University of Oklahoma.
	WKZO 590 1000 Kalamazoo, Mich. John E. Fetzer, Burdick Hotel.	WNAX 570 1000 Yankton, S. O. The House of Gurney, Inc., 2nd and Capital St.
	WLAC 1470 5000 Nashville, Tenn. Life & Casualty Insurance Co.	WNBF 1500 100 Blnghamton, N. Y. Howitt-Wood Radio Co., Inc.
	WLAP 1200 100 Louisville, Ky.	WNBH 1310 100 New Bedford, Mass
	American Broadcasting Corp. of Ky. WLB 1250 1000 Minneapolis, Minn.	New Bedford Broadcasting Co. WNBO 1200 100 Silver Haven, Pa.
	University of Minnesota.	John Brownlee Spriggs. (Washington, Pa.)
	WLBC 1310 50 Muscie, Ind. D. A. Burton, Anthony Bldg.	WNBR 1430 500 Memphis, Tenn. Memphis Broadcasting Co., Hotel DeVoy.
	WLBF 1420 100 Kansas City, Kans.	WNBW 1200 10 Carbondale, Pa.
	WLBF Broadcasting Co., Huron Bldg. WLBL 900 2500 Stevens Point, Wis.	WNBW, Inc., 50 Main St., N. WNBX 1260 250 Springfield, VL
	Wisconsin Dept. of Agriculture and Markets.	WNBX Broadcasting Corp., 39 Main St.
	WLBW 1260 500 Eric, Pa. Broadcasters of Pennsylvania, Inc.	WNBZ 1290 50 Saranac Lake, N. Y. Smith & Mace, 70 Broadway.
	WLBZ 620 500 Bangor, Me.	WNOX 550 1000 Knoxville, Tenn. WNOX, Inc.
	Maine Broadcasting Co., Inc., 100 Main. WLEC 1340 250 Portland, Me.	WNRA 1420 100 Muscle Shoals, Ala.
	Caseo Bay Broadcasting Co.	Kat. ryn Jones
	WLEY 1370 100 Lexington, Mass. Albert S. Moffat	WNYC 810 500 New York, N. Y. Dept. of Plant and Structures.
	WLIT 560 500 Philadelphia, Pa.	WOAI 1190 50000 San Antonio, Texas. Southern Industries, Inc., 1038 Navarro.
	Lit Bros. Broadcasting System, Inc. WLS 870 50000 Chicago, Ill.	WOBU 580 250 Charleston, W. Va.
	Agricultural Broadcasting Co.	WOBU, Inc., Ruffner Hotel.

	WOC- 1000 50000 Des Moines, Iowa.	WEAV 4000	
	WHO Central Broadestg, Co. 914 Walnut St.	WRAX 1020 250 Philadelphia, Pa. WRAX Broadcasting Co., 217 S. Broad	42
	WOCL 1210 50 Jamestown, N. Y. A E. Newton, 840 N. Main St.	WRBL 1200 100 Columbus, Ga.	ot.
	A. E. Newton, 840 N. Main St.	WRBL Radio Station, Inc.	
	WODA 1250 1000 Paterson, N. J.	WRBX 1410 250 Roanoke, Va.	
	WODAAM Corp., 115 Ellison St.	Richmond Development Corp.	_
	WODX 1410 500 Mobile, Ala. Mobile Broadcasting Corp., Battle House.	WRC 950 600 Washington, D. (National Broadcasting Co., Inc.	C.
	WOI 640 5000 Ames, lowa,	WRDO 1370 100 Augusta, Me.	
	Iowa State College.	WRDO, Inc., Augusta House.	
	WOKO 1430 500 Albany, N. Y.	WRDW 1500 100 Augusta, Ga. Virgil V. Evans Co., 309 8th St.	
-	WOKO, Inc., Hotel Ten Eyck. WOL 1310 100 Washington, D. C.	Virgil V. Evans Co., 309 8th St.	
	American Broadcasting Co., Annapolis Hotel.	WREC 600 500 Memphis, Tenn. WREC, Inc., Hotel Peabody.	
	WOMT 1210 100 Manitowoc, Wis.	WREN 1220 1000 Lawrence, Kans.	
	Francis M. Kadow, Box 326.	Jenny Wren Co., 8th and Vermont St.	
	WOOD 1270 500 Grand Rapids, Mich. Kunsky-Trendle Broadcasting Corp.	WRHM 1250 1000 Minneapolis, Min	nn,
	WOPI 1500 100 Bristol, Tenn.	Minnesota Broadcasting Corp., 115 E. G. WRJN 1370 100 Racina, Wis.	rant.
	Radiophone Broadcasting Station WOP1, Inc.	WRJN 1370 100 Racine, Wis. Racine Broadcasting Corp., Hotel Racine	
	WOO 1300 1000 Kansas City, Mo.	WRNY 1010 250 New York, N. Y.	
	Unity School of Christianity.	Marcus Loew Booking Agency.	
	WOR 710 5000 Newark, N. J. Bamberger Broadcusting Service, Inc.	WROL 1810 100 Knoxville, Tenn.	
-	WORC 1280 500 Worcester, Mass.	Stuart Broadcasting Corp., 524 S. Gay. WRR 1280 500 Dallas, Texas.	
	Alfred F. Kleindienst, 60 Franklin St.	WRR 1280 500 Dallas, Texas. City of Dallas, Hilton Hotel.	
	WORK 1000 1000 York, Pa.	WRUF 830 5000 Gainesville, Fla.	
-	York Broadcasting Co., 15 S. Beaver St.	State University.	
	WOS 630 500 Jefferson City, Mo. State Highway Control, Capitol Bldg.	WRVA 1110 5000 Richmond, Va.	
	WOSU 570 750 Columbus, Ohio.	Larus & Bro. Co., Inc., 22nd and Gary S WSAI 1330 1000 Cincinnati, Ohio.	t.
	Ohio State University.	Crosley Radio Corp., 1329 Arkington.	
	WOV 1130 1000 New York, N. Y.	WSAJ 1310 100 Grove City, Pa.	
-	International Broadcasting Corp. WOW 590 1000 Omaha, Neb.	Grove City College.	
	Woodmen of the World, 4th and Farnam.	WSAN 1440 250 Allentown, Pa. WSAN, Inc., 39 10th St.	
	WOWO 1160 10000 Fort Wayne, Ind.	WSAR 1450 250 Fall River, Mass.	
-	Main Auto Supply Co., 213 W. Main. WPAD 1420 100 Paducah, Ky.	Doughty & Welch Electric Co., Inc.	
	Paducah Broadcasting Co., Inc.	WSAZ 1190 1000 Huntington, W. V WSAZ, Inc., 929½ 4th Ave.	2.
	WPAP 1010 250 New York, N. Y.	WSB 740 50000 Atlanta, Ga.	
-	Marcus Loew Booking Agency. WPEN 1500 100 Philadelphia, Pa.	Atlanta Journal, 7 N. Forsyth St.	
	William Penn Broadcasting Co.	WSBC 1210 100 Chicago, III. Gene T. Dyer, 1258 S. Michigan Ave.	
	WPFB 1370 100 Hattiesburg, Miss.	WSBT 1230 500 South Bend, Ind.	
	Hattiesburg Broadcasting Co., Box 530.	South Bend Tribune.	
	WPG 1100 5000 Atlantic City, N. J. Columbia Broadcasting System.	WSEN 1210 100 Columbus, Ohio. Columbus Broadcasting Corp., 144 S. Hig	.L
	WPHR 1200 100 Petersburg, Va.	WSFA 1410 500 Montgomery, Ala.	
	WLBG, Inc., Medical Arts Bldg.	Montgomery Brdg. Co., Inc., Jeff. Dav. E	I'l.
	WPRO 1210 100 Providence, R. I.	WSIX 1210 100 Springfield, Tenn.	
-	Cherry & Webb Broadcasting Co., 15 Chestnut.	638 Tire & Vulcanizing Co.	
	WPTF 680 5000 Raleigh, N. C. Durham Life Insurance Co.	WSJS 1310 100 Winston-Salem, P Winston-Salem Journal Co., 416 N. Marsh	t. G. hall
	WQAM 560 1000 Miami, Fla.	WSM 650 50000 Nashville, Tenn.	
	Miami Broadcasting Co., Inc., 327 N. E. 1st Ave.	National Life & Accident Insurance Co.	
	WQAN 880 250 Scranton, Pa. Scranton Times, 149 Penn Ave.	WSMB 1320 500 New Orleans, La. WSMB, Inc., Maison Blanche Bldg.	
	WQAO 1010 250 New York, N. Y.	WSMK 1380 200 Dayton, Ohio.	
	Marcus Loew Booking Agency.	S. M. Krohn, Jr., 4th and Main St.	
	WQBC 1360 500 Vicksburg, Miss. Delta Broadcasting Co., Hotel Vicksburg.	WSOC, Inc., Box 730.	
<u> </u>	WQDM 1370 100 St. Albans, Vt.	WSPA 1420 100 Spartanburg, S. C	
	A. J. St. Antoine and E. J. Regan.	Virgil V. Evans, Ravenel and Avant St.	•
	WQDX 1210 100 Thomasville, Ga.	WSPD 1340 1000 Toledo, Ohio,	
	Stevens Luke, 135 E. Jackson St. WRAK 1370 100 Williamsport, Pa.	Toledo Broadcasting Co., 505 Jefferson WSUI 880 500 lowa City, lowa.	
	WRAK, Inc., 244 W. 4th St.	State University of Iowa.	
	WRAM 1370 100 Wilmington, N. C.	WSUN 620 1000 St. Petersburg, Fl	8.
	Wilmington Radio Assn., Princess St. WRAW 1310 100 Reading, Pa.	Florida Westcoast Broadcasting Co., Inc.	
	Reading Broadcasting Co., 533 Penn St.	WSVS 1370 50 Buffalo, N. Y. Seneca Vocational High School.	
		Delices Totalional Tilga Conduit.	

	WSYB 1500 100 Rutland, Vt.	XEC 1000 50 Toluca, D. F.
	Philip Weiss Music Co., 80 West St.	fesus R. Benavides.
	WSYR 570 250 Syracuse, N. Y.	XED 1155 500 Quadalajara, Jal.
	Central New York Broadcasting Corp.	ladiofonografica de Guadalajara, S. A.
	WTAD 1440 500 Quincy, III.	XEF 735 150000 Villa Acuna, Coah.
	Illinois Broadcasting Corp., State and 6th.	Compania Radiodifusora de Acuna, S. A.
	WTAG 580 250 Worcester, Mass.	KEFA 1250 500 Mexico City, D. F.
	Worcester Telegram Publishing Co.	Eduardo Limon Segui.
	WTAM 1070 50000 Cleveland, Ohio.	XEFB 1315 100 Monterrey, N. L.
	National Broadcasting Co., Inc.	esus Quintanilla.
	WTAQ 1330 1000 Eau Claire, Wis.	XEFC 1050 100 Merida, Yuc.
1	Gillette Rubber Co., Hotel Eau Claire.	J. Molina Font.
	WTAR 780 500 Norfolk, Va.	XEFD 757 5000 Tijuana, B. C.
	WTAR Radio Corp., Wainwright Bldg.	Goodwill Broadcasting Co.(Box 1441 San Diego)
	WTAW 1120 500 College Station, Texas.	XEFE 1000 100 Laredo, Tams.
	Agricultural and Mechanical College.	Rafael T. Carranza.
	WTAX 1210 100 Springfield, Ill.	
	WTAX, Inc., 416 E. Capitol Ave.	XEFG 1085 500 Mexico City, D. F. Ricardo Gonzales Montero, Tepic 48
-	WTBO 1420 100 Cumberland, Md.	
	Associated Broadcasting Corp., Box 794.	XEFI 1260 250 Chihuahua, Chih. Feliciano Lopez Isles, Ap. 157.
-	WTEL 1310 100 Philadelphia, Pa.	
	Foulkrod Radio Engineering Co., Inc.	XEFJ 1000 100 Monterrey, N. L. R. Junco de la Vega.
-	WTFI 1450 500 Athens, Ga.	
1	Liberty Broadcasting Co., Costa Bldg.	XEFO 940 5000 Mexico City, D. F. Partido Nacional Revolucionario.
	WTIC 1060 50000 Hartford, Conn.	
i	Travelers Broadcasting Service Corp.	XEFS 1000 40 Queretare, Qro. Salvador Sanches.
	WTJS 1310 100 Jackson, Tenn.	
	Sun Publishing Co., Sun Bldg.	XEFV 1370 100 Juarez, Chih. J. Onofre Meza.
-	WTMJ 620 1000 Milwaukee, Wis.	
-	The Journal Co., 333 W. State St.	J. Expedito Martinez.
	WTNJ 1280 500 Trenton, N. J.	
	Trenton Broadcasting Co., Stacy Trent Hotel.	XEFX 1370 100 Mexice City, D. F. Jose Onofre Meza.
-	WTOC 1280 500 Savannah, Ga.	
1	Savannah Broadcasting Co., Inc., DeSoto Hotel.	XEG 1075 500 Mexico City, D. F. Ricardo Gonzales Montero.
	WTRC 1318 50 Elkhart, Ind.	XEH 1132 250 Monterrey, N. L.
	Truth Radio Corp., Hotel Elkhart.	Tarnava y Cia, P. Mier 215.
	WWAE 1200 100 Hammond, Ind.	
	Hammond Calumet Broadcasting Corp.	XEI 1310 250 Morelia, Mich. Carlos Gutierrex M.
	WWJ 920 1000 Detroit, Mich.	XEJ 1015 500 Juarez, Chih.
	Evening News Assn., 616 Lafayette Blvd.	Juan G. Buttner and Leo Allande.
-	WWL 850 10000 New Orleans, La.	XEK 990 100 Mexico City, D. F.
	Loyola University, Roosevelt Hotel.	Arturo Martinez. Jalapa No. 51
	WWNC 570 1000 Asheville, N. C.	XEL 1000 40 Saltilio, Coah.
	Citizen Broadcasting Co., Inc., Flatiron Bldg.	Antonio Garza Castro.
	WWRL 1500 100 Woodside, N. Y.	XEN 711 1000 Mexico City, D. F.
1	Long Island Broadcasting Corp.	Cerveceria Modelo S. A.
	WWSW 1500 100 Pittsburgh, Pa.	XENT 1115 150000 Nuevo Laredo, Tams.
1	Walker & Downing Radio Corp.	Cia Industrial Universal S. A.
	WWVA 1160 5000 Wheeling, W. Va.	XEO 940 5000 Mexico City, D. F.
1	West Virginia Broadcasting Corp.	Partido Nacional Revolucionario.
	WXYZ 1240 1000 Detroit, Mich.	XEP 780 500 Mexice City, D. F.
1	Kunsky-Trendle Broadcasting Corp.	Cia Difusora de Mexico S. A.
	XEA 1000 250 Guadalajara, Jal.	XEPN 585 75000 Piedras Negras, Coah
	Alberto Palos Souza.	Pledras Negras Broadcasting Co.
	XEAB 1450 7.5 Nuevo Laredo, Tams.	
	Horacio Mattei A. y Homberto Garcia.	XEQ 1330 500 Mexico City, D. F.
	XEAC 1295 100 San Luis Potosi, S.L.P.	XER 735 150000 Villa Acuna, Coah.
1	Francisco de P. Cabrera.	Compania Radiodifusora de Acuna, S. A.
	XEAD 875 250 Mexico City, D. F.	XES 1020 250 Tampico, Tams.
	Julio Zetina Osorio.	Fernando Sada, Hotel Inglaterra.
-	XEAE 980 800 Tijuana, B. C.	XET 690 500 Monterrey, N. L.
1	Adolfo Labastida Jr. Apt. 10	Cadena Radiodifusora Mexicana, S. A.
	XEAL 1090 100 Mexico City, D. F.	XETA 1180 250 Mexico City, D. F.
	Carlos Gonzales Caballero.	Manuel Espanozo Tagle.
	XEAN 750 5000 Juarez, Chih.	XETB 1380 125 Torreon, Coah.
	Radio Difusora National S. A.	Jose A. Berumen.
	XEAO 580 100 Mexicali, B. C.	XETH 860 100 Puebla, Pue.
	Luis L. Castro.	Ramon Huerta G.
	XEAW 965 10000 Reynosa, Tams.	XETR 610 1000 Mexico City, D. F.
	Internacional Broadcasting Co., S. A.	Cia Difusora Mexicana S. A.
	XEB 1030 10000 Mexico City, D. F.	XETU 890 100 Pachuca, Hdgo.
	El Buen Tono, S. A., Buen Tono No. 6.	Rodrigo Manriquez.
	_	

XETW 830 500 Mexico City, D. F. Rafael M. Pena, Gante 4, 3er piso	YV1BC 960 5000 Caracas, Venz. Cia Ama Alamacen Americana.
XEU 1010 100 Veracruz, Ver. Fernando Pazos Sosa.	YV2BC 882 100 Caracas, Venz.
XEW 910 5000 Mexico City, D. F. Cadena Radiodifusora Mexicana S. A.	YV3BC 1200 1000 Caracas, Venz. Degwitz & Siblesz.
XEX 1210 500 Mexico City, D. F. "Excelsior" Cia Editorial S. A.	10-AK 1200 15 Stratford, Ont. M. I. Higgins, 151 Ontario St.
XEY 546.8 10 Merida, Yuc. Partido Socialista del Surest.	10-AT 1155 25 Trail, B. C. Trail Amateur Radio Assn.
XEYZ 780 10000 Mexico City, D. F. Radiodifusora Continental S. A.	10-Bl 1200 25 Prince Albert, Sask. Prince Albert Radio Club.
XEZ 630 500 Merida, Yuc.	10-BP 1200 15 Wingham, Ont. W. T. Cruickshank.
XFB 1290 1000 Jalapa, Ver. Gobierno del Estado de Veracruz.	10-BQ 1200 5 Brantford, Ont. Tom and Harold Brown.
XFC 805 350 Aguascalientes, Ags. Gobierno del Estado de Aguascalientes.	10-BU 1200 15 Canora, Sask. Canora Radio Assn.
XFG 638.3 2000 Mexico City, D. F. Secretaria de Guerra y Marina.	
XFO 940 5000 Mexico City, D. F. National Revolucionario Party.	
XFX 840 500 Mexico City, D. F Secretaria de Educacion Publica.	

AIRPORT RADIO STATIONS OF THE U.S.

KBTY KEU	Butte, Mont 20-21-22-23-38-41 Burbank, Calif., 20-21-22-23-38-41	KGUP KGUQ	Phoeniz, Ariz., 2-3-19-28-31-40-45-46 Indio, Calif., 2-3-19-28-31-40-45-46
KFM	Sacramento, Calif., 20-21-22-23-38-41	KĞÜŘ	Burbank, Calif., 2-3-19-28-31-40-45-46
KFO	Oakland, Calif., 5-6-20-21-22-23-30-38-41-43-44	KĞÜS	Blythe, Calif., 2-3-31-45-46
$_{\mathrm{KGE}}$	Medford, Ore., 20-21-22-23-38-41	KGUT	Robertson, Mo., 3-19-24-25-26-27-28-31-39-40
KGJW	Brownsville, Tex., 9-15-32-35-42-47-48-56-58	KGUU	Little Rock, Ark., 2-3-19-28-31-40
KGQW	Juneau, Alaska, 8	KGUY	Oakland, Calif.,
KGQX	Seattle, Wash., 8	KGUZ	Ponca City, Okla., 20-22-23-38
KGQZ	Sin Diego, Calif., 20-21-22-23-38-41	KIFM	Fairbanks, Alaska, 7-17-30-55-56
KGSB	Sin Bruno, Calif., 11-12-15-16-29-37-49-56	KJE	Reno, Nev. 5-6-20-21-22-23-30-38-41-43-44
KGSC	Oklahoma City,Okla., 11-12-15-16-26-29-37-49-56	KKO	Elko, Nev., 20-21-22-23-38-41
KGSE KGSG	Iowa City, Iowa,	KMP	Omaha, Neb., 5-6-20-21-22-23-30-38-41-43-44
KGSH	Oklahoma City, Okla., Portable, 19	KMR	No. Platte, Nebr., 20-21-22-23-38-41
KGSM	Silina, Kans., 13	KNAS KNAT	Kansas City, Mo., 20-21-23-38-41 Dallas, Tex., 20-21-22-23-38-41
KGSP	Denver, Colo., 11-12-15-16-29-37-49-56	KNAU	Tulsa, Okla., 20-21-22-23-38-41
KGSR	Pueblo, Colo., 11-12-15-16-29-37-49-56	KNWA	St. Paul, Minn., 10-14-34
KGSS	Denver, Colo., 13	KNWB	Fargo, N. D., 10-14-34
KGSV	Wiehita Falls, Tex., 11-12-15-16-29-37-49-56	KNWC	Pembina, N. D., 10-14-34
KGT	Fresno, Calif., 20-21-22-23-38-41	KOE	Chevenne, Wyo., 5-6-20-21-22-23-30-38-41-43-44
KGTA	Winslow, Ariz., 11-12-15-16-29-37-49-56	KQC	Rock Springs, Wyo., 20-21-22-23-38-41
KGTB	Texarkana, Ark., 19	KQD	Salt Lake City, 5-6-20-21-22-23-30-38-41-43-44
KGTD	Wichita, Kans., 15-16-37	KQM	Des Moines, Iowa, 20-21-22-23-38-41
KGTH	Salt Lake City, 11-12-15-16-29-51-56	KQQ	Iowa City, Iowa, 20-21-22-23-38-41
KGTJ	Las Vegas, Nev., 11-12-15-16-29-37-49-56	KQX	Bakersfield, Calif., 20-21-22-23-38-41
KGTL	Kingman, Ariz., 11-12-15-16-29-37-49-56	KRA	Boise, Idaho, 20-21-22-23-38-41
KGTQ KGTR	Springfield, Mo., 11-12-17-18-29-36-50-56	KRD	Pasco, Wash., 20-21-22-23-38-41
KGTU	Robertson, Mo., 11-12-17-18-29-36-50-56	KRF	Lincoln, Neb., 20-21-22-23-38-41
KGTV	Lake Charles, La., 19 Beaumont, Tex., 19-28-40	KSI KST	Los Angeles, Calif., 11-12-15-16-29-36-49-56
KGTW	Burbank, Calif.,	rsı	Kansas City, Mo., 11-12-15-16-17-29-36-37-49- 50-56
KGTX	Pocatello, Idaho, 20-21-22-23-38-41	KSV	Amarillo, Tex., 11-12-15-16-29-36-49-56
KGTZ	Spokane, Wash., 20-21-22-23-38-41	KSX	Albuquerque, N. M., 11-15-16-29-37-49-56-57
KGUA	El Paso, Texas, 2-3-19-31-45-46	KSY	Tulsa, Okla., 15-16-17-18-26-36-37-49-56-57
KGUB	Houston, Texas, 2-3-19-31-45-46	ŔŤŪ	Redding, Calif., 20-21-22-23-41
KGUC	Fort Worth, Tex., 2-28-39-40-45-46-58	KVO	Portland, Ore., 20-21-22-23-38-41
KGUD	San Antonio, Tex., 2-3-19-31-45-46	KZJ	Seattle, Wash., 20-21-22-23-38-41
KGUE	Brownsville, Tex., 1-4-19-27-33-52-53-54-56	WAEA	Indianapolis, Ind., 17-18-37-50
KGUF	Dallas, Tex., 2-3-19-28-31-39-40-45-46	WAEB	Columbus, Ohio, 11-12-17-18-27-29-36-37-50-56-
KGUG	Big Springs, Tex., 2-3-19-28-31-40-45-46		57
KGUH	Waco, Tex., 2-3-19-31-45-46	WAEC	Pittsburgh, Pa., 11-12-17-18-29-36-50-56
KGUK	Shreveport, La., 19-28-40	WAED	Middletown, Pa., 11-12-17-18-27-29-36-50-56
KGUL	Abilene, Tex., 19-28-40	WAEE	Camden, N. J., 11-12-17-18-29-36-50-56
KGUM KGUN	Frijole, Tex., 2-3-28-31-40-45-46	WAEF WAEG	Newark, N. J., 11-12-17-18-29-36-50-56
KGUO	Douglas, Ariz., 2-3-19-28-31-39-40-45-46 Tuscon, Ariz., 19-28-40	WAEG	Cresson, Pa., 11-12-17-18-29-37-50-56
1000	1 uncon, A112., 10-20-10	WALL	Milwaukee, Wis., 10-14-34

WAEJ Springfield, Ill., 2-3-19-28-31-40 WAEK Mobile, Ala., 19-28-40 WAEL Toledo, Ohio, WAEM Moline, Ill., WAEN Evansville, Ind., 19 WAEO Chicago, Ill., 13-18 WAEP Tortable, 19 WAEQ Elmira, N. Y., 27 WEEA Atlanta, Ga., 15-16-32-42-48	WNAL Brooksville, Pa., 20 WNAM Lewisburg, Pa., 20 WNAO Plainfield, N. J., 20 WNAT Orlando Twns., Ill., 20-21-22-23-38-41 WNAU Moline, Ill., 20-21-22-23-38-41 WOA New York, N. Y., 15 WQDP Atlanta, Ga., 2-3-19-28-31-45-46 WQDQ New Orleans, La., 2-3-19-31-45-46 WQDU Aurora, Ill., 5-6-20-21-22-23-30-38-41-43-44
WEEB Baltimore, Md., 15-16-32-42-48 WEEC Charleston, S. C., 15-16-32-42-48 WEEG Spartansburg, S. C., 15-16-32-42-48 WEEH McRee, Ga., 15-16-32-42-48 WEEI Detroit, Mich	WRDN Norfolk, Va., 9-15-42 WSDB Jackson, Miss., 2-3-19-28-31-40-45-46 WSDC Newark, N. J., 19-28-39 WSDD Boston, Mass., 19-24-39 WSDE Birmingham, Ala., 19-28-40 WSDF Louisville, Ky., 2-3-19-25-26-27-28-31-40-45-46 WSDG Chicugo, Ill., 2-3-25-26-27-28-31-40-45-46 WSDH Nashville, Tenn., 2-3-19-25-26-27-28-31-40-45-46 WSDI Cincinnati, Ohio, 2-3-19-25-26-27-28-31-40-45-46 WSDL Duluth, Minn., 10-14-34 WSDM Albany, N. Y., 2-3-19-28-31-40
WGDW Atlantic City, N. J., 9-15-42 WKDL Miami, Pla., 9-15-32-34-54-2-47-48-49-56-58 WMDU San Juan, P. R., 9-15-16-32-35-42-47-48-56-58 WNAJ Angola, Ind., 20 WNAK Litchfield, Ohio, 20 Megs. Meters Megs. Meters	WSDO Buffalo, N. Y., 2-3-19-31-45-46 WSDP Port Columbus, Ohio, 19 WSDQ Berea, Ohio, 2-3-19-28-31-40 WSDR Madison, Wis., 10-14-34 WSDZ Indianapolis, Ind., 2-3-19-28-31-40 Megs. Meters Megs. Meters
1. 2.316 129.45 16. 3.076 97.47 2. 2.326 128.89 17. 3.082 97.28 3. 2.344 127.91 18. 3.088 97.09 4. 2.356 127.25 19. 3.128 95.86 5. 2.482 120.79 20. 3.160 94.87 6. 2.506 119.64 21. 3.166 94.69 7. 2.648 113.22 22. 3.172 94.52 8. 2.650 113.13 23. 3.178 94.34 9. 2.662 112.62 24. 3.238 92.59 10. 2.680 111.87 25. 3.452 86.85 11. 2.722 110.14 26. 3.460 86.65 11. 2.734 109.67 27. 3.468 86.45	Megs. Meters Megs. Meters 31. 4.140 72.42 45. 6.260 47.89 32. 4.164 72.00 46. 6.275 47.78 33. 47.40 63.25 47. 6.305 47.55 34. 5.375 55.78 48. 6.320 47.43 35. 5.405 55.47 49. 6.350 47.22 36. 5.510 54.41 50. 6.365 47.10 37. 5.540 54.12 51. 6.380 46.99 38. 5.570 53.82 52. 6.540 45.77 40. 5.630 53.25 54. 6.550 45.77 40. 5.630 52.97 55. 6.570 45.63 41. 5.60 52.60 66. 8.015 37.40

86.05 72.98 72.70

Let's CLEAN Up the SET

2.906

3.004

103.13

99.79 97.66

(Continued from page 24) iceman are required in order properly to retune a complicated receiver. Inexperienced handling of trimmer condensers frequently results in an entirely new set of dial readings because of the increased or decreased capacity of the tuning gang-unit.

Make Careful Inspection

Examine the wires beneath the chassis. Separate any grid wires that have fallen too close to adjacent wires. Test the fastenings of the shield cams and, if loose, remove and clean the contacting surfaces with emery-cloth before replacing tightly and firmly. Poor shield contacts may cause instability, poor tuning, noise, fading and sudden oscillations. Bend the socket springs so

they will make good contact with the prongs of the tubes. A little brightening with emery-cloth will be time well spent. A little vaseline on some tuning units and dials, such as the Philco, will stop jerky or clicking tuning. The entire dial mechanism should be overhauled and oiled, but take care not to move the dial and thus change the dial readings.

57. 12.180

24.61 24.55

The Volume Control

The volume control, if wire wound, can be polished by rubbing lightly with emery-cloth. If worn or noisy it should be replaced with a new one ordered from the manufacturer, but be careful to replace the wires in exactly the same positions. Clean the contacts of the off-on and local-distance switches, and such other shortwave switches as may be on the chassis.

Test all the tubes. A new rectifier

often works wonders. The power tubes also lose their tone and volume qualities before the other tubes in the set. Clean all the old tubes and scrape the prong contacts to a bright finish. RADEX has presented considerable data about replacing old tubes with the newer types.

Check the ground and antenna Shielding of the down-lead will improve reception, as explained in the October, 1933, issue of RADEX. Filtering devices will remove most power line noises, as shown in the April, 1933, issue. And headphones, for perfect DX work, may be attached, as indicated in the February, 1933, number of RADEX.

The BEGINNERS' **STORY**

(Continued from page 7)

The wire through which electricity flows is a conductor. Copper is the best commercial material, but silver is the most nearly perfect. are materials that prevent the flow of an electric current, such as glass, hard-rubber, bakelite, etc. They are known as insulators. Other materials retard the flow of electricity to various extents, and they are known The unit of resistas resistances. ance is the ohm. The unit of conductivity is the opposite of resistance —the mho. 1,000,000 ohms is called a megohm.

The ampere, volt and ohm work together in all electrical and radio circuits. Their relationship is interesting and of vast importance in making circuit calculations. Perhaps some of our readers will wish to look up Ohm's Law in text books and make a more complete study of its many combinations in radio. Milli means onethousandth part of some unit, such as milli-ampere, which is one-thousandth of an ampere of current. Micro is one-millionth part of an unit; micro-volt being one-millionth of a

(Next month we shall see how al-

ternating currents may be used to transfer electric currents from one circuit to another; how radio and audio-currents are amplified; how magnetism and electricity are inseparable; and how transformers work.)

Queries

- 1. What is audio frequency? Radio frequency?
- What is direct current? Alternating current?
- 3. What is 60-cycle A. C.?
 4. What is a kilocycle? A megacycle?
- 4. What is a kilocycle? A megacycle.
 5. Do positive and negative electricity attract or repel each other?
- What is the effect of connecting batteries in series? In parallel?
- What is the unit of measure of electrical pressure? Of quantity? Of consumption? Of resistance?
- 8. What is the frequency-of-vibration limit of the human ear?
- What is the relation between frequency and length of wave?
- What is a carrier wave and what function has it?

STATEMENT OF THE OWNERSHIP, MAN-AGEMENT. CIRCULATION, ETC., RE-QUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of RADIO INDEX (RADEX), published Monthly except July and August, at Mount Morris, Illinois, for October 1, 1933.

State of Ohio County of Cuyahoga ss.

Before me, a Notary Public, in and for the State and county aforesaid, personally ap-peared Fred C. Butler, who, having been duly sworn according to law, deposes and says that he is the President of The Radex Press, Inc., publishers of RADIO INDEX and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411. Postal Laws and Regulations, printed on the reverse of this form, to wit:

That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Fred C. Butler, Hanna Building, Cleveland, Ohio; Editor, Fred C. Butler, Hanna Building, Cleveland, Ohio; Managing Editor, none; Business Man-

agers, none.
2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) The Radex Press, Inc., Hanna Building, Cleveland. Ohio: Fred C. Butler, Hanna Building, Cleveland, Ohio.

That the known bondholders, mort-3. gagees, and other security holders owning or holding 1 per cent or more of total amount of honds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustee, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.
FRED C. BUTLER.

Sworn to and subscribed before me this

29th day of September, 1933.

EDITH C. PHALEN, Notary Public.
(My commission expires May 11, 1935.)

Over the

EDITOR'S DESK

(Continued from page 11)

of razzberries. From the interesting little magazine "Tune In," the official organ of the New Zealand Radio Association, we quote the record of a member of that Association living in Lyttelton, N. Z., "-my radio experience with a one-valve receiver at Auckland. During the sixteen months I was DXing, I compiled a log of about 90 stations. Often my efforts were not appreciated by radio acquaintances, many of whom openly expressed their disbelief that I had heard stations in Hawaii, U. S., Japan and the Philippine Islands. I have proof enough to satisfy the most disbelieving critics, for my verifications include KDYL, KFOX, KGA, KROW, WTAM, JOAK and JOCK. I used phones, of course." This report from the other side indicates the amazing things that can happen in radio.

The FREQUENCY CHECKS

(Continued from page 4)

	1500 kcs.
KGFI	Corpus Christi, Tex., Fri. 5:10
KGFK	Moorhead, Minn., Fri. 5:50
KGKB	Tyler, Tex., Fri. 5:30
KGKY	Scottsbluff, Neb., Wed. 4:00
KNOW	Austin, Tex., Thur. 5:40
KPJM	Prescott, Ariz., Tue. 4:10
KPQ	Wenatchee, Wash., Mon. 4:00
KXŌ	El Centro, Calif., Tue. 4:30
WHEF	Kosciusko, Miss., Tue. 3:30
WKBV	Connersville, Ind., Thur. 4:50
WKBZ	Ludington, Mich., Thur. 4:30
WKEU	LaGrange, Ga., Tue. 2:40
WMBQ	Brooklyn, N. Y., Sat. 2:40
WMIL	Brooklyn, N. Y., Mon. 2:00
WMPC	Lapeer, Mich., Thur. 4:10
WNBF	Binghamton, N. Y., Mon. 2:20
WRDW	Augusta, Ga., Thur. 3:00
WSYB	Rutland, Vt., Mon. 3:10
WWRL	Woodside, N. Y., Sat. 2:20
WWSW	Pittsburgh, Pa., Mon. 2:40

From Our Own LOUD SPEAKER

"I have found it to be the most complete, accurate and reliable radio publication I have ever known. At times I just can't wait for the next copy."-W. T. R. Morris, Jr., 3219 Garland Ave., Richmond, Va.

"Just a line to tell you how much I like RADEX. I think it is the best radio magazine on the market, bar none. I absolutely could not do without it."-B. Hook, 315 Delatre St., Woodstock, Ontario.

"Your magazine is fine-seems to be the only radio magazine that started good and stayed that way." -L. D. Smith, 524 E. 9th St., Erie, Pa.

"I am an enthusiastic reader of RADEX and think it is the finest magazine of its kind on the market." -Leslie Scourfield, 299 Tunis Street, Ingersoll, Ont.

"Mr. Frank Barnett, New Zealand's champion DXer, showed me your magazine and I think it grand." -A. Mervyn Branks, Winton, Southland, New Zealand.

"I shall never be without it. give RADEX credit for my best catches."-Woodrow Welling, Roberts, Idaho.

"Sorry I did not get RADEX years ago; it is OK; nothing like it."—Ker R. Graham, P. O. Box 61, Gisborne, New Zealand.

"I've been a reader for several years. I find it indispensable."— Raymond M. Bell, 55 Wilson St., Carlisle, Pa.

STATION CHANGES During October

		FREQUENCIES
925 1010 1030 1120 1125 1140 1210		Havana, Cuba, from 1140 Hamilton, Ont., from 890 Fredericton, N. B., from 1210 Hamilton, Ont., from 1010 Cienfuegos, Cuba, from 1190 Havana, Cuba, from 925 St. John, N. B., from 1030
		POWER
1030 1200 1200 1210 1210 1290 1330	CKNC 10-BP 10-BQ CFBO WGNY XFB WDRC	Toronto, Ont., 500 to 100 Wingham, Ont., 25 to 15 Brantford, Ont., 15 to 5 St. John, N. B., 500 to 100 Chester, N. Y., 50 to 100 Jalapa, Ver., 500 to 1000 Hartford, Conn., 500 to 1000
		DELETED
630 1200 1350 1350	XETF KFWF WCDA WMSG	Veracruz, Ver. St. Louis, Mo. New York, N. Y. New York, N. Y.

1210 WSOC

1310 WKBB 1420 WJBO

910 CRCM 4085 XEFG

1420 WNRA

ELIMINATING NOISES

With each year's subscription to RADEX we will send free a copy of Tobe Deutschmann's 75-page book on "Radio Noises and Their Cure" provided 10 cents extra is sent for postage. Or we will give free one of those Radio Maps of the World with Time Converting Dial.

QUICK INDEX TO STATION DATA

Broadcasting Stations		
-	No.	Page
Time on the Air (Saturday's)	72	46
Time on the Air (Sunday's)	71	46
Monthly Frequency Checks	71	1
World Stations by Frequencies		46
World Stations by Countries		64
Identification Information		46
Slogans and Buildings		46
Mail Addresses	69	46
Europeans with Time on Air		75
Trans-Pacific by Frequencies		74
Complete European	65	76
Cuban Mail Addresses	65	78
Short Wave Stations		
100 Best by Frequencies	72	78
Canadian Police		80
World List by Frequencies		70
U. S. Police	67	74
Sunday Time on the Air		75
World List by Calls	64	74
U. S. Stations	63	74
World List by Countries	61	73

850 KWKH Shreveport, La., to International Broadeasting Corp. CHAINS 1240 KTAT Fort Worth, Texas, new CBS PERMIT TO CHANGE LOCATION 1210 WKFI Greenville to Greenwood, Miss.

LOCATION

LaPrairie, Que. Mexico City, D. F. CALLS

Charlotte, N. C., from Gastonia, N. C. East Dubuque, Ill., from Joliet, Ill.

Baton Rouge, La., from New Orleans, La.

Muscle Shoals, Ala., formerly WMED

	INSURE YOUR RAD	IO ENJOYMENT	
*	SEND THIS BLA	NK TODAY	
The Radex Press, In Hanna Building Cleveland, Ohio.	ıc.		
as checked below:	for which sen		
Program "Slates"	1 for 10c	☐ 2 for 15c	☐ 4 for 25c
One radio map of	North America	***************************************	15c
☐ One Radio World	Map and Time Converte	t	25c
One copy of the	next RADEX	***************************************	25c
☐ Trial subscription	, next five issues of RADI	EX	\$1.00
☐ Two subscription	ption to RADEX, 10 issues s to RADEX with one	leatherette cover and M	lap-Converter.
	scription with leatherette co		
	Write Name plainly		
	Street and Number		
73	City and State		
	No extra charge outs	ide the U. S. A.	

Last Call for

A REAL WORLD GLOBE

Every Radio Fan Can Afford to Own

Right up to the minute and so large every state in the U. S. A. and all the principal cities are plainly shown. Twelve inches in diameter—nearly 39 inches in circumference—beautifully printed in many colors. Ball is substantial metal.

A wonderful addition to the radio set and a big help to the children in the home. Only with a globe can you get a true picture of the relative position of one country to another.

This is the first globe for a low price we have found that was large enough to be worth-while. Get yours before the price goes up.



We regret that the size of this globe is too large to ship parcel post outside the U. S.

PRICE ONLY

\$5.50

POSTPAID ANYWHERE IN THE U. S. A.

The Radex Press Inc.

HANNA BUILDING CLEVELAND, OHIO

The Perfect Phone Adapter for all Receivers



No Tubes to Remove and Replace. No Change in Wiring. Inserting the phone-plug in the jack in the little box automatically cuts out the speaker.

The adapter (or adapters) are placed under the power tube (or tubes, if in push-pull) and left in place. The little clamp goes to the ground. The box may be placed on top or in the back of set or screwed to the underside of the cabinet out of sight.

Made in Four Types:

Model A: One socket, M

Model B: Two sockets. Four holes.

Four holes.

Tour noice.

Model C: One socket. Five holes. Model D: Two sockets.

oles. Five holes.

Models for one or two sockets and either six or seven holes made to order at same proce.

The use of the Perfect Phone Adapter does not change the

load or interfere with use of speaker in any way. To reduce volume to comfortable level, signal is taken before it is amplified by power tubes, hence it is not recommended for three-tube sets. Otherwise fully guaranteed.

Use headphones and hear those foreign and other distant stations that cannot be identified on the loud speaker. Use your radio without disturbing members of the family who have retired.

Price of any Model Postpaid



Complete with DX Phones and Plug



RADIO PARTS CO.

1401 Prospect Ave.

Cleveland, Ohio,