RADIO

The All-Wave Radio Log Authority

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No. 142

MARCH - APRIL, 1941

Contents

Radexing with the Radexers, by Ray LaRocque -	*	· 1								
The Inside Story of Your New Radio,										
by B. Francis Dashiell		- 11								
On the West Coast, by Melvin Fisher		15								
Radex Club News		28								
The DX Calendar	. ,	29								
High Frequency Globe Trotting, by Ray LaRocque		30								
Ham Hounding, by Owen P. Callin		44								
The Shortwave Broadcasting Stations		50								
The SWL Trading Post		52								
The Frequency Modulated Stations		53								
The World's Radio Stations, 2994 to 5000 kcs.		55								
The North American Broadcasting Stations by Frequency	tenci	es 64								
The Same Stations by Locations	× 0	83								
Also by Call Letters		. 89								

IN CANADA 30 C



PHONE ADAPTERS for QUIET RADIO

Do you listen in late at night while others are sleeping? Does your town require you to turn your radio down at a certain hour? If you are an apartment dweller, or a DXer, or if there is more than one radio in your home, equip your set with headphones and win the gratitude of your family and your neighbors.

We offer a phone adapter which will permit the use of headphones with your radio. It can be used with any radio set, regardless of make, and is fully guaranteed. Very easily installed.

$T\,R\,I\,M\,M$ Quiet radio attachment

This kit, including adapter and headphones, is made by the makers of the famous "Trimm" headphones. Headset and loud-speaker may be used separately or together.

Adapter with Trimm Featherweight Headphones— \$13.50

Adapter with Trimm Dependable Headphones— \$5.95

Adapter with Acme DeLuxe Headphones— \$4.40

THE RADEX PUBLISHING CO., Emerson, New Jersey



RADIO INDEX



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SEVENTEENTH YEAR

MARCH 1, 1941

NO. 142

Page Taylor, Editor
B. Francis Dashiell, Technical Editor

Ray LaRocque, Eastern Editor Melvin Fisher, Western Editor

Owen P. Callin, Amateur Editor

Radexing with the Radexers

By RAY La ROCQUE

Contestants in the big RADEX championship prize contest seem to have been very active during the past cour's of months. Let's glance at what our Radexers are doing in **** division (broadrv of Montoup with 651 of Rome, N. vecton Richards ster Stedman 43, and Normford, Conn. any vith 241. Many accession, and here will be a oon as the re-... come in.

e midst of the s month! This, in the form ter from David Thomas of Proctorville, Ohio, sort of changes the standings in many divisions and creates new leaders in some of them. Here they are:

 DXers who have been verifying stations two years or less:

RichardsIll	20 mo.	414
Landry-P. Q	17 mo.	376
Blinn-Kans	22 mo.	291
Metcalf-Ohio	12 mo.	269
F. Lee—N. J	24 mo.	262
ALD TIMEDIC C	TODE	MAC

OLD TIMER'S SUPREMACY: For the oldest dated verifications: Podall—Vt. Nov. 1916 Barnhart—Pa. Feb. 1923

Allen—Calif. Dec. 1923
Thomas—Ohio Mar. 1924
Jordon—Penna Aug. 1924

S. A. SUPREMACY: For the most Sosth American stations verified:

Reichardt-Mass.							35
Botzum-Penna.							32
Forestieri-N. Y.			i		į.		19
Burnham-Mass.							17
Lippincott-Me.						4	9
Barnes-Ill	٠		ı	ń			9

Readers living in the Eastern and Central Standard Time Zones may send their report direct to Ray LaRocque
105 Highland St.,
Worcester, Mas.
(Please use EST in reports)

T. A. SUPREMACY: For the most
Trans-Atlantic stations verified:
Reichardt-Mass158
Botzum—Penna 33
Lippincott—Me 29
Forestieri—N. Y 23
Burnham—Mass 14
TO DESIGNATION DE L

T. P. SUPREMACY: For the most trans-Pacific stations verified:

Reichardt-Mass.					84
Tarr-Wash					50
Botzum-Penna					
Lippincott-Me					
Forestieri-N. Y.					7

CLUB BUTTONS-STATIONERY

In this issue we launch here and now our official campaign for club buttons, seals, and stationery for RADEX Club members. The tabulation of names in favor of the plan begins here and will continue in each issue until 100 members have signified their approval of the plan. When we have reached 100, then your Radexer in chief will deposit the list into the hands of the powers that be and say, "there, Mr. Boss, are one hundred members who want club emblems."

The names:

1.-John D. Long, Dalton, Ga.

2.—Ed Medric, Brooklyn, N. Y.

3.—Roy Woollacott, Rochester, N. Y.

4.—Henry Bennett, Collingswood, N. I.

5.—Robert Mc Connéll, Middletown, Ohio

6.—Clarence L. Mustoe, Brady, Mont.

7.-Weston Richards, Zion, Ill.

PERSONALITIES:

Many happy returns of the day to Radexer Frederic T. Krueger, who was 72 years young last month! . . . Welcome back into the DX game to Bob Gilchrist who will be remembered for his association with the old Interstate Radio Association . . A new Hallicrafters Defiant graces the listening post of Malcolm Horlick of Youngstown, Ohio.

THIS 'N' DATA

Because they obtained their construction permits by a false statement of ownership, WTMC in Ocala, Fla., and WDLP in Panama City, Fla. have had their licenses revoked by the F. C. C. . . . WSUN takes over the facilities of WFLA on 620 kcs., and WKGA in Tampa is awarded the choice call letters-WFLA! . . . After many long years of refusing, the FCC finally looks with favor upon granting WHDH full time on 830 kcs., much to the woe of KOA! . . . New call letters assigned: KBWD to Brownwood, Texas, WPER to DeLand, Fla., WHLN to Harlan, Ky., KPOW to Powell, Wyo., KSWO to Lawton, Okla., WKRO to Cairo, Ill., WMAW to Worcester, Mass., WRLC to Toccoa. Ga.

WAAB was granted a new license by the FCC, but was told to be a good boy hereafter, or else!! It seems WAAB has adopted a policy of broadcasting editorials urging the election of certain political candidates which is considered to be against good radio ethics. A station should remain constantly neutral in political matters. . . . A new station for Greenwood, S. C. with 250 watts on 1420 kc. . . .

BITS AND TIPS

From our readers! Glen Thorman wants to know if it's too late to enter the RADEX contest. It's never too late, Glen. . . Say, can anyone help Vern Lee Gibbs, Rt. 5, Lexington, Ky. identify the all night Spanish speaking station on 1150 kcs! . . . For those who do not already know. G. L. Banta reminds listeners that the FCC checks provide excellent opportunity to boost your score in the RADEX contest. . . . N. Bernard Boonin, 246 So. Fairview Ave., Upper Darby, Penna. wants to know what station he heard in back of KTRH at 2:00 a.m.

WBAL took a month to answer then verified by air-mail. . . There is no known "Northern California Network" according to Bill Gabriel, Jr., but the California Radio System is comprised of KSAN KFBK, KMJ, KERN, KFWB, KFOX, KFSD, KTMS, and KOH. This is for Wes-

ton Richards... Peter Landry up in Montreal wants to know about the Spanish speaking stations on the air Xmas morning on 1030 kcs. and 1160 kcs.

The following choice bits are from the same Pete Landry for all and sundry who care to make use of them: Stations on the air before 5:00 a.m. are WMCA, WIP, WPIC, WMMN, XERA, XENT, WCAR, WEDC, WOL, WNEW, WNOE, KXYZ, WWSW and WJBK.

On at 5:00 a.m. are: KYA, XEAW, WBT, WCAU, KUOA*. and WHIS.

On at 5:30 a.m. are: WCHS, WIBW, WPTF, WJR, KFAB*, WHAS, WRNL, KMA, KDKA, XEG, WRVA, and WWVA.

On at 5:45 a.m. are WHIO, WNEL, and WCKY.

On at 6:00 a.m. are: WGR, WFIL, WKZO*, KWTO, WSYR, WEEI, WICC, WCAO, WROL, WPRO. WOR, CKAC, WEAN. CFRB, KOAM*, WKAR. CBL, CKSO, WLS, WBEN, WWL, WWJ, WDBJ, WAAT, WTRY*, WSPA*, WRC, WBZ, WHN. KNOX, CKLW, WTIC, WBAL, WTAM, WCOP*, WNAC, WSAZ, WSAM. WFBL, WFBR, WSAI, WSPD, WBNS, WOOD. WHIS, WING WBIG, WJSV, and KITE.

WDEV. On at 6:30 a.m. are: CHRC, CKCL, CFCF, KXOK*, WEAF, WHKC, WSM, WGN. WSB, WJJZ, WEW, WTAR, WGY, WHDH, WABC, WHB*, WBAP, CBF, CBM, KMOX, CHSJ, WAPI, CKCH (6:40),WHAM, WMAZ, WXYZ, WDOD, WJHP*, and WBBR.

7:00 a.m. are: WTMI, On at WCCO, WCSH. WEAU, KOWH*, WMBI, CHLP, WCAE, WNBX, WIID, WIBC*. KLCN, WOWO, and WKBW. (All of the previous are the observations of Friend Landry who has marked his most difficult catches with an aterisk and tabulated them as they would appear on your dial from 550 kcs. down the line to 1550 kcs!)

George Wetherell and Jim Davis both come to the aid of Hank Bennett in his query about the piece played before "God Save The King" on Canadian network stations. It is "O Canada". . . . Residents of Penn Yan, N. Y. are petitioning the FCC for a new station to serve the picturesque "Finger Lakes" region, according to Roy Woollacott. . . . Ooops! We nearly forgot to mention that Arnold Worme was one of thise who also answered the "O Canada" query.

Robert Koppelon of Newark, N. J. pays high praise to communications receivers when he says that he can't see how anyone using a set like these (communications) receivers can get any fun out of DXing since it can pick up anything on the air. ... While some communications receivers are very good, we hardly believe any of them can live up to Radexer Koppelon's expections. Too many other factors besides a good receiver enter into the matter of hearing everything on the air to even think of such a thing. There is the matter of location, antenna, ground system, and what is more important, atmospheric conditions. . . . A threat, a warning, or what have you comes from Bob Gilchrist who says he has made a slow start in the RADEX Contest, but is going to make a very strong finish!

P. O. BOX R9

ASHEVILLE, NORTH CARO-LINA—William Waldman, "I am 18½ years of age and have a Kadette 7 tube and a Truetone 11 tube radio. I had a 4 tube T. R. F. set which I used in Chicago where I was able to log KOA in Denver and WTIC in Hartford. Cubans were common on that set which was 10 years old!"

WASHINGTON, R. I.—Phillip Potter: "WJEJ says that my cards are the first reports from Rhode Island." STRATHROY, ONTARIO—Charles A. Mills: "First, here is a summary of one year of DXing on this radio—a Philco 17 T on the broadcast band. 488 stations with 141 verifications received and reports out to several more. This includes all states except Arizona, Idaho, Nevada, and New Mexico. The California stations have been coming in better so far this season than last year."

WEST MONTREAL, P. Q.—Arnold F. Worme: "I'm using an Espey 5 tube superhet with built in antenna (loop) and a 40 ft. ½ wave doublet tuned to 25 meters on the roof. Although the set has no band spread, I find it has plenty of power and selectivity. My broadcast band totals 73 stations, 61 in the United States, 12 in Canada, with WOAI in San Antonio the southernmost, and WHO in Des Moines, the farthest west."

CREDIT, PORT ONTARIO — Fraser Hendrick: "Port Credit, as you probably know is on Lake Ontario, 14 miles west of Toronto. I put up a new 110 ft. antenna for DXin gthis year. With this antenna and a 5 tube Westinghouse receiver I was able to log the following at 11:30 a.m. until 2:00 p.m: WSB, WHOM, WILTH, KITE, WLAW, WLAC, WDGY, WSPR, WBIG, WCSH, WIRE, WTMJ. Has any DXer living within 200 miles of Detroit, ever been able to get a veri from WJR?"

DULUTH, MINNESOTA—Nils J. Nordstrom: "May 13, 1939 was the start of one of my hobbies. This one is called 'DXing' and it began about fifteen days after we purchased our first radio. This is a six tube table model Airline with a range from 535 to 1720 kcs."

NEWBURG, NEW YORK—Don Reynolds: "I've just about given up ham and shortwave DXing because of the war. Now I'm concentrating on my old favorite, the broadcast band. The Cubans literally swamp the dial here at night. A few SA's manage to break through now and

then. I have reports out to CB118 and HJ1ABN. The TA stations have not given a peep so far this season, the TP's have been quite active on a few occasions. I heard 13 of them one morning, but none lasted long enough for a good report."

ST. LOUIS, MISSOURI—Arthur J. Kimble, 4643 Page Blvd: "I have been hearing two Spanish speaking stations on the broadcast band, but have been unable to log them because all announcements have been in Spanish. Could you tell me if at any time these stations announce in English. They come in on 690 kcs. and 730 kcs." (The 690 kcs. station is CMQ in Havana which occasionally announcees in English on the quarter hour—RL).

TERRA ALTA, W. VA. — Joe Jones: "The receiver here is an SX-24 HALLICRAFTERS with a Guthman U-42 preselector. The broadcast band has been rather noisy so far this season. Here is a list of all night broadcasting stations: WWSW, WJBK, KXYZ, KSAN, KFAC, KLS, WNEW, WOL, WEDC, KRKD, KJBS, KWJJ, KFVD, WIP and WMCA."

ROCHESTER, PENNA. — A. G. Schleiter: "I started a new log of stations on October 20th and have 361 stations in just 41 days—a very poor record. I have had double that in one month,"

PORT RICHMOND, N. Y.-Peter A, Clarius: "This is my first report of the season to RADEX. New stations logged are: KRKD, WPID. WKPT, WHUB, WBRW, WHKY, WGTC, WFPG, WBML, WKIP, WAOV, WLOF KYAN, KXOK, KPHO. WMIM, WLOG, WSOO, WINN, WIPR, KMJ, WSTV. WTMC, WFHR, WJHO, WCNI. WMOG. WLBI, KFXJ. KENO. WKNE, XEU, WJOB, WBLJ. KUOA, WTAG, WPAB and WARM. WFPG is now verifying with a very attractive card and they ask that allreports be sent to the "Steel Pier" in care of Blair Throm, chief engineer."

HARTFORD, CONN.—Leon Prague: "Having just joined the RADEX Club, this is my first report. During my first year as a broadcast band DXer, I have heard 213 stations and verified 38 on an Emerson 4 tube radio"

STRATHROY, ONTARIO — Lorne Mitchell: "I have been DXing only a month, having been introduced to the hobby by Radexer Charles Mills here in Strathroy. I am using a 1931 Rogers Radio at the present time. I have logged a hundred and seventeen stations on the broadcast band and have written for 49 verifications. To date I have 22 repl es."

MILWAUKEE, WISCONSIN—Fred Borcherdt, 5103 N. Sherman Blvd: "I would like very much to receive information regarding FCC tests or any DX programs conducted by stations in Maine, Vermont, New Hampshire, Wyoming, and Delaware."

UPPER DARBY, PENNA.-George Wetherill, Jr., 247 So. Carol Blvd: "Does anyone know the power of the station on 550 kcs. at the George Washington Bridge? Is there any chance of my picking it up? Would you please tell me of any other noncommersial Broadcast band stations that I have a chance of hearing. Both Nat Boonin and I hear code stations on 900 kcs. and 940 kcs. in the daytime, and at night on 580 and 630 kcs. Are these harmonics, images, or real stations? I notice that someone reported hearing a M-1 in Boston Harbor. Are there any such stations in Philadelphia?"

RIDGEWOOD, NEW JERSEY—Llyod Rees: "How is this for day-light reception? Noon on Dec. 28, 42° Fahrenheit, raining: WGR, WTAG WEEI, WLBZ, WLAW, CKAC, CBL, WBEN, WFMD, CBF, KDKA, CBA, WSPR, WDAS, WJSV, WKBW, WTAM, WBT, and WHAM."

ASTORIA, NEW YORK—Joseph Janata: "I recently bought a new Howard Model 435 and like it very

much. A verification from WADC arrived after 11 months of waiting. Could this be a record?"

TORONTO, ONTARIO—Jim Davis: "I bought my first copy of RADEX a few days ago and I think it is by far much better than any other radio magazine: I am using a Sparton Model 253 with a 100 ft. aerial. Log is 180 stations on the broadcast band."

CHICAGO, ILLINOIS—Blake H. Page: "I've been DXing since 1922 when radio was an infant. Some of my verifications date back to 1923 or 1924. I believe I have heard some 1500 or more stations. I'm now using my third Scott receiver since 1932—which is when I first started to use RADEX. For daytime records, I have heard as far south as WWL, east to WBZ, north to WEBC, and west to WOW."

COVERING THE CONTINENTS Domestic Dialings

"W" Calls In The East: WLAW came on the air at 4:15 p.m. on December 1 with its new 5 kw. transmitter... WJAR and WBRY also have permits for 5 kw... WOCB is operating from West Yarmouth, a part of the town of Yarmouth... WFPG stands for "World's Favorite Playground."... WKNY is located in the Gov. Clinton Hotel in Kington.... WESX signs on at 8 a.m. on Sunday... Has WRTD been deted? (Yes—RL)... What station uses or has used the call KCFI. (Roger F. Scott, Whitinsville, Mass.)

WEEI, now on from 6:00 a.m. to 1:00 a.m. is scheduled soon to come on the air at 4:45 a.m. . . . WNAC from 6 a.m. to 1:15 a.m., WBZ from 6 a.m. to 1 a.m., WCOP from 6 a.m. to 4:30 p.m., and WHDH from 6:30 a.m. to 7 p.m. . . . WAAB is from 7 a.m. to 2 a.m., WORL from 7 a.m. to 4:30 p.m., WMEX from 8 a.m. to midnight, WLAW, from 6:30 a.m. to 1:15 a.m. WESX and WLLH both come on at 6:30 until? . . . WGAN is now using its 5 kw. (Stanwood R. Morss, Bradford, Mass.)

WGN verified by duplicate letter which says the issuing of verification cards and stamps has been discontinued. . . . WBTM verified by letter with Danville, the World's Best Tobacco Market printed across the bottom. . . WMSD, KWYO KADA, and WJR have verifications showing their antenna towers. (Fred Binkley, Jr., China Spring, Tex.)

WEAF on 660 kcs. has a new transmitter at Port Washington, L. I. They sent an eight page folder on the station. . . . The following new stations are now on the air: WKPA, WGAC, WLAV, WBLJ, WSOO, WAKR, WDAK. . . . WMAL comes on at 6 a.m., KUOA on at 5 a.m., (Charles A. Mills, Strathroy, Ontario)

It is three years since WLAW took its place on the air with the many other stations throughout the United States and in that space of time they have done a great service to the public and its many listeners. On the WLAW inaugural program it was announced that WMUR on 610 kcs., the station owned by Gov. Murphy is under construction. (Matthew E. Leshner, Lawrence, Mass.)

WMRO's card is printed in silver and black with call letters in red, and the blanks filled in with green ink. The card is a glossy white. . . WMCA is inaugurating a new policy, going on a 24 hour schedule. Important note in schedule is the curfew on jazz at 2:00 a.m. until 7:00 a.m. This time will be filled with soft music, poetic readings, impromptu guest appearances, etc. . . (George Wetherill, Jr., Upper Darby, Penna.)

WEEU has a test program every Monday morning at 6:30 a.m. . . . WTCN's card is in red, white, and blue with the American Flag pictured on it. . . . WGY sent three stamps showing views of the transmitter. . . . WTAM has a DX tip program every Saturday night at 11:15 p.m. . . WINX was heard on their test programs. (N. Bernard Boonin, Upper Darby, Penna.)

WAAT sent a card with large red letters on it. . . . WKIP operates from 7:00 a.m. to 12:05 a.m. on week-days and from 8:00 a.m. to 12:05 a.m. on .Sundays (N. Bernard Boonin)

WFBR in Baltimore is Maryland's pioneer broadcast station and operates daily from 7 a.m. to midnight.... WSAJ operates from 6 a.m. until 2 a.m. daily. On Sundays they come on the air at 8 a.m. (Elwin L. Gleason, Moosic, Penna.)

WLAP is going to change frequency and power. WSOY took 12 months to verify. . . . KOTN has changed from 100-250 watts. (Vernon Lee Gibbs, Lexington, Ky.)

WICC is on the air at 6:00 a.m. un til 2:00 a.m. . . . WGAN is now on from 7 a.m. to midnight. (Lee D Johnson, Portland, Me.)

WJAX have finished remodeling their studios and expect to increase their day and night power to 5 kw. When completed their fidelity will not be equaled by any station east of Louisiana and South of Carolina, except for WSB! (Ed Medric, Brooklyn, N. Y.)

WJEJ verified with a full color post-card showing a moonlight scene of their transmitter. (Edward Laudansky, Dorchester, Mass.)

WROL is now on 620 kcs... WJHL is now on 880 kcs... WSPA begins broadcasting at 6:00 a.m. and signs at 5:00 p.m. (William Waldman, Asheville, N. C.)

WSPR is now testing on 1240 kcs. . . WINX, Washington's newest broadcasts a full hour of news from 12-1 a.m. nightly. . . . (Bob Gilchrist, New York, N. Y.)

WOLF in Syracuse was very pleased with the report I gave them concerning their daytime signal strength here in Rochester. They verified by letter stating that they would like other reports from other DX friends of mine. The stamps I enclosed were returned! (Roy Woollacott, Rochester, N. Y.)

KEUB's card is in red and black... WAYX is in black with call letters in green. KFXJ's card shows a

picture of their new transmitter. (Harold Blinn, Arkansas City, Kans.)

WSPA verifies with a very appreciative letter. . . . WBAL sends large advertising blotters with their verifiration. (Fred Borcherdt, Milwaukee, Wis.)

WGBF heard on their new frequency of 1250 kcs. in the evening with an R7-8 signal. (Bill Gabriel, Lakewood, Ohio)

WHBI, in my last report, was classed a religious station, but I found out later that it was KUOA that I was hearing. (Leon Prague, Hartford, Conn.)

WOLF's verification was signed by Lawrence A. Reilly, chief engineer. (Lester Balcom, Malden, Mass.)

WKAQ can be heard signing off at 10:05 p.m. with the Star Spangled Banner. (Norman H. Kane, Drexel Hill, Penna.)

WKNE's verification was received two days after mailing the report. WKNE uses 5 kw. (Norman L. Maguire, Stamford, Conn.)

WJHL and WKPT both operate from 6 a.m. to 11 p.m. . . . WBIR will operate the same schedule starting in January. . . . (Bill Scott, Johnson City, Tenn.)

WDEF on 1370 kcs. is on the air daily until midnight. . . WBLJ our new station in Dalton is on the air from 7 a.m. to midnight with 250 watts. C. W. Roberts is the chief engineer. (John D. Long, Dalton, Ga.)

WGR and WSYR sign on the air at 6 a.m. . . WGAC was heard R3 through WEDC. (Weston Richards, Zion, Ill.)

"K" Calls In the West: KUOA is heard with R8-9 signal every morning. They send a post-card with big red letters in the upper left hand corner. (N. Bernard Boonin, Upper Darby, Penna.)

KYW is now using their 50 kw. This greatly adds to the strength of the signal in urban Philadelphia. XERA is pretty well eliminated, now. (Norman H. Kane, Drexel Hill,

Penna.)

KMA has an early morning program and the station comes in like a local until WPEN comes on the air. . . . KOWH can be heard with a nice signal in the early morning even after WEAF's carrier is turned on . . . KENO is the first Nevada station that I have heard, but my report, out over a month has not been answered yet! (George Wetherhill, Upper Darby, Penna.)

KXOK is now operating on 630 kcs... KYW is going to need more than 50 kw. in order to lick XEAW here. (Roy Woollacott, Rochester, N. Y.)

KGA on 1470 kcs. operates daily from 10 a.m. to 3 a.m. using 5 kw. . . . KWK operates daily from 7:00 a.m. to 1:30 a.m. and Sundays from 8 a.m. to 1:30 a.m. (Elwin L. Gleason, Moosic, Penna.)

KITE's verification stationery shows a large kite flying among the clouds. . . . KGIR's verification message is on a sheet of copper! (Fred Borcherdt, Milwaukee, Wis.)

KPO, KNX, KHJ, KFAC, KFAC, KGO, KMJ and KFVD can be heard regularly in the early morning. . . . KFI signs off at 3:15 a.m. . . . KFWB has been heard around 2 a.m. . . KRKD has been logged between 3 - 4 a.m. . . . KERN (1380 kcs.) signs off with newscast at 3:00 a.m. . . . KFBK on 1490 kcs. signs off at 3:00 a.m. . . . KVI also signs off at 3:00 a.m. . . (Charles A. Mills, Strathroy, Ont.)

KWAT in Watertown, S. Dak. verified in 29 days. The slogan is "The Voice of South Dakota." (Robert Mc Connell)

KWIL in Albany, Oregon on 1210 kcs. has been heard with equipment tests. (Joseph Jones, Terra Alta, W. Va.)

KGFJ on 1200 kcs., KROY on 1210 kcs., and KSAN on 1420 kcs. are still on the air during the FCC tests. Can anything be done about it? (If they interfered with the FCC's monitoring of the stations they would be asked

to remain silent-RL)

Bahamas: ZNS has been heard occasionally through WGY. News from London was heard at 7:45 p.m. On verification, both the shortwave and broadcast band stations are listed. (George Wetherill, Jr., Upper Darby, Penna,; Roy Woollacott, Rochester, N. Y.; and Peter G. Landry, Montreal, P. Q.)

Canada: CKCL on 580 kcs. is being heard here well with their increase in power to 1000 watts. . . . CBR on 1100 kcs. is heard several times weekly. . . . CHNC signs off at 11 p.m. which is midnight Canadian time. . . (Edward Laudansky, Dorchester, Mass.)

CBW in Windsor is listed in a Toledo, Ohio newspaper on 600 kcs. Has anyone any information on this station? (Bill Gabriel, Lakewood, Ohio)

VE9BC in Revelstoke, B. C. on 840 kcs. with 20 watts is the first of a number of small broadcasting stations being installed by the CBC in certain sections of British Columbia and Northern Ontario, where residents have poor reception because of natural barriers. The station is in charge of the Telegraph Line Repeater Operator at Revelstoke, who feeds all CBC network programs, sustaining and commercial through this low powered transmitter, which is powerful enough to service the residents of this mountain area. The station does not sign off or on, as no microphone is located at this point. Its present experimental call letters changed shortly and a call similar to other CBC stations will be given the station. Similar stations are to be built at various points and small setthroughout the Rocky Mountains along the two Canadian Railway lines. Later it is planned to have these stations in Northern Ontario, north of Lake Superior. (George Wetherill, Jr., Upper Darby, Penna.)

CBY in Toronto is going to in-

crease its power from 100 to 1000 watts and a new antenna is going to be built outside the city limits. As it is now, CBL carries all commercial programs of the CBC because CBY has not enough power to be heard far out of Toronto. CBY now carries quite a few programs of the MBS. (Jim Davies, Toronto, Ontario)

CFRC on 1510 kcs. in Kingston, Ontario verified by a government post card. (Roy Woollacott, Rochester, N. Y.)

CBA in Sackville on 1050 kcs., CBK in Watrous on 540 kcs., and CBL in Toronto on 890 kcs, can all be heard on Saturday nights from 8 p.m. with hockey game broadcasts. . . . CKCL on 580 kcs. is another Canadian station having verification stamps. . . . CKTB has a black card with large silver letters. . . . CHML on 1010 kcs. has a card with a green picture of studio building with message printed over the top. . . . NOTE: Some Canadian stations will be noticed to be giving the time one hour ahead of other stations in the same time zone. This is because of a government regulation stating that cities on Daylight Saving Time in the Summer would remain on it for the duration of the war. (Charles A. Mills-Strathrov. Ont.)

Newfoundland: VONF on 640 kcs. is not heard very well lately. They relay B. B. C. news from London at 8 p.m. They sign off at 9:30 p.m. (Roy Woollacott, Rochester, N. Y.)

VOCM is listed on 1006 kcs. in a Newfoundland newspaper. (Edward Laudansky, Dorchester, Mass.)

Latin America

Argentina: LRA is heard almost every morning from 1:30-3:30 a.m. with a four tone whistle and station announcements in Spanish and English. (George Wetherill, Peter C. Landry, Roy Woollacott, N. Bernard Boonin)

LT-3 is the one South American I have heard this season. (N. Bernard

Boonin)

Colombia: HJAN was heard with an R9 signal and verified through WOAI. As soon as WOAI signed the Colombian came in fine. . . . HJCZ is heard on 1040 kcs. over WTIC and KRLD! Some nights these stations cannot be heard, and then HJCZ puts in an R6 signal. . . . HJBJ in Santa Marta has been heard several times in the early mornings. (George Wetherill, Jr., Upper Darby, Penna.)

HJAN on 1190 kcs. heard one evening for four consecutive hours. The time from 8 p.m. to midnight. They were also on Christmas morning as was HJAH on 1080 kcs. (Peter C. Landry, Montreal, P. Q.)

Costa Rica: TIGP on 625 kcs., TIEP on 825 kcs., and TILS on 880 kcs. was heard Christmas morning. (Peter C. Landry, Montreal, P. Q.)

TIPG on 625 kcs. can be heard as early as 7:30 p.m. with an R4 signal. Has anyone ever received a veri from this station? (Roy Woollacott)

TI4NRH heard with a fair signal but QRM'd by WGN. They were heard much better after 2:00 a.m. (George Wetherill)

Cuba: CMBH on 1600 kcs. is heard R9 plus. Report has been out four months and no verification yet! . . . CMBC is now operating on a frequency of 780 kcs. They are heard R9 plus. . . . CMKG is heard on 1000 kcs. using 10 kw. (Vernon Lee Gibbs, Lexington, Ky.)

CMQ's card has a picture of their transmitter and is printed in brown on white. (N. Bernard Boonin)

CMOX on 1510 kcs. is heard almost every night with American music. (Weston Richards, Zion, Ill.)

CMKN on 640 kcs., CMHQ on 670 kcs., CMQ on 690 kcs., CMCF on 810 kcs., CMHI on 830 kcs., CMX on 880 kcs., CMCK on 970 kcs., are being heard regularly in the evening. . . . CMCY on 590 kcs., CMCD on 630 kcs., CMBL on720 kcs., CMK on 750 kcs., CMKU on 770 kcs., CMCM

on 850 kcs., CMBX on 1180 kcs., and CMOX on 1510 kcs. are heard occasionally in the evening. (Peter C. Landry, Montreal, P, Q.)

Ecuador: HC2AJ was heard on their DX program with a weak signal. (George Wetherill, and Fred Benkley, China Spring, Texas)

Guatemala: TGW on 1520 kcs. should, by the time this appears in print, be using their new 10 kw. transmitter. (RX)

There is a low pitched heterodyne from another Spanish speaking station on TGW. Who is it? (Roy Woollacott)

Mexico: XEH on 740 kcs. has been heard several times on Sunday morning with special DX programs. . . XEL on 1150 kcs., and XESM on 1400 kcs. heard regularly every a.m. (Peter C. Landry)

XERA, XEAW, and XENT took long enough to answer my reports, but now they're over-doing it To date I have 3 XERA cards, 2 XENT cards, and one from XEAW....

(George Wetherill)

XEL on 1150 kcs. is heard very well around 2 a.m. They announce their call letters in English. . . . XEG is now operating on 1050 kcs. They broadcast both Spanish and English programs. . . XEW is heard all evening with strong signals. All programs are in Spanish. (Roy Woollacott)

XEQ on 730 kes. in Mexico City has a program from 12:30-1 a.m. consisting of American dance tunes. . . XEMO on 860 kes. can be heard most mornings until 3 a.m. . . (Char-

les A. Mills)

XENT on 990 kcs. now and can be distinguished between KDKA and WHO. Nill J. Nordstrom, Duluth, Minn.)

XEH was heard testing new RCA equipment and urgently requesting reports. . . XECL is on till 3 a.m. with a program for the United States. (Weston Richards)

Panama: HOK verification received for report on special DX program.

Puerto Rico: WKAQ on 1240 kcs. is heard well beginning at 6 p.m. The call letters are announced in English on the half hour. (Roy Woollacott)

Uruguay: CX-6 on 650 kcs. verification received. (Peter C. Landry)

Venezuela: Delete from service: YV5RR on 1010 kcs., YV5RD on 1450 kcs., YV5RO on 882 kcs., YV5RE on 1110 kcs., YV4RI on 1450 kcs.

Frequency Changes: YV1RD from 1153 to 1150 kes., YV3RE from 1475 kes. to 1470 kes., and YV5RB from

1200 to 790 kcs.

Call Changes: YV3RC-"La Voz Lara (1270 kcs.) changed to YV3RA-"Radio America": YV5RG -"Ondas Populares" (1010 changed slogan to "Emisoras Unidas Ondas Populares-Estudios Universo": YV4RL (1430 kcs.) uses slogan "Radio Maracav"; YV4RG--"Radio Marconi" (1153 kcs.) is now YV4RD on 1150 kcs.; YV5RX-"La Voz de Patria" (720 kcs.) now uses YV5RH with same slogan and frequency.

Location Changes: YV5RL—"Radio Tropical" on 1160 kes. from E1 Valle to Caracas. (Jose Carriazo, Jr.,

Havana, Cuba)

QUERY: A Latin American puzzling Norman Kane and George Wetherill on 825 kcs. is evidently TIEP in San Jose, Costa Rica using 500 watts.—RL, Mass.

Tuning the TA's

France: "Radio Nationale Francaise" is by far the best heard TA' station this season on its 1393 kcs. channel. From the type of programs and announcements we judge that this station is undoubtedly the former "Radio Lyons" with increased power. A sister station to this is heard on 1321 kcs. usually operating in parallel which can be the former "Radio Mediterranee" at Antibes, France. These stations were reported by Radexers George Wetherill, and Norman Kane. (RL—Mass.)

"Toulouse-Pyrenees' on 775 kcs. and "Lyon La Doua" on 648 kcs. were heard on Jan. 8 for my first TA reception. (Peter C. Landry).

"Radio Toulouse" on 913 kcs. has been heard spasmodically throughout the winter season, but Paris Mondial, and Rennes along with "Radio Normandie" are absent this season. (RL—Mass.)

Germany: A German speaking station was heard on approximately 630 kcs. in the early morning with a good signal. Can anyone identify it? (May have been the former Vigra, Norway station on 629 kcs., using 100,000 kw.—RL) Question supplied by George Metherill.

Hamburg was heard on Christmas morning with a fair signal and fading badly. I managed to get a report out to them, but whether they reply is doubtful. (George Wetherill)

Stations speaking a language believed to be German were heard on 850 kcs. (Probably Stavener—Norway—RL) on 720 kcs. (Probably Jaarsveld, Netherlands—RL) and on 660 kcs. the latter which was undoubtedly Cologne. All these were heard from 1:10 a.m. to 3:30 a.m. (Peter C. Landry)

Great Britain: "Home Service Stations" on 667 kcs., and 767 kcs., were heard with R3 and R4 signals respec-

tively. (Peter C. Landry)

The synchronzied transmitters on 1149 kcs. were heard very well at times during January after WHAM signed. Programs are usually in a foreign language and sometimes there is QRM from XEL. (Roy Woollacott)

The British station on 1050 kcs. has been fighting it out with KNX lately. It may be heard as early as midnight with news in English. This is followed by news in French and other languages. The programs are the same as 1149 kcs. (Roy Woolacott, Rochester, N. Y.)

Norway: "Stavenger Kringkaster" was my first TA logged on Aug. 17, 1940 at 2:26 p.m. and a veri was received on 10-10-40 by air mail, passed by both censors. 2:26 p.m. is correct

(Please turn to page 95)

The Inside Story of That New Radio

B. FRANCIS DASHIELL

This season of the year finds many new radios coming into use. For, like everything else, radio sets are changing in appearance, convenience and efficiency. However, the basic principles operating inside these superb examples of the cabinet-makers' art have changed but little. Strip a radio of its fancy dressing and the many new gadgets that provide for ease of operation and you will find the fundamentals much the same as when the first super-hetrodyne circuit was discovered. Practically all radios now utilize improved super-heterodyne principles, and the old tunedradio-frequency receivers that served so well are just about obsolete.

No two radios of different models and makes, even when using the same number of tubes, are identical. When we stop to think that a couple of thousand radio engineers are employed to develop new ideas, that over 10,000 models appeared during the past decade, and approximately 30 million sets are in use in America today, it is easy to understand that no description of a radio receiver can be made to apply to all sets in use everywhere. But the essential principles, although often abused by liberal radio designers, remain as constant throughout the years as those which explain why airplanes fly and automobiles run. It is of these general fundamentals that we shall speak.

Now that you have a new radio, or an old one for that matter, you may wonder what is under that vencer of polished wood, bright metal, and mysterious buttons, knobs and switches. The modern radio is much like the automobile; you can operate it after a few simple lessons, and yet never learn just what makes it work and why. For this reason, the radio novice, unless he is ground-

ed in radio and electrical fundamentals, seldom fails to get the real inside story of his new radio. It is true he learns all there is to the art of tuning and picking up stations by consulting RADEX, and quickly becomes adept at DX reception. But he also hears much about kilocycles, megacycles, wave lengths and frequencies, static, interference, automatic tuning, tubes, antennas and doublets. These sometimes puzzle, but it is what goes on inside, when the signals from the antenna enter here, go in and around and around, and come out there, that mystifies so many people.

But, believe it or not, its quite simple and highly interesting! Yet the story of modern radio is amazing, even to those who have become its master. It has proved to be one of our greatest achievements, and today America leads the world in the production and use of radio apparatus. Radio, as you may already imagine, therefore, was not the invention of a single person. Yet, just after the turn of the century, a foreign scientist named Marconi put a few discoveries together and made them Americans, however, made radio what it is, and they use it far more widely and with much more freedom than any of the other nations of the world.

The magic of electricity provides the energy so vital to radio. Magnetism, light, and sound, also play essential parts. But the power to scatter radio signals from great transmitting stations to millions and millions of receivers comes from electricity. However, the total energy radiated from one station may be no more than that which is consumed by the electric toaster at our breakfast table! And there is no limit to the number of radio sets that can be brought to life merely by the passing

of a single radio wave which flies through the air and around the wires of our receivers with the speed of light—186,000 miles a second! Behind the dials and controls of our radio receivers lurks practically all the effects of electricity, and yet a child can control them and bring them into play with the touch of a finger!

Let us not enter into a discussion of weighty theories. They may best be left to text books and studious experimenters. Instead, we shall sit before the new radio and, in our minds, picture the flight of the broadcast signals from their source across space to our homes and radios. But, it must be remembered, these things happen very quickly - seven times around the world in one second! One cannot think that fast, so don't try! By a snap of a switch and touch of the d ial, we bring in some foreign station. But this simple action brings into play many of the marvelous laws of nature. Instantly, sweet melody pours forth from the loud speaker, and it seems indeed that the musician must be standing beside the radio, so perfect is his art, instead of being many thousands of miles away. His finger, too, has not yet left the key of the piano before you hear the note; it even comes to you a split fraction of a second before those listeners who sit in the back row of the broadcast studio can hear the sound!

This is because radio emissions travel with the speed of light—186,000 miles a second—as compared with only 1,120 feet a second for sound. Thus, it requires just about 1/60th of a second for a voice from Europe to be electrically wafted to your home receiving set!

· Here is how a standard broadcast station works:

YOUR COPIES OF RADEX WILL BE RESERVED. SEE PAGE 96

A person talks into the microphone as if it were a telephone. His voice sets up varying vibrations in the microphone. The lower the pitch the slower the vibrations. These vibrations have various "intensities" and "frequencies", "Intensity" means the degree of sound, and "frequency" refers to the number of sound waves which can be transmitted in a given length of time.

In the studio these vibrations are converted into electrical current having the same "frequency" and "intensity" characteristics as the sound delivered into the m icrophone. After being checked and double checked at the studio, these electric impulses are sent over leased telephone wires to the individual transmitting station (usually some miles distant), orto other radio stations carrying the same broadcast. This is the method used in so-called "network" broadcasting.

These electrical vibrations which represent the voice or music in the studio are sometimes called the "audio wave". They are greatly amplified in intensity—sometimes 10,000,000 times—before they are imposed upon the "carrier wave" at the transmitter. The carrier wave is the one assigned to the radio station by the Federal Communications Commission—that to which the dials on the radio receiver must be tuned in order to hear the station.

The intensity and the frequency of this wave are constant, and all by itself it cannot transmit any music or speech. In order to do this it must be varied in some way in accordance with the fluctuations of the audio waves. This is called "modulation". In the standard broadcast band the audio waves are imposed on the carrier wave in such a way as to cause its frequency to remain constant and its "amplitude" (or power) to vary in accord with the audio waves. This is called "amplitude modulaton".

These modulated radio waves are then put on the air by the transmitting antenna. They radiate from the antenna tower like waves moving with the speed of light. They emerge in the same fashion that ripples do in a calm body of water disturbed by a thrown stone. However, these radiations move out in ALL directions. Some of them follow the contour of the ground and are called "ground waves." Others dart upward are called "skywaves." The former give the best daytime reception. night, however, the "skywaves" are forced back to earth by a ceiling of electrical particles which science calls the "ionosphere." This nightly rebound gives the listener a choice of more distant stations.

Radio waves pass through buildings and other objects subject, of course to absorption and interference. As in the case of artificial ripples on water, radio vibrations weaken with distance. Seasonal disturbances and sunspot periods can also disrupt and throw them off their course.

Standard broadcast stations in this country transmit 550,000 to 1,600,000 waves a second. They are known as "long wave" stations because the waves they transmit are actually long. At 550,000 waves a second, the distance between the crests is 1,800 feet. This is known as "wave length." A station transmitting 550,000 waves a second is said to have a frequency of 550,000 "cycles." This corresponds to 550 "kilocycles" (one kilocycle equals 1000 cycles) which, for the sake of convenience, is the usual marking on your receiving set dial. ("Kilo" means one thousand, and "cycle" refers to a complete swing of an electric vibration. Thus, "kilocycle" is a short way of denoting a thousand of these vibrations or oscillations a second. By the same token, a "megacycle" is equivalent to 1000 kilocycles.)

The so-called "short wave" broadcast stations transmit from 6,000,000 to 25,000,000 waves per second. These waves are sent out one after the other so rapidly that the distance between their crests is only from 50 to 150 feet. It is a paradox that "short waves" go farther than "long waves." That is why international broadcasts are on "short waves."

Unknown to most people, radio transmission goes out in three simultaneous waves. The fundamental frequency or carrier wave, is accompanied by two other waves, one immediately above and the other immediately below the main carrier. These are called "side bands." The distance separating the main frequency and its companion frequencies is known as the "modulation frequency."

The modulated radio wave from the radio station transmitter is picked up by the home receiving antenna. That is to say, it sets up in the receiving antenna modulated radio frequency current having the same frequency and the same varying intensity as the radio frequency currents in the transmitting antenna. The receiving set changes these impulses back into sound which is amplified so that the human ear can hear. In the receiver the carrier wave and the audio waves, of which the modulated wave is comprised, are separated by a device called a "detector" or "demodulator". The carrier wave is shunted off into the ground. Having done its job it is no longer needed. The audio waves, however, are sent to the loud speaker or "telephone head set" where they are transformed back into sound waves.

Radio waves occupy only a portion of what science calls the "electromagnetic spectrum." Imagine the latter as a ruler marked off in kilocycles (which means frequencies) for eight different classes of electric radiation. The radio part of it ranges from 10 to more than 400,000 kilocycles (or frequencies). Not all of this is useful at the present time. But into the useful portion, at varying intervals and in various widths, are crowded many types of radio services.

The number of frequencies avail-

able for standard broadcast service are limited, so there is international agreement as to their use. This is necessary to prevent broadcasts in one country from "colliding" with broadcasts in another country. Thus, though the same frequencies have to be used throughout the world, they are shared in such manner as to minimize interference.

Standard broadcast occupies from 550 to 1600 kilocycles (or frequencies). This is known as the standard broadcast "band". This band was adopted for broadcasting because a score of years ago, when broadcasting began, the lower frequencies were used by other radio services, ships at sea, Government stations, and by radiotelegraph stations employing code signals. Very little attention was given to the higher frequencies in those early days. It was believed that they were not suitable for broadcasting since it was known that their ground waves were much more highly absorbed and weakened than those of the longer waves. They turned out to be the only ones possible for broadcasting to great distances, such as to foreign countries, because of the sky waves which bounce back to earth as previously explained.

Today the development of FM (frequency modulation) and television bids to make the ultra-high frequencies (above 30,000 kilocycles) also very useful. The FM development onthe ultra-high frequencies is interesting because it promises more natural reproduction of music and speech than is obtainable on the lower frequencies and greater relief from static and noise. In the FM wave it is the amplitude or power which remains constant instead of the frequency as in the standard AM (amplitude modulation) wave, and it is the frequency which varies with the audio wave instead of the amplitude when the carrier and audio waves are superposed.

To prevent interference and confu-

sion, it is necessary to apportion broadcast frequencies into "channels." In our standard broadcast band there are 106 such channels, each 10 kilocycles wide. A broadcast channel can be used by a number of stations if the stations are adequately separated to prevent interfering with one another or are protected by directional antenna systems.

A standard broadcast channel, in effect, means the path assigned to the emission of a particular station. The broadcast station's carrier wave, plus its two "side bands," must keep within the channel. The side band is the range of frequencies required for the audio program (music or speech).

A broadcast station is assigned 10 kilocycles of the spectrum for its emissions to travel in. It is permitted a certain amount of "swing" or deviation. However, its carrier must operate within 20 cycles of the assigned frequency.

Hearings differ, but the perceptible range of sound to humans is from about 16 cycles to 16,000 cycles a second. A new dog whistle emits sound which does not register on the human ear. A piano keyboard sets up vibrations of from some 27 to 4,000 cycles a second. The new FM (frequency modulation) system advocates a maximum of 15,000 cycles a second.

A broadcast channel may be likened to a modern highway, with the dividing white line of the latter representing the assigned radio carrier frequency, and the side bands symbolic of the adjacent traffic lanes. A broadcast station program travels the etherway with identifying call letters akin to license plates of an auto traversing a land highway. Both must keep in their assigned lanes to prevent "colliding" with traffic in adjacent lanes. Such "collisions" are responsible for the squeaks or rumbles often heard when you attempt

(Please turn to page 52)

On The West Coast

By MELVIN FISHER

It does "Ye olde correspondent's" heart good to see the increase in activity in western DX, coupled with the fine line-up of prizes we now boast for the RADEX contest winners! The way you fellows are twisting the dials and sending in the reports you're a cinch for some of these prizes. Just go after the veries, for those are the "blue chips" in these contests!

This past winter has been very good for reception of the Japanese stations, both on the broadcast band and shortwave, while reception from "Down Under" has been a trifle disappointing, judging from the comparative scarcity of reports on stations from this part of the world. However, we are just now heading into the Spring "peak" period for reception of these stations, and so have one more big chance this season to go after Australian and New Zealand additions to our logs.

At this time it is a little early to list any results in our Distance contest, but we expect to have some good entries in the next issue, though everybody has until July 1st to get distant veris in. Standings will be listed in two divisions: Broadcast Band,, and Shortwave.

We all wish to extend a hearty welcome to newcomers to RADEX, whether you are a beginner or a 'vet' at this hobby of DX. We hope that all our relations together will be most pleasant, and of long standing. So please "get your feet wet", fellows.—enter the contests—send in reports for the column; you'll certainly earn our appreciation!

I've had several requests from new RADEXERS asking how they might become reporters to the column. As all the old-timers know, there is no

"red tape" connected at all. Just take your pen in hand and start writing, or sit down to your typewriter and punch out a card or a letter to us, stating what you have heard via your Joining the RADEX club is just as simple—put your request on a postal card and address it to RADEX, 12 Locust Avenue, Emerson, N. J., and a free membership card will be sent you. You will note our shortwave reports are arranged by countries-it will help us immeasurably to have each one of you submit your reports in this fashion, for by each one working a little harder, a great deal of work is saved one person. We wish to thank all of you who already follow this procedure-your cooperation has helped a lot.

Competition was terrific for places on the Big Three this time, but we are prepared to present the winners. Here they are!

THE BIG THREE

- 1. Russell Cain.
- 2. G. R. Jewell, Jr.
- 3. Art Cushen.

Russell Cain stepped from third to first place byvirtue of consistent, newsy reports. Hot on his heels were "Gil" Jewell and Art Cushen, with very good reports. Hal Tuncil, a newcomer, just missed the Big Three, and deserves honorable mention along with Fred Anderson of the Philippines, and Bill Petty, of Hawaii.

Reporters living in the Mountain Standard and Pacific Standard Time Zones may send their reports direct to

> Melvin Fisher 1401 Bancroft Way Berkeley, Calif.

(Please use PST in reports).

Russell Cain hails from Reno, "Gil" Jewell from San Diego, and Art Cushen from far-off New Zealand, so we have all districts pretty well represented in the honor roll this month. Who's going to be our leader next issue?

THE BROADCAST BAND

T. BRANDON, EDMONTON, ALTA.—"Have been taking RADEX since 1933 and have every issue since then. I use a DeForest 5-tube, 1940 model, and a General Electric 8 tuber set. My first DX was in 1922 on a home-made peanut tube radio. How many remember these old timers: WBAP' when they were using 500 watts; WCAJ, using 15 watts, and KFKX, Hastings, Nebraska? CKUA will increase to 1000 watts immediately and go commercial. My best DX catches are CBA, CMQ, WSMB, WOOD, WASH, KWK, and KFAM."

BOB BROWN, GOSHEN, IND .-Bob bought the 23-tube Scott that Joe Lippincott has been using the last couple of seasons and says, "I hope I can live up to the reputation Joe and the set have established." (We have a feeling Bob will give a good account of himself.) He heard KENO, KERN, and KRE, all between 11:45 p.m. and 12:05 a.m., PST. He says, "I've been trying to identify a Spanish speaking station on 1130 k/c. The announcer sounds like a Mexican and they play American records. Could it he XEJP?" He also mentions 2YC is on 860 k/c and wonders how they could have interferred with 4QS on 760 k/c. He is right, and it's our mistake...2YH was the station that interferred with 4QS, and as mentioned in last issue was changed to 750 k/c to avoid this difficulty.

FOREST L. WEBB, SALINAS, CALIF.—"CKLN were heard Nov. 17 with a DX program. WTAG was heard signing off at midnight. HOK was heard on an NNRC special at 12:15 a.m. on Nov. 22. WLAV was hard on a test program on Nov. 23. WHAI was heard signing off at midnight. 4QS, 4YA, 4QG, 2BL, 4QN,

2FX, 3WV, 1YA, and 3GI have all been heard. Leonard Shreve signs KDON veries. WJHO informs me that there has never been anyone by the name of Robert Donahue connected with that station, as stated in RADEX list of veri-signers. Robert B. Wilds, chief engineer, signs all veries. The call of the new Tampa, Fla., station is WKGA. KLS has "upped" its power to 1000 watts, and KARK to 5000.

HARRY H. JOHNSON, LOS ANGELES.—"CMQ, 690 k/c, was heard 3-4 a.m., with very strong signal. KYCA was heard testing 12 to 12:30 a.m. on Sunday morning, Nov. 24. They asked for reports outside the state, and in return will send a picture of their station. They come on the air at 6 a.m. KPPC at Pasadena can be heard on Sundays with a religious program. Their call letters signify Pasadena Presbyterian Church."

BOB DOOLITTLE, GLENDALE, CALIF.—'My specialty is police stations. Have tried for veries, but no response. Mebbe' the 'cops' figure I shouldn't eavesdrop! Have logged over 132, including many UHFS. I use a Hughes Mitchell converter (specially adjusted) into a PHILCO all-wave receiver."

CLARENCE LEE MUSTOE, BRADY, MONT.—"KSAL verie was signed by the chief engineer, N. E. Vance, Jr. I am one who hopes the RADEX club gets pins, buttons, and stationery—at least one of them."

NORMAN L. MAGUIRE, ALBU-QUERQUE, N. M.—"KOB will increase its power to 50000 watts. It is enlarging its transmitter facilities at this present writing. Our other local station, KGGM will increase its power to 25000 watts shortly, and its other station, KVSF in Sante Fe, will then use the old KGGM transmitter. Reception here has not beenup to regular standards as yet. However, with a new receiver coming in a few weeks, I imagine that my DXing will pick up." Norman gives us a few verisigners: KYAN-L. Peach: KNOW-

James E. Lewis, Chief Engineer; and KSUB-Sherman T. Wright, Mgr.

PETTY. BILL WHEELER OAHU, HAWAII.—"I've FIELD. purchased a new HALLI-SX28 CRAFTERS receiver; boy, does it pull them in! Our December FCC tests I heard KWEW, KFIZ, WMPS, WAVE, KGHF, WJMS, KGCU, KFJM, WHDF, and KUOA. I heard KGBU behind KHJ on 900 k/c at 11:45 p.m. WGY was heard recently overriding KGO at 9:30 p.m."

R. A. BUTTS, EASTON, WASH.

—"The past season I logged 390 stations—77 on shortwave and 313 on BCB—we are expecting a new arrival in the near future. We are hoping for a son and if so I will make a real "DX hound" of him. RADEX surely is a live wire radio magazine. Keep up the good work." (A later letter from Ray informs us that the new arrival was a son, born on Friday,

Dec. 13).

H. H. CROW, JR., SACRAMENTO, CALIF. — "KENG verifies, signed by Bob White. KYAN, a Mutual outlet, was picked up through KRE, KTUC, KUJ, and goodness knows what else. KODL in The Dalles is on the air." He would like to know how it is that he heard KGCX relaying CBC programs. Also, he has had noluck verifying KYCA, and wonders what experiences other DXers have had with this station. He would also appreciate hearing from anyone who has heard KOVO testing or has verified them this year.

ANDERSON, FORT FRED A. MILLS, P. I.—"Well, the DXing isn't so bad here. So far I have logged 18 U. S. stations, 8 Australians, 5 Japanese, 6 Chinese, 5 South Africans, and one in Saigon, French-Indo China. I have verified (all BCB) KZRM. KZRH, KZRF, KZIB, KZRC (1200 k/c), JZL (590 k/c, JZL-4 (980 k/c) and ZET (1000 k/c) in Durban, South Africa. In the evening here from 8 p.m. I catch the U. S. stations signing on the air, a day behind Manila. I sure miss those FCC checks." Just as Fred closed his letter he tuned in KQW and they announced the time as 6:40 a.m., while Fred was ready to go to bed at 10:40 p.m., Manila time. Many of you will remember Fred as the soldier from Fort McDowell, Calif., whose report appeared in the Nov. - Rec. issue...at that time he said he was to leave shortly for Manila and that we would hear more from him after he arrived there. Well, Fred, we're all glad to have you still with us, and now that you're our "advance guard" in the Far East we'll be counting on you to keep us posted on DX news from out that way, OM.

KENWHITE, OAKLAND CALIF.—"I am fifteen years old and very much interested in radio. I started logging BCB stations on Dec. 1, 1940, and so far I have 57 from 16 states. The receiver I am using is a Howard, Model 400. I got my first RADEX about a month ago and like

it very much."

T. P. VASILOPOULOS, WEST LOS ANGELES, CALIF.—"KTOH has been heard, using my body as an antenna. KGMB, KGU, and KINY in Juneau, Alaska, were also heard.... I'm breaking down the eight tube super, and building an 11 or 12 tube set with another stage of both R.F. and I.F., using a larger chassis."

GEOGE HISS, WEST HOLLY-WOOD, CALIF.—"I have heard 98 stations in 22 states on the BCB, including CMQ, CBK, CBY and a dozen Mexican stations. Because of my work, I do all my listening before midnight, using a six tube set."

R. V. CALDWELL, NESKOWIN, ORE.-"KXL in Portland is on all night Saturday nights. Add KFWB to last issue's list of all nighters on the West Coast. The following sign on at 5 a.m.: KSL, KDYL, KID, KFKA, KFXD, KUTA. KVOD. KTAR and KOA. KSFO, KTFI and KSFI are on at 5:30 a.m. Portland stations sign on the air as follows: KOIN, KEX, KGW, KWJJ, KXL at 6 a.m.; KALE at 6:30 KBPS at 10:30 a.m., the later on the air only until 1 p.m. I heard a Spanish speaking station on 1230 k/ early in the morning, but did not catch the call letters. In all I have logged 247 stations on the broadcast band since August. My best are WBT, WRVA, WEAF, WALA, WTMJ, WILL, KSD, WMC and WMAX."

LIONEL JACOBS, PASADENA, CALIF.—"KHJ, the first Mutual station in California, has moved to new studios at 5515 Melrose Avenue, Hollywood. KHJ announced that Mutual now has 165 stations in their network. The old towers on the KHJ Building in Los Angeles will be turned over to shortwave work."

HAL TÚNCIL, BAKERSFIELD, CALIF.—"KERN is having some new cards printed, and will verify free of charge. XEAW's change to 1020 k/c has resulted in a considerable decrease in signal strength. Since I bought my first issue in September, 1939 I would be lost without my faithful copy of RADEX. My receiver is a HALLICRAFTER'S Sky Buddy, with a two-tube pre-selector."

BROADCAST BAND NOTES

KQW plans an increase on local programs for 1941, and a close-out on MBS programs. KQW will also broadcast the San Francisco baseball team's games in the Coast League next season, replacing KGO in this service.

Bob Brown sends us an interesting comparison on stations reported both last season and this year:

Station Last Year This Year KMPC No reply Verified in 9 days KGIR No reply Verified in 8 days XEAC, veri. in 100 days. Veri. 8 days

Bob displays a good sense of humor in adding: "I wonder if there was that much difference in my reports?"

JFAK has shifted to 670 k/c from 750. 2NW, 750 k/c with 10,000 watts, will be a new station located at Manin, N. Z. 4GY on 1350 k/c, located at Gympie, N. Z., will take the air early in 1941, while 2TM on 1300 k/c has rebuilt its transmitter, using a power of 2000 watts. (ARDXC).

A station in Tijuana was heard testing on Jan. 1, 2, and 3rd from midnight to 1:30 a.m. on 930 k/c. The first two nights the broadcast was entirely in Spanish, while on the 3rd the broadcast in English for the Los Angeles area. (Webb-Salinas).

KZRH, 710 k/c, Manila powered at 5000 watts, is on the air 2:30 p.m. - 7 a.m. KZRM, 618.5 k/c, has a broken schedule: 1:30-4 p.m., and 8 p.m. to 7:30 a.m. Powered at 1000 watts, KZRF on 780 k/c, transmits 2 p.m. until 7:45 a.m. KZRC, Cebu City, P. I., powered at 100 watts and on 1200 k/c, broadcasts 2-4 p.m., 8-9 p.m., and 1-6 a.m. (Anderson-Philippines).

KWIL heard on an equipment test in the early morning. They are on 1210 k/c and are located at Albany, Oregon. They operate with 250 watts

power. (Crow.

KTKC now conducts a special program every night 11 p.m. to 3 a.m., sponsored by firms in Fresno. KLS in Oakland has been able to continue playing ASCAP tunes since the beginning of the BMI-ASCAP fracas. Canadian stations also play these tunes. (RF).

XEGM, Tijuana, authorized to operate on 950 k/c and heard by Bill Cunningham on 920 k/c, has been heard once definitely on 930 k/, covering KROW here. (Webb-Salinas).

SURVEYING THE SHORTWAVES

From the reports received this past winter, we would say we are in a very successful DX season as far as the Shortwave Broadcast Bands are concerned. More countries are being heard from, and the volume of reports is increasing steadily. But enough of this—let the fellows have the floor!

Argentina

LRA-1, Buenos Aires, 9688 k/, is being heard with strong signals from 5-9 p.m. English is used at sign-off. LRX on 9660 k/c is heard until 8 p.m. with fair signals, at which time QRM over-rides them. (Jewell). LRX logged QSA-5,R9 at 7 p.m. (Cain). LSX on 10,350 k/c was heard working NBC, New York, with R7 signals,

signing off in English at 8:15 p.m. (Tuncil).

Australia

The VK3 call was used by Victorian experimental stations which went off the air at the outbreak of the war. VLR on 9580 k/c, Mel-(Bishop). bourne, signed on at 12:30 a.m. with R8 signal, VLQ, 9615 k/c, was heard signing on at 12:25 a.m. in French with an R9 signal, in parallel with VLQ7, 11,880 k/c. The latter station replaces VYQ8, 17800 k/c, on the 9:55-10:45 p.m. broadcast. These stations are known as the ABC stations and are all located in Sydney, except To save time, reports should be sent to "Dept. of Information", 375 Collins St., Melbourne, C1, Australia. Veries will be sent to all reporting reception correctly. Jewell). VLQ on 9541 k/c is on the air only from 3:40-4:15 a.m., broadcasting from Sydney. (Anderson). VLI7, 11880 k/c, was logged R8 with a news broadcast at 7:30 a.m. (Tuncil).

Bolivia

CP43, 15101 k/c, Cotagatia, was logged R6 at 6 p.m. (Cain).

Canada

CKFX, Vancouver, 10 watts, 6080 k/c, heard with godo signals until midnight. CJCX, 6010 k/c, was heard opening at 4:30 a.m. CJRX, 11720 k/c, was heard closing at 10 p.m. (Cushen-N. Z.) CFCX, 6010 k/c, Montreal, heard with a weak signal at 7:15 p.m. CFVP, 6030 k/, relaying CFCN, put in a fair signal at 7 p.m. (Cain). CJRX, 11720 k/c, heard irregularly at 7p.m. with R6 signals, and some QRM with WRUL. (Tuncil). CFRX is on 6070 k/c with 1000 watts -their address is "The Rogers Radio Stations, Toronto, Ont., Canada." CFVP is on 6030 k/c with 100 watts relaying CFCN. Their address is 'The Voice of the Prairies, Limited, Calgary, Alta., Canada." Their transmitter is at Strathmore, and they verify with a black and cream card-CFVP is typed above the old call of VE9CA. (Cain).

Chile

CB1174, Santiago, heard nightly on 11740 k/c with program of Latin dance music 6-7 p.m. CB1180 on 11945 k/c broadcast popular music 6-9 p.m. (Jewell). CB970 excellent until 8:30 p.m. on 9700 k/c. CB1170, 11700 k/c, heard testing until after 9 p.m. with a very god signal. CB1174 heard closing at 8 p.m. with "Marching Through Georgia." CB1180 excellent around 8 p.m. (Cushen, N. Z.)

China

XGOY on 9610 k/c from 6-6:30 in English. Veries are signed by Mr. Fung Chein, Director. Send all reports to "The Voice of China", Chungking, enclosing an IRC. XGOX reports should also be sent to the above QRA. XGOX is on 15200 k/c and 17,800 k/c, while XGOY is on 9610 k/c, 9650 k/c, and 11,900 k/c. They operate with a power of 35000 watts. (Jewell). YGRS, Shanghai, operated by the German Club, was logged on 11920 k/c with fair signals. (Cushen, N. Z.) XGRV, "Voice of China", located in Chungking, and operating on 11,418 k/c, broadcasts only 9-9:25 p.m. and 5-5:45 a.m. YPSA, Kweiyang, 6980 k/c, broadcasts on Sundays from 10 p.m.-6:55 a.m., and 3:30 p.m.-7:10 a.m. on weekdays. XGOY, 11900 k/c, began an English program to Western U. S. and Canada on Dec. 15th. The time is 9-11 p.m. daily. (Anderson). XGOY on 9630 k/c heard at 6a.m. with R7-8 signals. Sign-off is irregular. cil).

Colombia

HJCT, 9630 k/c, comes in good until 8:30 p.m. HJAB, 4780 k/c, puts in a fair signal at 7 p.m. (Cushen, N. Z.) HJDP, 4885 k/c, Medellin, heard weakly at 7 p.m (Cain).

Costa Rica

TIX, 5830 k/c, closes with good signals at 9 p.m., playing "Goodnight," TIPG, 9620 k/c, heard with excellent signal, closing in English at 9p.m. TIEP, 6690 k/c, puts in a god signal until 9 p.m. (Cushen, N. Z.)

COCY. 11500 k/c, excellent until sign-off at 10 p.m. COHI on 6455 k/c also heard. COK on 11570 k/c heard with god osignals at 9 p.m. (Last issue of "Radio Guia" reports COK as temporarily off the air, but probably not for very long) COBS, 9030 k/c, also heard well at the same time. (Cushen, N. Z.) COCQ on 8850 k/c has been very good in the eve-(Hiss). COCO on 8700 k/c nings. heard with English program at 9 p.m. with very good signals. COHI on 6455 k/c comes in every evening with R9 signads. (Tuncil).

Dutch Guiana

A new catch was heard here several weeks ago—"The Voice of Paramaribo", on 11380 k/c from 3:30-5:30 p.m., located in Paramaribo. (Jewell).

HCJB, 12460 k/c, excellent at 6 p.m.

Ecuador

HCJB, 12460 k/c, excellent at 6 p.m. HC2ET, 9190 k/c, closes with English at 8 p.m. HC1GQ, 9170 k/c, is good at 8 p.m. (Cushen, N. Z.) HCJB is very good 6-7:30 p.m. (Hiss). They are heard every evening except Monday with R8-9 signals. (Tuucil).

Egypt

SUX, 7860 k/c, Cairo, came in very weakly at 3:50 p.m. on a relay to CBS. (Cain). Let's have more reports on this fine DX catch!

England

GSV, 17810 k/c, heard at 12:15 a.m. (Petty-Hawaii). GSP, 15310 k/c, and GSI, 15260 k/c, are heard during the daytime in parallel. The former is usualy R8, while GSI averages R6.

Fiji Island

VPD-2 on 9536 k/c at Suva is still being heard with fair signals with recorded music from 9-9:15 p.m. and news in French 9:15-9:30 p.m., relayed from London. Sign-off at 9:30 is in English. Send reports to Amalgamated Wireless, Ltd., Suva, Fiji Islands. (Jewell). A later report from "Gill" Jewell reported receipt of a veri from VPD-2.

French Indo-China

"Radio Saigon", 11,780 k/c, preseits news in English at 3:45 a.m., 6 a.m.,

and 7 a.m. (Anderson).

French Equatorial Africa

"Radio Brazzaville" on 11970 k/c, powered at 5000 watts, are on almost daily from 10-10:30 p.m. and 12:30-1 p.m. They announce as 'Ici Radio Brazzaville", Viva General de Graulle and France Liber." Their address is Service de la Presse et de Informations de Government General, Brazzaville, French 9quatorial Africa. (Cain).

Germany

DJE, 17760 k/c, was heard at 12:15 a.m. with an English program. (Petty-Hawaai). DXB, 9610 k/c, and DJB, 15200 k/c, put in very good signals here. (Tuncil).

Greece

SVJ, 9825 k/c, is the only station from this country reported heard in New eZaland. Powered at 20,000 watts, it was heard at 6a.m. with a very weak signel. (NZDXC).

Guadeloupe

FG8AH, 7445 k/c, locaeed at Pointe-a-Pitre put in a weak signal at 3:45 p.m. with announcements in Euglish. (Cain).

Guatemala

TGWB on 6480 k/c is heard nightly with fair signals. Marimba music is heard from 8-8:30 p.m. on Mondays, Thursdays, and aSturdays. QSL received in three weeks signed by the English announcer, Roberto Jordon. (Jewell, Tuncil). TGQA, "The Voice of Quezaltenango", 6190 k/c, verified with a nice card after exactly a year's time. (RF).

Hawaii

KKH and KKS at Honolulu heard on 7600 k/c 8-8:30 p.m. on Sundays with an extremely strong signal. (Johnson)

Honduras

HRN, 5870 k/c, heard well until 9 p.m. (Cushen-N. Z.)

India

VUD-2, 15290 k/c, Delhi, heard at 7:15 p.m. with news bulletin in English. (Matzen)

Italy

2R43, 9630 k/c, comes in with R9 signals during the daytime, and very

weakly during late evening hours. 2RO4 verified with the usual EIAR card, colored gray and red. (Tuncil)

JZI, 9535 k/c, heard 9-10:30 p.m. and 5:30-6:30 a.m. with strong signals. JZJ, 11800 k/c, heard in parallel on both transmissions. (Jewell) heard at 6 a.m. and 10 p.m. (Johnson) JLG4, 15105 k/c, heard testing 6-7 p.m. JLU3, 15135 k/c, heard in the evenings. JZI heard with news in English 11:30-11:55 p.m. (Petty-Hawaii) JZI and JZJ heard testing with recorded music and asking for reports at 8:30 p.m. (Hooker, Hiss) JVZ, 118515 k/c, and JLG4, 15105 k/c, heard with loud volume. Time—? (Cain, Tuncil) JVA, 18910 k/c, Tokyo, was heard contacting KWE, San Francisco, on December 27th. (Benedict)

Java

JYDA, 3040 k/c, YDA, 9550 k/c, YDC, 15150 k/c, PLP, 11000 k/c, and PMN, 10260 k/c, are all on the air 7:30-11 p.m and 1:30-7:30 a.m. (Saturday until 8:30 a.m. and 3-4:30 p.m. during the week. On Sundays they broadcast from 4-11 p.m. and 1:30-7:30 a.m. PMH on 6720 k/c broadcasts oriental programs exclusively. (RX)

Manchukuo

MTCY on 9545 k/c and 11775 k/c at Hsingking is being heard in the mornings until sign-off at 7:30 a.m. in English. MTCY on 11775 k/c broade casts in English 10:30-11:30 p.m. (Jewell) MTCY logged recently on 9545 k/c. Their signals were very weak. (Tuncil)

Martinique

"Martinique" heard at 4 p.m. with weak signals. (Cushen-N. Z.)

Mexico

XEQQ, 9680 k/c, has good signals closing with English at 10 p.m. XEBT, 6005 k/c, heard with good signals at 9:45 p.m. (Cushen-N. Z.) XEWW on 9500 k/c is heard here every evening with Q5, R9 signals. on 9540 k/c broadcasts from 2 p.m.-

XEBR on 11826 k/c has a strong carrier hum, but comes in R9 every day. (Tuncil)

New Caledonia

Veri received recently from "Radio Pacifique." They use 100 watts on 7280 k/c and have also been heard on 6480 k/c with short news sessions in French at noon and 4 p.m. They open with the march "La Chant du Depart." They will shortly put a onekilowatt transmitter on the broadcast band. (Cushen-N. Z.)

Panama

HP5J, 9600 k/c, has good signal until 7:30 p.m. HP5G, 11770 k/c, heard closing at 7 p.m. HP5A, 11700 k/c, heard well until 8 p.m. (Cushen, N. Z.) HP5G heard with American dance music and English Announcements at 6:30 p.m. Signal was R7. (Hooker) HP5A verified with a plain card, printed in Spanish in black and white. HP5G on 11780 k/c heard QSA-5, R8-9 with some QRM. (Tuncil) Power of HP5A is 800 watts is 800 watts. They broadcast on 11700 k/c 4-10:30 a.m., and 2-8 p.m. Their address is Apartado Numero 954; Panama City, Panama. (Cain)

OAX5C on 9440 k/c at Ica is being heard nightly with fair signals 6-8:30 p.m. Programs are relayed from Buenos Aires. (Jewell) OAX1A, "Radio Delcar", closes at 9 p.m. OAX4Z, 6082 k/c, was heard very well at 10 p.m. OAX4T, 9560 k/c, was heard in parallel with OAX4Z, OAX4P, 5970 k/c, heard with good signals at 8 p.m. OAX4G, 6190 k/c, puts in a good signal until 11 p.m. on Saturdays. Cushen- N. Z.) OAX4J verified with an envelope which opens up, and is printed in black and orange. They are on 9340 k/c. (Tuncil)

Philippine Islands

KZRH on 11890 k/c is a new transmitter operating from 8-9 p.m. in English, directed to the U. S. A. OSL is a brown card printed in black and dark brown, signed by Mr. B. H. Silen. Address is Heacock Bldg., Escolta, Manila, P. I. (Jewell) KZRH

8 a.m. KZRH then has an international broadcast on 11890 k/c from 8-9 a.m. KZIB on 9500 k/c broadcasts from 2:30-10 p.m. and on 6043 k/c from 10:30 p.m.-7 a.m. KZRM on 9570 k/c broadcasts from 1:30-4 p.m. and 8 p.m.-7:30 a.m. KZRF on 6140 k/c is on the air 2 p.m.-7:45 a.m. KZRC, Cebu City, broadcasts on 6100 k/c 2-4 p.m., 8-9 p.m., and 1-6 a.m. (Anderson) Manila will soon have a new 20 kilowatt transmitter, but I have no real dope on it yet. Anderson)

Portugal

CSW, 11040 k/c, breaking through to Pacific Coast R8 between 9 and 9:30 a.m. (IRM)

Russia

RV15, 4273 k/c Khabarovsk, heard with loud volume at 4:47 p.m. (Cain)

San Salvador

YSP, 10400 k/c, is excellent until 9 p.m. (Cushen- N. Z.)

Straits Settelments

ZHN, Singapore, 7250 k/c, is operating simultaneously with ZHP on 9690 k/c. (Breen-N. Z.)

Switzerland

HBQ heard on relay to CBS. They are on 6675 k/c. Time heard not mentioned. (Cain) HBO, 11402 k/c, transmits to South America Mondays and Wednesdays, 3:45-5:10 p.m. HBO and HBL, 9345 k/c, broadcast for North America Mondays and Wednesdays 5:45-7:10 p.m. HBO broadcasts to Africa Tuesdays and Saturdays 9:45-11:10 a.m. HBH, 18480 k/c, is on the air for the Orient 5:45-7:10 a.m. on Wednesdays. HBO and HBJ, 14535 k/c, transmit to Australia 6:45-7:10 p.m. on the first Sunday of the month. Power of all transmitters is 20 kilowatts. (Cain)

Taiwan

JIE-3 is on approximately 9600 k/c. (Jacobs)

YOU WILL SAVE 75 CENTS SEE PAGE 96

Theiland

HSP6 is on the air daily except Monday from 5-7 a.m. and HS6PJ is on Mondays from 5-7 a.m. Their power is 10 kilowatts. An old station, HS8PJ, 9510 k/c, has been replaced by HSP5, 11715 k/c. HS6PJ is on 19020 k/c, with transmitter at Saladoeng, Bangkok, Thailand. My veri from HSP5 stated mine was the first report from Reno. (Cain)

Turkey

TAP, 9465 k/c, Ankara, heard with R8 signal 11:30-11:45 a.m. with male and female announcers giving news broadcast in English. (Hooker, Cain)

Union of South Africa

ZRL at Capetown verified promptly with a very cordial letter and an attractive SABC card, with printing in green on a yellow background. Their frequency was listed as 9606 k/c, though they seem to be heard about 9615 k/c. They announce the only stations now using English are the two low-powered Durban transmiters, ZTD on 4878 k/c, and ZRD on 6147.5 k/c, both powered at 500 watts. The power of ZRL is 5000 watts. They said they do not get as many reports as formerly from the United States on ZRL since they started broadcasting only in Afrikaans. (RF)

United States

WRUW, 11730 k/c, heard on Friday nights until 10:30 p.m. testing for the West Coast with WRU1, 6040 k/c. KGEI, 9670 k/c, hopeless until WRCA signs off at 10 p.m. (Cushen-N. Z.) WNBI heard all day on 11890 k/c. (Petty-Hawaii) WLWO came booming in on 15250 k/c, 10-11 a.m., using 75000 watts power. WGEA transmits daily on 6190 k/c from 7:30-8:30 p.m. (RF)

Uruguay CXA-8, Colonia, heard on 9640 k/c at 8:30 p.m. (Cain)

Venezuela

Good signals are heard in the 60 meter band at 7 p.m. Reports are out to YV5RO, YV5RH, YV5RM, YV3RX. (Cushen-N. Z.) YV5RH,

4920 k/c, YV5RK, 5000 k/c, YV5RO, 4940 k/c, YV5RT, 4980 k/c, YV6RT, 4900 k/c are all deleted. New slogans are: YV3RX — "Radio America"; YV5RU—"Emisoras Unidas Ondas Populares-Estudios Universo"; and YV6RC — "Emisora del Estado." YV5RJ, "La Voz de la Patria", has changed call to YV5RX, but uses the same slogan. (RX)

Yugoslavia

YUG on 15240 k/c is heard irregularly with good signals. (Tuncil)

THE MIDDLE BAND

The call letters of the cutter "Itasca" is NRVI, but I have been unable to find their frequency. KNBC and KNCA heard around 4500 k/c in the daytime. KSW, Berkeley police, heard on 1658 k/c. Potters Field station, 390 watts, heard on 4220 k/c.

AMATEURS

KC60KS is the only known Wake Island station—the same for KB4FCS of the Virgin Islands. (Jacobs)

W4XA verified with brown and cream card. They were heard relaying WSM from 4-4:30 p.m., and are on 26, 150 k/c. W5XAU, 26125 k/c, heard around 5 p.m. relaying WKY. They verified with red and cream card—their address is Skirvin Tower Hote, Oklahoma City, Oklahoma (Sutherland)

ULTRA HIGH

W4XA has been heard here on the UHF, 26,150 k/c. Could anyone tell me the whereabouts of a W5— on 26,000 k/c? The above is from Charles Benedict, 2226 Casitas Avenue, Altadena, Calif.

W5XAU, 26125 k/c, heard R6-9 with considerable QRN. They relay WKY and verify by card. W9XPD, 25900 k/c, relaying KSD, verify by letter. (Tuncil) Hal Tuncil says W4XA does not verify, while Ivor Sutherland has verified them. Try again, Hal!

THE PIGEON HOLE

D. L. Bishop, Liberty, Sask., answers Allan Cadorath: "WMI operated on several frequencies, 8585 k/c being one of them. They broadcast a Great Lakes weather report at 8

a.m. and 7 p.m. (PST) They verify promptly."

Greeting to Art Cushen in far-off New Zealand! Art, who is the short-wave editor of the New Zealand DX Club, sends in a fine SW report for this issue, and further gladdened the heart of yours truly by using PST throughout!

Mervyn Branks of Invercargill and Cyril S. Belshaw of Auckland also are doing their bit to keep New Zealand at the "DX front." Reports from both appeared in the last issue. All three are RADEX club members. And a hearty hello to Alan I. Breen, from out the same way! Alan is an honorary member of the club.

Harry C. Powell of Portland, Oregon, uses an RCA 8--K, and would like to correspond with other RA-DEXERS who have the same type of receiver. From his location he has logged all the 50,000 watt stations in the countryand many smaller ones.

Allen G. Hooker compiles his short-wave DX with a 3 tube SW3. Thanks for your frequent reports, Allen—please kee up the good work, OM.

Bill Petty of Wheeler Field, Oahu, Hawaii, is in the U. S. Air Corp., is 26 years old, and has been DXing since 1934, though not consistently. He has VAC on SW, has logged 170 stations on the BCB in the past two years while in the Islands. Before then he "burned the midnight oil" in Virginia, but his DC activities are now somewhat limited. Thanks, Bill, for your holiday greetings! Thanks also to Mert eMade and Ray LaRocque for you attractive and unique Christmas cards.

Forrest L. Webb sent one report to XEAW and got THREE cards all alike.

Eugene Allen has purchased a new HALLICRAFTERS SX-25, fifteen tubes, and now sports the most powerful set among East Bay RADEX-ERS, since Larry Yarnes' 23-tube Scott is in his home in Oregon, and while attending school at the University of California he is using a five

tube Philco.

Charles Benedict of Altadena, Calif. has been DXing for only one month. He tunes a HALLICRAFTERS six tube model, with doublet antenna and directional preselector.

Lionel Jacobs, a pen pal of Rus-

sell Cain's DXes with a 1940 Zenith and a Philco. He has a log of 617 on SW and BCB, plus about 1000 "hams."

Russell Cain of Nevada has a VFB card, and will send them out for return postage.

LIST OF REPORTERS

RF	Your West Coast Editor
RX	Official News Item
R636	Norman L. Maguire Albuquerque, N. M
R834	.G. R. Jewell, Jr San Diego, Calif
R881	Clarence Lee Mustoe Brady, Montana
R1043	William S. Petty Wheeler Field, Hawaii
R1098	Ted E. Matzen Miles City, Montana
R1151	Robert Brown Goshen, Indiana
R1213	H. H. Crow, Jr Sacramento, Calif
R1815	.G. H. Tuncil Bakersfield, Calif
R1829. Nev2	Russell Cain Reno, Nevada
R1849	A. G. Hooker Liberty, Sask
R1885	D. L. Bishop Liberty, Sask
R1905	Forrest L. Webb Salinas, Calif
R1906	Ivor Sutherland Mill Valley, Calif
R1919	George J. Hiss West Hollywood, Calif
R1922	Harry H. Johnson Los Angeles, Calif
	Art Cushen Invercargill, N. Z
	Fred A. Anderson Ft. Mills, P. I
~~~~~~	Charles BenedictAltadena, Calif
	Tom Brandon Edmonton, Alta
YOU BENEFIT	Alan I. Breen Dunedin, N. Z
FIVE WAYS	R. A. Butts Easton, Wash
FIVE WAYS	R. V. Caldwell Neskowin, Oregon
SEE PAGE 96	R. D. Doolittle Glendale, Calif
SEE   AGE 70	Lionel Jacobs Pasadena, Calif
	Harry C. Powell Portland, Oregon
~~~~~~~~~	T. P. Vasilopoulos West Los Angeles, Calif
	Ken White Oakland, Calif

TIME CONVERTER

The RADEX Map of the World with Time Converting Dial is the most useful accessory any radio fan could have around. Just a twirl of the dial shows the correct time at any location in the world. No calculation is necessary; the dial does all the work. The price is only

25c

You Can't Get Along Without It. Order Now.
Please use order form on Page 96

The Radex Publishing Co., Emerson, New Jersey

The Radex Contest

Radex Contest Prizes

All Wave Contest

Hallicrafters Skyrider Defiant Receiver, SX24 2nd Prize, \$30 in cash 3rd Prize, 1 Year Subscription and Membership in the World DX Alliance

Amateur Contest

1st Prize, \$15 in cash 2nd Prize, Subscription to Radex for one year 3rd Prize, 1 Year Subscription and Membership in the World DX Alliance

Broadcast Rand Contest

Philco Strap-around Fortable Radio

2nd Prize, \$15 in cash 3rd Prize, 1 Year Subscription and Membership in the World DX Alliance

Shortwave Contest

1st Prize, \$15 in cash 2nd Prize, 1 Year Subscription and Membership in the World DX Alliance

3rd Prize, Spatari Radio Language Book

A tabulation of the Contest coupons received to date shows a close race in two divisions of the Radex Contests. The leaders in the Broadcast and the All-Wave Divisions are closely bunched together, but the first place occupants in the Shortwave and Amateur Divisions are running away from the pack. But a lot can happen yet, Weston Richards of Zion, Ill. follows

For The Broadcast Band Champion

PHILCO

The PHILCO Corporation, Tioga and "C" Streets, Philadelphia, Pa., has donated a strap-around portable radio, Model 89-C,

a strap-around portable radio, Model 89-C, to be offered as a prize.

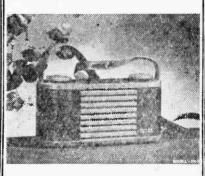
This portable radio plays anywhere, and is ideal for hikes, picnics, at the beach, wherever you go, indoors or out. It is truly a tiny package of "dynamite" in performance, with the power and fine tone of a radio many times its size. The aerial is contained in the shoulder strap. It is extremely light in weight, and its smart, plastic case recently won one of the top awards in the Modern Plastics Contest in New York City.

The PHILCO strap-around portable

New York City.

The PHILCO strap-around portable radio will be offered to the winner of the Broadcast Band Championship division of

the contest



and the picture presented when the second batch of coupons comes in may be an entirely different one.

In the All-Wave Division, Ed Laudansky, of Dorchester, Mass. is leading, with 115 points. Not far behind is Donald Fraser of Detroit, with 96 points, and in third place is Bill Scott of Johnson City, Tenn.

Harold Hutton of Rome, N. Y. stands at the top of the Broadcast Band Division, registering 415 points.

with 340, and in third place Chester Stedman of Westerly, R. I. comes up

with 243 points.

Because of the distance that verifications have to travel, the Shortwave Division has barely gotten a start. By the time our next issue is out, however, a lot of verifications ought to be back and this Division will look more lively. Leading at present is Al Renfro, Jr. of Johnson City, Tenn., with 12 points. Ed Laudansky is in second place with 4 points. Many contestants are tied for third place with 1 point.

Mike Unger of Detroit is running away with the Amateur Contest, showing 228 points, more than 200 points ahead of the second place contender, Harry O'Meara of Manchester, Mass. Merton Meade of Kansas City, Mo., brings up third place with

18 points.

One reader asks why we do not count CW (code) stations in the All Wave Division, "because," he says, "this really places a handicap on us poor CW listeners." Well, to tell the truth, we'd like to do it, but we think if we did it that we would be placing a heavy handicap on those hundreds of listeners who do not read CW.

And now, a letter from a reader who compliments us, by telling us that our prize awards will not be properly distributed. "The only thing wrong with the contest", Bob Gilchrist of New York City writes, "is that the prize goes to the wrong person. Anybody who comes in ahead of the pack must already have a pretty good radio. But I guess there's no escape from that; you can hardly award a Hallicrafters as a booby prize." Bob's right, of course; the thap who comes in last needs the Hallicrafters the most.

It is not too late to enter the big Radex DX Contest. Copies of the November - December, 1940 issue of RADEX, in which appeared Coupon Number One, can still be obtained from our offices in Emerson, N. J.

For the benefit of those of our readers who may have missed our announcement in our last issue, the RADEX Contests cover four divisions of DXing: All Wave, Shortwave, Broadcast Band and Amateur. The Contest began on October 1st, and will continue until September 30, 1941, and as soon thereafter as possible the name of the winners will be published in RADEX.

The Radex P	9 ,			
Emerson, N.	, <u> </u>			
Gentlemen:	J. Date			
My entry in t	the RADEX Contests f	ollows:		
	Α	В	C	
	Stations Verified	Countries		
	Since Oct. 1, 1940	Verified	Points	
Broadcast Bar	nd			
Shortwave			******	
Amateur		=		
All Wave	**********	********		
(Column A tim				
Column B equa	ıls			
Column C).				
	Name		TVICETORY	
	Address			
	11001000 11,11111			V
	City and State			

The purpose of the Contests is to learn who can receive the greatest number of verifications from radio stations during the year, and all verifications entered must confirm stations heard during this period.

Contestants will be allowed two months after the close of the Contests, until December 1, 1941, to receive verifications from distant stations heard prior to the official closing date of the Contests. It will not be necessary for contestants to send us their verifications until we request them to do so.

Each contestant may enter as many Divisions of the Contests as he wishes.

A contestant can take first prize in only one contest. If a person should happen to place first in two divisions, he will be offered his choice of first prize in one of the divisions, and second prize in the other.

Points will be computed by multiplying your total number of verifications by the number of countries represented. If you have 700 verifications from 20 different countries, your score would be 700 times 20, or 14,000.

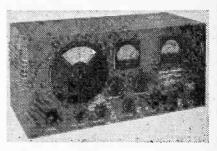
Only one verification from each station will be accepted. If a station works on several frequencies, employing the same call letters on all frequencies, it can be counted as a separate station for each frequency, PROVIDED the frequency on which the station was heard is clearly shown on the verification.

Verifications from stations can, of course, be in any form whatever—QSL cards, postal cards, letters, international reply cards, or cards prepared by the listener and properly signed by the station.

With countries being eliminated and new ones being formed nearly every week, we believe that the fairest way to determine the nationality of a verification will be to be guided by the postage stamp under which it is mailed. Thus, if a DXer hears a country called Radioland, and receives his verification with a Radioland stamp on it, it will still be

FOR THE ALL-WAVE

HALLICRAFTERS



Through the courtesy of Mr. Royal Higgins and Mr. W. J. Halligan, The Hallicrafters, Inc., of Chicago, Ill., have donated a HALLICRAFTERS SKY-RIDER DEFIANT RECEIVER, Model SX-24, to be given to the person who will be declared at All Ware Chemical

RIDER DEFIANT RECEIVER, Model SX.24, to be given to the person who will be declared the All Wave Champion.

This all-wave receiver is truly one of the finest communications sets on the market today. Frequency Meter tuning is provided by means of two translucent illuminated dials, one for the main tuning control and the other for the electrical handspread system. A built-in noise limiter is provided. Variable selectivity in six positions from sharp crystal to broad I. F. A. carrier level meter is calibrated in "S" units and decibels. A double-balance bridge-type crystal filter, frequency stabilization and a full four-band tuning range from 540 kcs. to 43500 kcs. all contribute to its peak performance. Ample selectivity is provided by a T. R. F. stage and two high-gain I. F.'s.

Radioland even if the country should later become a "protectorate" of Costa Rica. However, if after the change, he heard the same station again and it was verified as a Costa Rican station, he could count it as another country. This may not be the most perfect way to handle such a situation, but we believe its simplicity commends it.

New Prizes

Through the courtesy of Erick R. Johnson, contestants may now compete for a third prize in each divi-

sion. The Director of the World DX Alliance, Mr. Johnson, has offered a one-year membership in the Alliance and a year's subscription to their bulletin, to the third prize winner in the All Wave, the Amateur and the Broadcast Band Contests, and to the second prize winner in the Shortwave Contest.

All Wave Division

The person who receives the greatest number of points from all radio stations using voice, from 500 to 500,000 kcs. will be the All Wave Champion. The All Wave Division includes all radio stations—broadcasters, amateurs, commercials, ships, police, etc., but not stations using code.

The Amateur Division

The person who receives the greatest number of points from amateur stations transmitting within the recognized amateur bands will be declared the Amateur Champion.

Broadcast Band Division

The person who receives the greatest number of points from broadcasting stations operating on frequencies between 500 and 1600 kcs., located anywhere in the world, will be declared the Broadcast Band Champion.

Shortwave Broadcast Division

The person who receives the greatest number of points from stations broadcasting programs of entertainment between the frequencies of 1600 and 500,000 kcs. will be titled the Shortwave Champion.

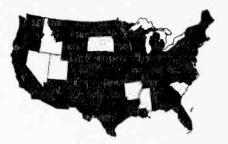
SEND STANDING NOW

All contest entries must be sent on the coupons which will be printed in every issue of RADEX, and failure to send a coupon will eliminate a contestant. To insure the receipt of your copy of every issue of RADEX, it is suggested that you send in a subscription, which is only \$1.25 per year. See the subscription blank on page 96.

Do not hold the coupons until the end of the contest, but send each of them, as soon as possible, to RADEX, Emerson, N. J. Each coupon may be

held, however, until the next one is in hand; thus, send Coupons 1 and 2 now, if you have not already done so; send Coupon No. 3 when you have received your next issue of RADEX.

The Radex Club



By ANNE TENNA

Since the last meeting of the Radex Club, 169 new members have been enrolled, bringing the total membership up to 2104 active DX fans from every walk of life, from every part of the continent. The growth of your club is due in no small measure to the very fine cooperation of many of the members who are making their friends acquainted with the fascination of DX.

Al Renfro, Jr., of Johnson City, Tenn., has set a goal of ten new members from his city; Stanwood Morss of Bradford, Mass., has sent the names of several fans to headquarters, and members in several other localities are trying to start local chapters. All we can say is: FB (and FB means "fine business.")

Outstanding among requests for membership recently were a letter from an XYL who complained that her husband had overlooked the fact that she, too, is a DX hound when he sent in his own application for membership; from Julius Hart, announcer at WIBM in Jackson, Mich.; and one from Jose Carriazo, Jr. of Havana, Cuba, shortwave editor of Radio

Union Magazine.

Anyone who is interested in DXing may join the Radex Club. There are no obligations and no fees. Just send your request for membership on a postal card and we will send your membership card.

DX Calendar

The winners of the WBAB DX program of January 18, 1941, are as follows:

First telephone call was received from Bernard Duffy, Staten Island, N. Y. The first telegram was received from Nick Woytan, Syracuse, N. Y., and the most distant telephone call was from Marion Merton, Virginia Beach, Va.

Special programs to be broadcast in March will be as follows, all time

being EST .:

March 9, 1:45-2:00 a.m., TG1, Guate-mala City, 1310 kcs.

March 9, 1:45-2:00 a.m., TG2, Guate-mala City, 6190 kcs.

March 11, 4:45-5:00 a.m., KTOK, Oklahoma City, 1370 kcs.

March 12, 4:25-4:40 a.m., WKST, New Castle, Pa., 1250 kcs.

March 12, 4:35-4:50 a.m., WJLS, Beckley, V. Wa., 1210 kcs.

March 20, 3:00-4:00 a.m., WCNC, Elizabeth City, N. C., 1370 kcs. March 24, 3:00-3:15 a.m., WINN,

Louisville, Ky., 1210 kcs.
March 24, 5:30-6:00 a.m., WPID,

Petersburg, Va., 1210 kcs.
March 26, 5:00-6:00 a.m., WCOA,

Pensacola, 1340 kcs. April 4, 3:00-3:15 a.m., KWAT,

Watertown, S. Dak., 1210 kcs, April 5, 2:30-3:00 a.m., WFPG, Atlantic City, 1420 kcs.

April 7, 5:00-5:30 a.m., WJLS, Beckley, W. Va.; 1210 kcs.

April 9, 4:35-4:50 a.m., WJLS, Beckley, W. Va., 1210 kcs.

April 13, 1:45-2:00 a.m., TG1, Guatemala City, 1310 kcs.

April 13, 1:45-2:00 a.m., TG2, Guatemala City, 6190 kcs.

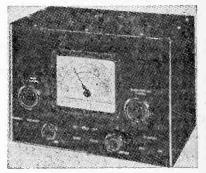
April 23, 5:00-6:00 a.m., WCOA, Pensacola, 1340 kcs.

REAL Short Wave RECEPTION

with

NEW ECHOPHONE

Commercial



Only \$19.95

Think of an outstanding communications receiver for this exceptionally low price! TUNES FROM 545 kes. to 30,500 kes. IN THREE BANDS AND COVERS STANDARD BROADCAST and has a beat frequency oscillator for locating weak stations, self-contained speaker, headphone tip jacks and directly calibrated dial with various channel services marked. Other features are: AC/DC operation, 115/125 volts, electrical band spread on all bands, dial calibrated in megacycles with all important service bands indicated band spread logging scale, complete isolation for headphones through phone circuit transformers and undistorted power output 6/10 watts.

through phone circuit transformers and undistorted power output 6/10 watts.

Receiver is housed in a metal rabinet nicely fin sished in satin black lacquer. Size is 7½" high 107%" wide x 7%" deep. Shipping weight 12 lbs.

Write for Free Literature

Price Complete With Tubes is Only \$19.95
Order from

RADEX

12 Locust Ave. Emerson, N. J.

High Grequency Globe Trotting By RAY LA ROCQUE

Report-O-Meter

Norman H. Kane						100%
Edward Laudansky						67%
Malcolm Horlick						36%
Al Renfro, Jug						31%
Walter E. Welsh						
E . C El	-		1			.1.

Except for Ed Laudansky, the meter this month carries a list of new comers, chief of which is Norman Kane from out Pennsylvania way who blasted his way to the top with some choice reporting. Honorable mention goes to Art Hankins, Art Stevens, and Arnold F. Worme. Try

again next month, boys.

Our sincere apologies for not being able to have the Report-O-Meter last month. For those interested, here's how the meter registered last month: Robert Skyten—100%, Edward Laudansky—47%, Charles Meyers—46%, William McMahon 40%, Fred Borchertd 36%. . . And the boys who missed our list of acknowledgements at the end of this department last time, we include this month both the reporters for this issue and last.

Interest in the shortwave section of the big RADEX contest doesn't seem to measure up to that displayed on the broadcast and ham bands. How about more activity, boys?

ASK US ANOTHER

A. M. Hankins of Latrobe, Penna. wants to know if Radio Eiran in Eire is still on the air, and what their actual schedule is. . . For whose who are waiting for "Radio Guadeloupe" to verify, Art Hankins pens the encouraging note that he received his after waiting 1 year and 10 months! . . . Stations heard on 13000 kcs., and 14500 kcs. with speech sounding like Japanese or Chinese. This signal was heard by Chas. O. Peach, 6416 Kingshighway, St. St. Louis. Mo. from 9:30-10 p.m.

Quoting this time, from Mrs. John Matthews, Lenox, Mass., "I got a Canadian station on 5600 kcs. and listened for forty-five minutes but never their call letters or location—though they were loud and clear. They signed off with a siren and called themselves 'The Northern Broadcasting Company'. . . The station on the 31 meter band coming on at 11:45 p.m. with exercises is undoubtedly ZRL in Klipheuval, So. Africa. This for the benefit of Edward R. Omelian of Watersmeet, Mich.

The QR's of stations W2XJI and YNDG are required by Jack Stephenson, 2721 W. 21st., Oklahoma City, Okla. (W2XJI can be addressed in c/o the Bamberger Broadcasting Corp., Newark, N. J.—RL) . . . Information on a Spanish speaking station on approximately 12140 kcs. is desired by Vernon Gibbs, Lexington, Ky. . . And, H. H. Chambers of "Faraway," Narragansett, R. I. would like someone to solve the mystery of the interference he gets on GSC, caused by WLWO. (WLWO is now using that channel according to a recent grant by the FCC.—RL)

There is a station in El Salvador on 6590 kcs. which sometimes uses English announcements. Signal is very strong, often much louder than COHI. It apparently relays some broadcast band station and signs at midnight with a national anthem. This from Norman aKne of Drexel Hill, Penna.

Charles Meyers of 3643 W. Flournoy St., Chicago, Ill. asks a couple of questions and supplies a couple of possible answers for confirmation. A

Readers living in the Eastern and Central Standard Time Zones may send their report direct to

Ray LaRocque 105 Highand St., Worcester, Mass.

(Please use EST in reports)

station announcing as "Radio Rabat" on 9885 kcs. may be CNR testing on a different frequency. Music and speech on 12120 kcs., may be TPZ in Algiers, Algeria. . . . Mae McKenzie of 823 Shelby St., Indianapolis, Ind. wants to have a French station on 12045 kcs. identified. The station came on at 3:35 p.m. and signed oz at 4:10 p.m. with "Bonsoir, messiours, bonsoir mesdames,"

Roy Riedel, 725 Bellview Place, Indianapolis, Ind. starts our department off with an answer. It is for William McMahon and concerns a station on 11400 kcs. It is Paramaribo, Suriname—whether or not it uses the same call as the 6800 kcs. station (PZH) is not known, but it is definitely heard late in the afternoon. The station on 11970 kcs. may be HI2X and the French speaking station on 9890 kcs. is HH3W (9890 kcs.) in Port-Au-Prince, Haiti.

Perhaps some kind RAdexer can help H. Mandel, 12625 Notre Dame E., Montreal, P. Q. with this one. We'll let him tell you about it: "The station comes on the air Sunday evenings about 6:45-7:00 p.m. playing a march. Program continues with talking in Spanish or Italian and oriental or arabic type of music. This lasts for about an hour. Heard often during the broadcast were 'Republica Dominicana' and 'Palestine'."

QUOTE AND UNQUOTE

Bob Hetzel, 1327 N. 18th Street, Milwaukee, Wisconsin: "I first read one of your magazines the other day and liked it very much. I have been a DXer for four years and have managed to verify 108 countries. My better catches verified are XGAP, FK8AA, ZUN (only one in the U. S!), Radio Leo, YCP, ZNB, XYZ, CR6AF, ZB2B, CR7BH, and many more."

Bill Scott, 313 W. Holston Ave., Johnson City, Tenn: "I would like to get some information on obtaining cards from CW commercials. I hate to hear some stations like CUT, JUI, XDA, FZG and the like without being able to get their cards." (I don't

believe these stations have cards and if they did it would be risky business writing them as most of the time they are transmitting information that is confidential and penalties for divulging this information are steep—RL)

Arnold F. Worme, 6876 Sherbrooke St., West Montreal, P. Q: "I have been DXing on the shortwaves for nine months and have logged 90 odd stations from the six continents. My first veri card came from PSH and is white with a blue map of Brazil."

Charles Squires, 606 West 135th St., New York, N. Y.: "Tell all Radex readers that I reply 100% to SWL's and to foreign readers who write in English, I will send with my card, ten different post card views of New York, N. Y."

Dick Knoth, 115 Mt. Vernon Ave., West View, Penna.: "I have just finished the last edition of RADEX and let me say that it is really a magazine. I have been DXing 8 months, and between a 1937 PHILCO and an SX-24 HALLICRAFTERS, I have done a lot of listening.

Harold Satterthwaite, 3166 Midvale Ave., Palms, Los Angeles, Calif.: "Here is a phenomenon with which I feel Radex readers should be acquainted. The environs of San Diego, Calif. have an extremely freakish characteristic in the form of the ability to receive short wave signals from great distances. As far as I know, no other location in the United States has such characteristics. Then too, at National City, so called surburb of San Diego, just north of the city, conditions are just reversed. Here it is possible to receive standard broadcast signals from great distances. This caused me much grief as I was following reports in RA-DEX from a reader in this locality. Stations which he reported with strong signals were not even audible on mine. Until I found out about this situation, and affer carefully checking my receiver I had lost a little interest in DX!'

Al N. Cole, Jr., 3005 Buckingham St., Norfolk, Va.: "Why not ask the leaders of the Report-O-Meter to send in the age and make of their receivers and how many countries and states that they have heard? I got a new Howard 435 receiver for Christmas."

Norman H. Kane, Jr., 3721 Bonsall Ave., Drexel Hill, Penna.: An interesting letter accompanied the vericard from HP5G. George Williams, in his letter, states that he puts on 'special DX'ers programs' and continues 'if you want one for your magazine or town I would be glad to carry out this idea for the good will of Panama and the U. S. A.'"

Thomas Woodbury, 152 Leavitt St., Hingham, Mass.: "WBZ has opened their new short wave station, WBOS, which went on the air New Year's Eve and is now broadcasting daily to

Latin America."

Bernard F. Arnold, 994 Celma Ave., Akron, Ohio: "I have just bought my second issue of Radex and to my knowledge it is the best magazine out. I have been a shortwave listener for about eight months. Some verifications I have received are JZK, TGW, COBZ, CHNX, COK, HP5A, etc. I use a Silverstone receiver."

Fred Benkley, Jr., R1773, China "Although I have Spring, Texas: been a RADEX reader for almost a year, this is my first report to your column. My DXing interest developed without outside stimulation during about two years, as I have never corresponded or been acquainted with any other DXers. I DX on the broadcast band and shortw ave broadcast frequencies with a Howard 430. To Arthur Stevens who failed to receive a veri from TGWA, I would like to say I sent a postal card report and received a veri in two months and twenty eight days. I would appreciate some hints on short wave aerials as I have not been able to secure an aerial which offers suitable reception on all short wave bands. I have tried RCA 395 and RCA "Spider Webb" types. The former is suitable for 25 and 31 meters, but not as good on 16, 19, and 49 as a single wire type."

NOT SO SHORT WAVES

It seems that a group of DXers whose inteerst centers on the commercial bands that fall between the standard broadcast and the shortwave broadcast bands have organized what is called the COMMERCIAL RA-DIO ROUND TABLE. The organization, through its guiding hand, Chet Roman of Chicago now issues a monthly bulletin that is full of reports and facts about these little known stations. To devote enough space in this department in RADEX so as to include even one-fourth of the material sent in by members of the Round-Table would take up much more space than we can follow for "Not-So-Short Waves." It must be understood that only a small minority among the DX fraternity listen to these bands and we must arrange our news accordingly. It would be appreciated, in making reports for this department, if the reader would kindly include only his important items instead of a complete list of what has been heard. In this manner, we would be able to list herer, each month, the most important facts and changes,

The number of reports received for this column from different readers in comparison with the total number of reports received for the entire short wave department will determine how much space this department shall oc-

cupy.

KYZF located at the Emigration headquarters of the Border Patrol in Alpine, Texas on 5912 kcs. was heard testing on a Sunday night with R7

signal. (Arnold—Ohio)

WAR, the War Dept. station is now working amateurs as follows: from 7-8 p.m. on Tues., Thurs., and Fri.) for hams from 3500-400 kcs. . . . from 10-11 p.m. on same days for hams from 14000-14400 kcs. WAR will use 4024 kcs. for the 3500-4000 kcs. hams, and 13320 for the 14000-14400 kcs. hams. They will call CQ, followed by the band and ZCAA. . . NOQ on 2662 kcs. is a U. S. C. G. station now

located at Mobile, Ala. and has weather reports at 11:20 a.m. and p.m. (Bennett-N. J.)

WANA on 2726 kcs. at Homerville, Ga. was heard testing Jan. 10, '41 at 9:15 p.m. The correct QRA is Consolidated Timber Protective Orangization, Homerville, Ga. . . . (Wells-Ont.)

"Cutter Hyacinth" heard talking with Charlevoix, Mich. on 2670 ks. . . Canadian airport stations in Montreal, Ottawa, Torento, and North Bay heard on about 4350 kcs. (Richards-Ill.)

Six special emergency stations of 50 watts are operated portable by the Bell Telephone Co. They are KQIP on 2590 kcs. in Dumas, Tex.; KQIO on 2590 kcs. in Amarillo, Texas, KOCA on 27526 kcs. at Borger, Tex., KDXC on 2726 kcs. at Amarillo, Texas; KQXZ on 2836 kcs. at Hereford, Texas; and KOXY on 2836 kcs. at Amarillo, Texas. . . . These stations started to operate about the middle of last November, just after the destruction caused by ice and sleet in the Texas Panhandle region, and continued for nearly a month. These stations carried on long distance toll service for the telephone company. They operated day and night. Their signals were R5-6 in the daytime and R7-8 in the evening. (Blinn-Kansas)

WOX and WAQ New York on 2522 kcs., WOU Boston on 2506 kcs., WGB Norfolk, Va. on 2538 kcs., WDR Miami, Fla., on 2514 kcs., and WAK in New Orleans on 2558 kcs. were all heard here. (Medric-N. Y.)

CY4A on 4755 kcs. at Bousquet, P. Q. can be heard every night at 7:20 p.m.

CB-18 at Lynn, Mass.—The Naval Reserve Station conducts code lessons Mon. to Fri. 6:45 p.m. to 7:15 p.m. on approximately 2360 kcs.

575 airports and airplanes have been heard at this location. (Welch-Mass.) (Radexer Welch sent in an elegant nine page report, which unfortunately is much too lengthy to be included here. We have selected but a couple

which we thought most important—RL)

Please, "Not-So-Short-Wavers" do not report stations which are common and which make little difference to other readers. Include in your reports only stations which you think will contain material of value to other DXers—in this manner your department will always contain the "cream" of the reports.

"FM" FACTS

"FM", the radio of the future is going ahead by leaps and bounds. Slowly, but surely, the experimental licenses owned by FM stations are being converted into regular broadcast licenses. Slowly, but surely, the public is being convinced of the distinct advantages posessed by this type of broadcasting. Now the FCC has provided an entirely new identifying type of call leters for FM stations (See FM station list on another page).

Roger Dissell of West Hartford, Conn. wants an entire section or department in RADEX devoted to FM. This is far fetched at present, of course, as interest is not yet high enough to warrant this. But it will come—and soon, judging from the strides FM has made of late. IF you are buying a new receiver, remember that having the frequency modulation feature in your receiver will cost but a little more than the regular cost of the set.

WINOJ was regularly heard this Summer while at Yarmouth, Me. Signals were fair. At the same spot the signals of WIXTG were faintly audible. (Dissell-Conn.)

W1XPW here in Hartford, have shifted from 43400 kes, to 44100 kes, and are broadcasting daily from 2-10 p.m. Programs are mostly recordings. (Dissel-Conn.)

W1XSO is on the air from 3:30-11:30 p.m. with relays of WTIC pro-

grams (Dissel-Conn.)

W1XEH (also owned by WTIC) are heard occasionally testing jujst below W1XOJ. W1XOJ and W2XMN are occasionally heard here meakly.

(Dissel-Conn.)

W1XOJ is marvelous on my new FM Zenith Radio here in Manchester, 60 miles away. Their signals are strong and clear and music on an "FM" set is something to really enjoy as instruments can be heard as they actually sound to the natural ear: W1XTG is heard with a weak signal here and have logged W2XMN and one of the New York City stations, but of course these are not heard to be enjoyed. (Meader-N. H.)

W9XCR in Chicago was heard here once relaying CBS programs. A station using AM on the same band wis identified as W9XAW in Minneapolis, Minn. These stations were heard at 12:00 noon. Evidently this is what is known as "sporadic E" condition.

(Dissel-Mass.)

FM station W2XMN was heard on my radio broadcasting the Rice-S. M. U. football game on 43000 kcs., but they were QRM'd by an amateur on 42800 kcs. How come I can hear and partially understand "FM" transmissions on my AM radio? (George Wetherill-Penn.) "FM" signals are not entirely inaudible on regular AM radios, but their quality on such sets is very poor and hardly enjoyable.—R.L.

Winston-Salem Journal applied to the FCC for an FM station for this area to serve 69400 sq. mi., which would mean a power of approximately 50 kw. (Waldman-N. C.)

SHORTWAVES IN REVIEW

Argentina

LRX on 9660 kcs. is being heard nightly with popular music. This station is in Buenos Aires and has complete English announcements at 10:05 p.m. (Hankins-Pa., Renfro-Tenn.)

LSX on 10350 kcs, was heard at 1:45 p.m. talking to New York. (Ren-

fro-Tenn.)

LSK-3 on 10250 kcs. was heard in two-way contact with London at 5:15 p.m. (Kane-Pa.)

Australia

Revised A.B.C. schedule: Trans. 1:

3:25-4 a.m. to New Caledonia and Fr. Oceana.

Trans, II: 6:40-7:15 a.m. to North and East Rsia.

Trans III: 7:25-8:0 a.m. to East North America.

Trans. IV: 8:10-8:45 a.m. to South and East Asia.

Trans. V: 10:25-11 a.m. to Western North America.

Trans. VI: 11:55 a.m. to 12:30 p.m. to South Africa.

Trans. VII: 12:55-1:55 p.m. to Southern Europe.

Trans. VIII: 2:30 p.m. to 4 p.m. to Northern Europe.

Trans: IX: 6:10-7:00 p.m. to Eastern North America.

Trans: X: 12:55 a.m. to 1:45 to

Western North America.

Trans. II has VLQ on 9615 kcs.; Trans. III has VLQ-5 on 9615 kcs.; Trans. IV has VLW-2 on 9650 kcs.; Trans. IV has VLW-2 on 9650 kcs. and VLQ-7 on 11880 kcs.; Trans. V has VLW-5 on 6180 kcs.; Trans. V has VLW-5 on 6180 kcs., and VLQ on 9615 kcs.; Trans. VII had VLQ-2 on 11870 kcs.; Trans. VIII has VLQ-7 on 11880 kcs.; Trans. IX has VLQ-5 on 9680 kcs., and Trans. X has VLQ-8 on 17800 kcs. (Kane-Penna.)

VLQ on 9615 kcs. was logged from 2-2:30 p.m. with strong signals. (Si-

monian-Mass.)

VLQ-5 at Sydney on 9680 kcs. was heard from 7:30-8 a.m. with a broadcast on Australia. (Stracener-La., Waldman-N. C.)

VLQ-8 on 17800 kcs, was heard at 12:30 a.m. with news in English until sign-off at 1:45 a.m. (Renfro-Tenn.)

VLW-2 on 9560 kcs. at Perth and VLQ-2 on 11870 kcs. broadcast in parallel in the morning with ABC programs. News in English at 8:50 a.m. with English program following until 9:20 a.m., when they change to another language. Preceding the news in English there is a French program until 8:49 a.m. VLQ-2 cannot be heard—just WLW-2! Identification is by a series of chimes, sometimes but a few notes, sometimes playing an actual tune. (Kane-Penna., also Lau-

dansky-Mass., Stracener-La., and Han-kins-Pa.)

Bahama Islands

ZNS on 6090 kcs. is on the air daily from 8-8:30 a.m., 1-2 p.m., and 5:45-9 p.m., the addition of a morning transmission may make it easier to log nithe mid-west. Address may be either P. O. Box 48 or Mr. K. P. Brown, Director of Telecommunications, East St., Nassau. (Kane-Penna., Scott-McConnell-Ohio.)

Belgian Congo

OPM (call not used) on 10140 kcs. announces as "Radio Congo Belg" and comes on the air at 1:41 p.m. with a series of high pitched notes. At 1:51 p.m. a series of musical notes in weird sequence until 1:56- p.m. when orchestra begins to play. At 2:00 p.m. a man speaks in French identifying the station. There is little QRM and station is heard until sign-off at 2:45 p.m. at which time the Eelgian National Anthem is heard. (Laudansky-Mass., Kane-Pa., Hankins-Penna., and Bocherdt-Minn.)

Brazil

PSA on 21080 kcs. is not being used. PSE on 14935 kcs. broadcasts in German on Wednesdays from 4-4:30 p.m., in tIalian on Thursdays from 3-3:30 p.m., and in French on Saturday from 3-3:30 p. m.

PSH on 10220 kcs. broadcasts in English on Mondays from 8-8:30 p.m., on Tuesdays from 8-8:30 p.m. and in Spanish on Friday from 7-7:30 p.m.

(Johnson-Me.)

Canada

CJCX on 6010 kes, is on daily from 8 a.m. to midnight with English news at 10 p.m. Verifies promptly. (Arnold-Ohio.)

CJRX on 11720 kcs. at Winnipeg, relays CJRC daily and announce as "Manitoba's Friendly Station". They are best heard from 7-10 p.m. (McConnell-Ohio, Horlick-Ohio, Laudansky-Mass., Bill Scott-Tenn.)

VE9DN on 6005 kcs. at Montreal is being heard and is the best Canadian at this location at night. (Hor-

lick-Ohio.)

Chile

CB-1180 kcs. on 11945 at Santiago, Chile is on evenings from 7 p.m. to 11 p.m. They are best from 9-10 p.m. News in Spanish at 10 p.m. (Worme-P. Q., Peach-Mo., Laudansky-Mass.)

Colombia

HJGB on 4775 kcs. sends a white card printed in blue. On the back the signer penned "Merry Christmas and Happy New eYar". (Stephenson-Okla.)

Costa Rica

TI-4NRH still going strong on 9692 kcs. on Tuesdays, Thursdays and Saturdays from 9-10 p.m. Location is Heredia and U. S. stamps or coin is preferred for verification as I.R.C.'s are not valid in Costa Rica. (Arnold-Ohio, Stracener-La.)

TIJK on 6010 kcs. at Puntarenas is a new station being heard evenings.

(Laudansky-Mass.)

TIPG on the air daily at 6:00 a.m. until 11:30 p.m. (Laudansky-Mass.)

TIRCC on 6185 kcs. was heard on Jan. 1 with a program of popular music from 5:10-5:36 a.m. with Spanish announcements. They identified themselves in English. (Stracener-La.)

Cuba

CLX on 7100 kcs. at Havana "Observatorio Nacional" was heard at 7:25 p.m. testing for the United States. Weather report given at midnight. (Laudansky-Mass.)

COBZ on 9030 kcs, can be addressed at Box 866. (Arnold-Ohio.)

COCY on 11460 kcs. is a new short wave relay for CMCY and is heard daily with a good signal. (Mills-Ont., Hankins-Penna. Disagreeing with the above. Johnson-Me., says the call on 11460 kcs is COCF!

COCO on 8700 kcs. in parallel with CMCK (broadcast band) comes on at 8 a.m. and signs off at 11:30 p.m. Address is P. O. Box 98, Havana. (Hankins-Penna.)

Dominican Republic

HJ-1J is now being heard on 5975 kcs. instead of 5960 kcs. They are only slightly QRM'd on the new frequency. (Laudansky-Mass.)

HI-1N on 6245 kcs, relays a program from Palestine Thursday and Sunday evenings from 6:45-8:30 p.m. (Hall-Mass.)

HI-8J at La Vaga has moved to 6383 kcs., and HI-1A to 6430 kcs.

(Welsh-Mass.)

Ecuador

HC2AK on 9380 kcs. at Cuyaquil was heard with god signals on this frequency—just a little higher than COBC. (Laudansky-Mass.)

HC2XA on 9377.5 kcs. as checked by CBS in New York previous to a hook-up for relaying the "World Today" broadcast. (Kane-Penna.)

HCJB on 12450 kcs. "The Voice of The Andes" at Guyaguil was still the most often reported station in this country this month. Their signal is splendid and their English programs at 6 and 9 p.m. daily are usually interesting. Verification from HCJB contains a small picture of the antenna and studios with three stripes of red, blue, and yellow running diagonally acros sthe card. A booklet on Ecuador usually accompanies the card. (Murphy-Wisc., Janata-N. Y., Woodbury-Mass., Renfro-Tenn., Stracener-La., Horlick-Ohio, Hall-Mass. and Johnson-Me.)

Egypt

SUX on 7865 kcs. at Cairo broadcast to London, who in turn relayed the program to CBS in New York. Cairo was heard as well here as the Rugby station in England. (Kane-Penna.)

France

TPC-5 or "Station Y" as the Germans call it now on from Paris at various times throughout the day. Schedule seems to be made up of short transmissions. They announce as "Vive la France". (Kane-Pa.)

TPC-13 on 9520 kcs. was heard with Oriental music from 3:45-4:04 p.m. announcing "Allo, allo, Ici Paris

Mondial". (Kane-Penna.)

French Equatorial Africa

"Radio Brazzeville" on 11970 kcs. is still being heard from 3:30 until 4:15 or 4:30 p.m. Of late this station

has been using various frequencies in order to avoid jamming by "U-Know-Who". They were heard on 10970 kcs., free of jamming. (Laudansky-Mass., Johnson-Me., Kane-Pa., Borcherdt-Wis.)

French West Africa

"Radio Dakar" is practically impossible to verify. Reason: there is no mail service to Dakar. (Laudansky-Mass.)

Germany

DJB on 15200 kcs, is on daily from 6-9 a.m.

DJC on 6020 kcs. si on from 8 p.m. to 1 a.m.

DJD on 11770 kcs. is on from 4:50 p.m. to 11 p.m.

DZD on 10540 kcs. is on from 5:45-6:35 p.m. and from 7-11 p.m.

"Station Y" on 9520 kcs. is on from 4:50-11 p.m. (Official North American Schedule.)

A complete list of stations in Germany or in German occupied territory follows. This list is the work of W. E. Welch of Lynn, Mass.

6010—OLR2A	11840DXW
6010—DXO	11855—DJP
6020—DXP	11875—OLR4C
6030—DXP	11900—OLR4D
6030—OLR2B	15110—DJL
6072—DJY	15120—SP-19
6079—DJM	15120—DX42
6115—DXD-2	15160—DXS
6115—Warsaw	15160—OLR5C
6115OLR2C	15200—DJB
6160—DXA	15230—DXT
6170—DXQ	5230—OLR5A
6175—DXH	15275—Crakow
6190—DXG	15280DJJQ
6195—DXI	1532O—OLR58
7240—DXJ	15320—DXU
7270— DXM	15340DJR
7290—DJI	17760—DJE
9504—OLR3B	17780—Dwow
9525—Lodz	17815—DJG
9525—SP-31	17825DXC
9525—DXY	17830—OLR6A
9540—DJN	17830—DXV
9550—OLR3A	17845DJH
9560—DJA	21450—DJS
9570—SR-1	21565—DJJ
9570DXZ	21565—OLR7B
9610—DXB	21640—DJK

9650—DJW	21640—OLR7C
9670—OLR3B	21660—DXD
9675—DJX	21670—D XK
11740-Kattowitz	21690—DXF
11740—SP-25	21720—DXE
11745—DJF	21730—DXL
11760—OLR4 8	21740—DXN
11760—DXR	25850—DJT
11770—DJD	25950—DJU
1.1795—DJO	26450—DJ V
11801—DJZ	
11840—OLR4A	

Of the above listed stations, the following were reported heard during the day at various odd times: DJB, DPD, DJL, DJC, DJQ, DXH-2, DXB, DXM, DJZ, DJA, DJW. (Kane-Pa., Horlick-Ohio, Hankins-Pa., Renfo-Tenn.)

DXC-2 on 11740 kes. (formerly Oslo) was hooked up in synchronization with DJL from 8-8:15 a.m. for a relay to CBS in New York. (Kane-

Pa.)

Great Britain

GRZ on 2f640 kcs. was heard late on a Sunday morning with a church service. (Laudansky-Mass.)

GSA on 6050 kcs. was heard at 10:45 p.m. with "Radio Newsreel No. 171. They were also reported at 4:00 a.m. (Renfro-Tenn., Laudansky-Mass.)

GSU on 7260 kcs. was also heard durin gthe Radio Newsreel program from 10:30-10:45 p.m. (Renfro-Tenn.)

GSW on 7260 kcs. was heard with a program of Canadian News and music on Mondays and Wednesdays from 3:45-4:15 p.m. and again from 7:30-7:45 p.m. (Worme-P. Q., Renfro-Tenn.)

Other BBC stations heard and reported were GSL on 6110 kcs., GSC on 9580 kcs., GSN on 11820 kcs., GSD on 11750 kcs., GSE on 11860 kcs., GSJ on 21530 kcs., and GSV on 17810 kcs. (Horlick-Ohio, Hankins-Pa., Stracener-La., Horlick-Ohio, Renfro-

Guatemala

TGWA on 15170 kcs. operates with 10 kw. daytime only.

TGWA on 9685 kcs. operates with the same power at night with optional use of both 11760 kcs. and 17800 kcs.

TGWB on 6480 kcs. operates with 1 kw. all day and in the evening.

TGWC on 2320 kcs. operates with 1 kw. daytime and evenings. (RX.)

TGW, TGWB, and TGWC have "The German Hour" on Mondays from 9:30-10 p.m.; "The English Hour" on Thursday at 9:30-10 p.m.; and "The Italian Hour" on Fridays from 9:30-10 p.m. (McConnell-Ohio.)

Haiti

HH2S verified by letter stating that they had no cards. (Stephenson-Okla.)

HH3W on 9900 kcs. has an English program on Monday afternoon from 1:45-2:05 p.m. which starts and stops with "Stars and Stripes Forever".... HH3W also broadcasts in English from 7:45-8 p.m. (Hankins-Pa., Stracener-La., Johnson-Me., Hall-Mass.)

Honduras

HRD on 6235 kcs. signed off at 10:20 p.m. with the English announcement and a marimba theme song. (Kane-Pa.)

HRN on 5875 kcs. "The Voice of Honduras" presents the "Hour of Honduras" every Tuesday from 9:30-10:30 p.m. This program is in English. (McConnell-Ohio.)

Hungary

HAT-4 on 9125 kcs. in Budapest si heard nightly on its program to the U. S. and announce as "Radio Budapest, Hungary". News in English is at 8:03 p.m. (Kane-Penna., Stracener-La.)

India

VUD-2 on 9590 kcs. is being widely reported with news in English at 7:30 a.m. followed by news in the native tongue at 7:35 a.m. (Stracener-La., Kane-Penna., Morse-Mass.)

Italy

IRF on 9830 kcs. heard during the American hour with R9 signals. (Hankins-Pa., J. Ribinski-N. Y.)

12RO-3 on 9630 kcs. was heard at 10:20 p.m. with the American Hour directed to this country. (Renfro-

Tenn.)

12RO-4 on 11810 kcs. heard from 12:30 p.m. broadcasting music, and using a woman announcer. (Horlick-Ohio, Kane-Penna.)

12RO-6's program at 12:15 p.m. is directed to North America. (Horlick-

Ohio.)

12RO-15 on 11760 kcs, heard at 12:15 p.m. with a man announcing the frequency. This is the earliest any Rome station has been heard here. (Renfro-Tenn.)

Jamaica

ZQI on 3470 kcs. testing at 6:40 p.m. (Welch-Mass.) ZQI at Kingston on 4750 kcs. verifies with a tan card with green print. Power is 200 watts. Dennis M. Gick, Manager, signed the card. (Stephenson-Okla.)

Japan

JLG-4 on 15105 kcs. operates from 8-10 p. m.

JLT on 6190 kcs. operates from 2-

5:30 p.m.

IVW on 7257.5 kcs. operates from

2-5:30 p.m.

JVZ on 11815 kcs.(new station) operates from 4-8 a.m., 6-8 a.m., and 8-10 p.m.

JWV on 11725 kcs. operates from

8-9:30 a.m.

JZI on 9535 kcs. operates from 1:30-5:30 a.m., 10-11:55 a.m., noon to 1:30 p.m., 6-7:30 p.m., 10:30 p.m. to 1 a.m.

JZJ on 11800 kcs. operates from 1:30 a.m. to 3:30 a.m., 4-5 a.m., 5:30-6:25 a.m., 6:30-9:30 a.m., 10-11:55 a.m., noon to 1:30 p.m., 6-7:30 p.m. and 10:30 p.m. to 1 a.m. (Whole schedule

RX via Stevens-Ky.)

All but JLT and JVW have been reported heard in Eastern North America by (Bennett-N. J., Arnold-Ohio, Laudansky-Mass, Werme-P. Q., Horlick-Ohio, Mills-Ont., Walker-Ky., Hankins-Pa., Johnson-Me., and Benkley-Tex.)

JLG on 7285 kcs, and JLG-2 on 9505 kcs, are used occasionally on the 2-4 p.m. program for Europe. (Kane-

Pa.)

JLU-3 on 15160 kcs. heard with R8

signal from 7:20-9:30 a.m. (Stracener-La.)

Madagascar

FIQA on 10950 kcs. at Tanananrive is heard Saturdays with news in English from 2:35-3 p.m. A woman does the English announcing. (Horlick-Ohio.)

Manchoukuo

MTCY on 9545 kcs. operates from 1:30-2:20 a.m. to Europe, and from 9:30-10:30 a.m. to Dutch East Indies, and Australia.

MTCY on 11775 kcs, operates from 1:30-2:20 a.m. to Pacific Coast of U.S. and Hawaii and from 9:30-10:30 a.m. to Dutch East Indies and Australasia. (RX.)

Martinique

"Radio Martinique" on 9705 kcs. is on nightly from 5:30-9 p.m. with French songs and music. Both man off includes "La Marseilles". (Wermeand lady announcers take part. Sign P. Q., Kane-Pa., Horlick-Ohio.)

Mexico

XEQQ on 9680 kcs. in Mexico City is heard daily with popular Mexican music and songs. (Werme-P. Q.)

Mozambique

CR-7AA on 6137 kcs. comes in R8 from 12:30-1 a.m. (Horlick-Ohio.)

CR-7BE on 9710 kcs. is being heard very regularly with a god signal from 2-4 p.m. with program in Portuguese. American dance tunes are often used for music on the program. (Scott-Tenn., Johnson-Me., Stevens-Ky., Borcherdt-Wis., Kane-Pa.)

CR-7BE verified with a white card, green map of Africa, radio towers, and radio waves, and blue call letters. Stations now in use are: CR7BD on 15250 kcs., CR7BE on 9710 kcs., CR7AA on 6030 kcs., and CR6AB on 3490 kcs. Not in use at present are CR7BF, CR7BG, CR7BH, and CR7BI (Laudansky-Mass)

Netherlands

PCJ-2 on 15220 kcs, heard with program in the morning for the Dutch East Indies. PHI is also heard on announcements, but this station is not heard here. News in English at

Page Thirty-eight

6:50, 7:50, 9:38, and 10:30 a.m. (Kane-Pa.) "Radio Amsterdam" heard as identifying announcement on 15220 kcs., at 10:30 a.m. (Hankins-Pa.)

Nicaragua

YNDG on 7660 kcs. broadcasts week-days from 8:30-9:30 p.m. Station identification is given in English. Verification card is in white with red call letters and blue print. (Laudansky-Mass., Stracener-La., Borcherdt-Wisc.)

Panama

HP5B on 6033 kcs. at aPnama City is heard in the early evening with good signals. (Laudansky-Mass.)

HP5G on 11780 kcs. is heard from 7-7:30 p.m. with news period conducted and announced by George Williams. (Arnold-Ohio.)

HP5K on6000 kcs. heard with a program in English from 6:05-6:30 p.m. (Stracener-La.)

i. (Strucener Eur)

Paraguay

ZP-14 "Radio Cultura" verified with a grey card with blue print. (Laudansky-Mass.)

Peru

OAX4J on 9380 kcs. has a jrobram by the Peru Automobile Club in English at 5:30 p.m. on Saturdays. (Stracener-La.)

Portugal

CSW-5 on 11040 kcs. causes interference to OPM around 3 p.m. (Kane-Penna.)

CSW-6 on 10990 kcs. heard from 2:30 p.m. on Sundays with a musical program. Announcements in Portu-

guese. (Laudansky-Mass.)

CSW-7 on 9740 kcs. is the most often heard Portuguese station, being reported with news in English at 4:00 and 4:15 p.m., and at 9 p.m. (Kane-Pa., Hankins, Pa.)

Salvador

YSPB on 6575 kcs. signs off at 11:58 p.m. announcing in Spanish as YSP and YSPB. Two descending gongs form identification signal before each short announcement. Before station announcement a series of 8-10 strokes of the gong are sounded. (Hankins-Pa.)

YSD verified with a lemon and blue card showing a radio tower with call across it. (Stephenson-Okla., Stracener-La.)

Spain

EAQ on 11680 kcs. is being heard in the afternonos until 3 p.m. with program which concludes with news in Spanish. (Kane-Pa.)

EAQ on 9855 kcs. is very erratic, being heard R9 one evening and scarcely audible the next. (Kane-Pa.,

Hall-Mass.)

Switzerland

It is no longer permissable to send pictures of the Geneva (Schwarzenburg) radio as verifications, so the chief of programs sent me instead, two pictures of Bern and the Alps as veries. Verification also mentions stations on 6165 kcs. and on 11965 kcs., previously unreported in the states. The former station operates only on week-days from 2-5:30 p.m., and the latter daily from 7-8:45 a.m. (Kane-Pa.)

Uruguay

CXA-6 on 9625 kcs. is all Spanish speaking. Announcements are made 8:28 p.m. and 8:59 p.m. Announce as "Servicio Oficial de Difusion Radio Electrica, CX-6 and CXA-6". (Hankins-Pa., Laudansky-Mass., Werme-P.O.)

CXA-8 on 9640 kcs. is heard nightly with popular Latin American music. They are sometimes over-shadowed

by Rome. (Werme-P. Q.)

CXA-19 on 11705 kcs. in Montevideo is known as "Radio Espectador". They verified with a nice letter stating that they also operate CX-14 and CX-18 on the broadcast band. Address: Calle Olimar 1364, Esquina 18 de Julio, Montevideo. (Laudansky-Mass.)

U. S. A.

KTRC hear dhere at midnight contacting WGEO. KTRC is on 9135 kcs. and is located at East Base, Little America. (Scott-Tenn.)

WBOS now becomes the call of the former WPIT since it has moved to

Hull. (RX.)

WLWO verifies with a large folder and pictures of foreign announcers, transmitters, and studios. (Woodbury-Mass.)

W2XGB on 12862.5 kcs. of the Press Wireless was heard testing between 11:45 a.m. and 1 p.m. (McCon-

nell, Ohio, Renfro-Tenn.)

W9XEI on 6425 kcs. at Lake Bluff, Ill., was heard contacting ships. (Laudansky-Mass.)

Venezuela

YV3RC on 3420 kcs. in Merida signs off at 9:35 p.m. (Benkley-Tex.)

YV5RN on 4920 kcs. operates until 11 p. m. or later from Caracas. News is broadcast at 9:30 p.m. (Benkley-Tex.)

YV5RW on 3400 kcs. in Caracas is heard operating after 10 p.m. and announcing as YV5RL and YV5RW. (Benkley-Tex.)

YV5RY on 3380 kcs. heard after 10 p.m. (Beukley-Tex.)

Yugoslavia

YUA on 6100 kcs. is now being used in place of YUG on the afternoon broadcast of English news at 4:25 p.m. (Kane-Pa.)

Reporters submitting to this department or to Radexing With the Radexers will please have their letters for the May-Ilne Radex in our hands by

March 25th.

RADEX REPORTERS

RL: Your Eastern Editor Ray La Rocque, Worcester, Mass.

RX: Official News.

R7, Pa. 1: A. M. Hankins, Latrobe, Pa.

R101: Weston Richards, Zion, Ill.

R103: Robert Bailey, Scituate Mass.

R372: Page Brent, Kansas City, Mo. R431: Samuel Meyer, Jr., Rochester, N. Y.

R451: Chet Roman, Chicago, Ill.

R557: Roger F. Scott, Whitinsville, Mass. R626: Bill Scott, Johnson City, Tenn.

R636: Norman L. Maguire. Stamford, Conn.

R695: Frank B. Lee, Wildwood, N. J.

R757: Mathew Leshner, Lawrence, Mass.

R786: Bob Skyten, Brookfield, Mass. R798: John K. Higbee, Powhatan Point, O.

R841: Elwin L. Gleason, Moosic, Pa.

R881: Clarence Lee Mustoe, Brady, Mont.

R1079: Stanwood R. Morss, Bradford, Mass. R1178: Joseph Jones, Terra Alta, W. Va.

R1201: Jim Palmer, Winnetka, Ill.

R1208: Peter C. Landry, Montreal, P. Q. R1273: John D. Long, Dalton, Ga. (Ga. 5)

R1312: Lester Balcom, Malden, Mass.

R1319: Alton Caldwell, Brockton, Mass.

R1320: Frank Gravely, Martinsville, Ky. R1342: Leon Grossman, Rochester, N. Y.

R1369: Julius Krupp, Chicago, Ill.

R1421: Frank Susoreny, E. Chicagi, Ind.

R1470: Jack Stephenson, Oklahoma City,

R1543: Fraser Hendrick, Port Credit, Ont.

R1557: Charles O. Peach, St. Louis, Mo. R1566: Roy Woollacott, Rochester, N. Y.

R1643: Glenn Thormann, Westbury, N. Y. R1667: Charles A. Mills, Strathroy, Ont.

R1691: Hal Robie, Springfield, Mass.

R1740: Connie Sideris, Oswego, N. Y.

R1757: William McMahon, Glen Cove, N. Y. R1764: Vernon Lee Gibbs, Lexington, Ky.

R1769: Allen Cadorath, Brandon, Man.

R1773: Fred Benkeley, Jr., China Spring, Tex.

R1784: Charles Adams, Philadelphia, Penna.

R1794: Phil Gridley, Holyoke, Mass.

R1805: George Wetherill, Jr., Upper Darby, Penna.

R1806: Nat Boonin, Upper Darby, Penna.

R1807: Robert McConnell, Middletown, Ohio.

R1826: Israel Zeid, Brooklyn, N. Y. R1834: Dawson Y. Davis, Indianapolis, Ind.

R1842: Ray Reidel, Indianapolis, Ind.

R1843: L. N. Stracener, Baton Rouge, La. R1847: John Hall, Springfield, Mass.

R1852: Arthur Stevens, Shepherdsville, Ky.

R1856: Fred Borcherdt, Milwaukee, Wisc. R1872: Don Murphy, Milwaukee, Wisc.

R1904: Billy Cuny, Louisville, Ky.

R1911: Norman H. Kane, Jr., Drexel Hill, Penna.

R1912: Terrence Boyd, Toronto, Ont. R1932: Leon Prague, Hartford, Conn.

R1978: Bernard F. Arnold, Akron, Ohio.

R1979: Charles Squires, New York, N. Y.

R2001: Epgene Francis, Bronx, New York.

R2001: Eugene Francis, Bronx, New York.

Lester Balcom, Malden, Mass. Fred Bamberger, Shaker Heights, Ohio.

G. L. Banta, Downers Grove, Ill.

Harold Blinn, Arkansas City, Kans. Clarence Burnham, Boston, Mass.

Bob and Bill Camp, Moosic, Penna.

Jose Carriazo, Havana, Cuba.

H. H. Chambers, Narragansett, R. I. Walter Chopek, Matapan, Mass.

Peter A. Clarius, Port Richmond, N. Y.

A. N. Cole, Jr., Norfolk, Va. Richard Crane, Waukeegan, Ill. Dick Daneker, Lansdale, Pa.

Jim Davis, Toronto, Ont.

Roger Dissell, West Hartford, Conn.

James L. Fitzgerald, Richmond, Va.

Carl Firesieri, Bronx, N. Y. Bill Gabriel, Lakewood, Chio. Bob Gilchrist, New York, N. Y. John Hall, Springfield, Mass. W. H. Herman, Cleveland, Ohio. Malcolm Horlick, Youngstown, Ohio. Bob Hetzel, Milwaukee, Wisc. K. M. Imboden, Chicago, Ill. Joseph Janata, Long Island, N. Y. Hal Jewell, Arlington, Mass. Avery L. Kempton, Harding, Mass. Robert Kappelon, Newark, N. J. Arthur J. Kimble, St. Louis, Mo. Dick Knoth, West View, Pa. W. Knouff, Columbus, Ohio. Frederick Krueger, Newfield, N. Y. Harst Krumrei Milwauke Wisc. Frederick Kummer Cleveland, Ohio. Edward Laudansky, Dorchester, Mass. Mrs. J. Matthews, Lenox, Mass. Allan Maxwell, Jr., Bloomington, Ill. Mae McKenzie, Indianapolis, Ind. A! Meader, Manchester, N. Y. Ed Medric, Brooklyn, N. Y. Chas. Meyers, Chicago, Ill. Lorne Mitchell, Strathroy, Ont. Nils J. Nordstrom, Duluth, Minn. Edward Omelian, Watersmeet, Mich. Clarence Overheiser, Hastings, Nebr. Phil Potter, Washington, E. I. Lloyd Rees, Ridgewood, N. J. Al Renfro, Johnson City, Tenn. Don Renalds, Newburgh, N Y. I. Rihinski, Yonkers, N. Y. Charles Ruby, Longmeadow, Mass. Walter Scholtz, Webster Groves, Mo. A. G. Schleiter, Rochester, Pa. Fred Simonian, Lynn, Mass. Joseph Slicius, So. Boston, Mass. Vincent Stasen, Philadelphia Pa. Art Stevens, Louisville, Ky. F. A. Strubel, Hackensack, N. J. Snowden Taylor, New York, N. Y. David F. Thomas, Proctorville, Ohio. Charles C. Vandervoort, Laceyville, Pa. LeRoy Waite, Ballston Spa, N. Y. William Waldman, Asheville, N. C. Frank Walker, Greenville, Ky. Pat Web, San Antonio, Texas. Bill Wells, Hamilton, Ont. Walter E. Welch, Lynn, Mass. M. F. Williams, Noroton Heights, Conn. Oscar Williams, Clarion, Pa. Thomas Woodbury, Hingham, Mass.

YOU BENEFIT FIVE WAYS SEE PAGE 96

SPECIAL NEWS

Following is a list of test programs (other than the regular 2nd week monitoring tests of the FCC) conducted regularly by United States stations:

1st Wednesday WSAV 2:25-2:40 a.m. WHUB 2:30-2:45 a.m. WKAT 2:40-2:55 a.m. WKPT 2:45-3:00 a.m. WPAB 2:50-3:05 a.m. WCOS 3:00-3:15 a.m. WPRA 3:05-3:20 am. KVIC 3:10-3:25 a.m. WGBR 3:15-3:30 a.m. WGAC 3:25-3:40 a.m. WSPB 3:25-3:40 a.m. WFTL 3:30-3:45 a.m. WSKB 3:30-4:00 a.m. WMGA 3:45-4:00 a.m. WFTM 3:50-4:05 a.m. WSAZ 4:15-4:35 a.m. 1st Friday

WGTC 2:30-3:00 a.m. WTSP 2:00-2:30 a.m. 1st Tuesday KLAH 4:30-5:00 a.m.

4th day of Month WDLP 2:00-2:30 a.m. 4th Monday

WINN 3:00-3:15 a.m. (WEDC is off)

Last Saturday WATW 2:15-2:45 a.m.

1st Thursday WORD 2:30-2:45 a.m. WTMC 2:35-2:50 a.m. WFIG 2:40-2:55 a.m. WIHO 2:45-3:00 a.m. WMJM 2:50-3:05 a.m. WTMA 2:55-3:10 a.m. WLBI 3:00-3:30 a.m. 3:00-3:15 a.m. WCBI WAPO 3:05-3:20 a.m. WMOG 3:10-3:25 a.m. WGOV 3:25-3:40 a.m. KTRI 2:200-2:30 a.m. WFOR 2:00-2:30 a.m. 1st Saturday

KWAT 3:00-3:15 a.m. WTSP 2:00-2:30 a.m. WFPG 2:30-3:30 a.m. 1st Monday WAOV 2:00-2:30 a.m. KFGQ 2:30-3:00 a.m.

1st Sunday VESX 4:00-4:1

WESX 4:00-4:15 a.m. 7th day of Month KVGB 3:00-3:30 a.m. KTEM 3:30-4:00 a.m.

4th Thursday WMAN 2:00-2:30 a.m. WFMJ 2:00-2:15 a.m.

DAILY

WOLF 1:00-2:00 a.m. 1:00-2:00 a.m. KROC WBAX 1:00-3:00 a.m. WDSM 1:00-2:00 a.m. KPHO 1:00-3:00 a.m. KENO 1:00-3:00 a.m. WPIC 4:00- ?? a.m. WCAR 4:00- ?? a.m. ?? -2:00 a.m. CMCH ?? -2:00 a.m. **CMCX** WHIS 5:00- ?? a.m. WMMN 3:30- ?? a.m. WSLS 6:00- ?? a.m. WSOO 6:00- ?? a.m.

The foregoing list is the work of Robert Kappelon of Newark, N. J., to whom we are indebted for these useful tips!

Old Issues Available

Nearly all issues of Radex from 1931 until 1939, are available at the new reduced price of ten cents each, sent postpaid.

Following are some selected back

numbers:

The Oceania Broadcasting Stations,

Sept. '38.

Tuning South Pacific Stations, Tuning South Americans, and a list of South American Broadcasting Stations, Oct. '38.

This Hobby Called DXing, the International Prefixes, the QSA and R.

Codes, Jan. '39.

Stations of New Zealand, April '39. Please send us the names of friends who have shown an interest in DXing and whom you think would be interested in receiving a sample copy of RADEX. A postal card with the names and addresses on it will do. Thank you. RADEX, Emerson, N. J.

The VAC Awards

The VAC awards of The Radex Club are "different." A series of six plaques each different, suitable to hang on the wall of the radio den, is awarded to listeners who verify all continents. But (and herein they are different from other awards), the plaques may be obtained one at a time. If you have verified only one continent, you may get a plaque for that continent. Any DXer who hears a radio station can qualify for at least one of these awards, and they are available whether you tune the broadcast band, the shortwave bands or the amateur bands. And the nominal charge of ten cents each just covers the cost of mailing them to members and returning the verifications which are submitted as required.

To get these VAC plaques, one verification from each continent is required, except that three veries from the continent on which you live are required for your own continent's plaque. Thus, members living in North America can send one verification for Europe, Asia, Africa, South America. The three veries from your own continent must be from three different countries.

The Continents

NORTH AMERICA: Includes the countries of Canada, Newfoundland, Greenland, The United States, the territory of Alaska and all the Aleutian Islands, the countries of Central America, Bermuda, all the countries of the West Indies, i.e., the Bahamas, the Greater Antilles, the Lesser Antilles, the French West Indies, the British West Indies, but not the Netherland Antilles. In the Pacific Ocean, the Cocos and Clipperton Islands are included in the continent. Through the Bering Sea to the North Pole the continental boundary follows the International Date Line.

SOUTH AMERICA: Includes the entire mainland, and the Netherland Antilles to the north. In the Atlantic Ocean the several islands belonging

to Brazil are included, as are the Falkland Islands. In the Pacific Ocean, the Galapagos and the several islands belonging to Chile are included.

EUROPE: Includes, to the north, Novaya Zembla, Spitzbergen and Iceland. In the Atlantic Ocean, the Azores are included. In the Mediterranean Sea, the following islands are considered as European: Sardinia, Balearics, Corsica, Malta and Crete. The eastern boundary of Europe starts in Kara Bay, continues southward, through the Obdorsk Mountains, the Ural Mountains and the Ural River, to the Caspian Sea, then through the Caucasus Mountains to the Black Sea.

AFRICA: Includes none of the Mediterranean Islands. In the Atlantic Ocean, it includes the Madeiras, the Canaries, the Cape Verdes, Ascension and St. Helena. In the Indian Ocean, Madagascar, the Seychelles, Reunion, Mauritius, and Rodriquez. Africa's eastern boundary goes through the Suez Canal, the Red Sea and the Gulf of Aden.

ASIA: The western boundary of Asia is the same as the eastern boundaries of Europe and Africa. All the islands in the Arabian Sea are included in Asia, as well as those in the Bay of Bengal. Asia's eastern frontier includes all of Japan, the island of Taiwan and Hong Kong Island. From Taiwan the boundary passes through the South China Sea to Singapore, then through the Malacca Straits to the Bay of Bengal.

OCEANIA: Includes Australia and New Zealand, and the so-called Islands of the Pacific, extending as far north as the Hawaiian Islands, which are included. The Philippines and all the Netherland East Indies are considered as part of Oceania.



Edward V. Sachtleben, of Newark, N. J., is a real DX fan operating three radios. One shown above is a nine-tube Zenith Best catch on the shortwave broadcast band is Manchukuo. He considers KF6JEG as his prize for the Ham bands and also Little America.



Bill Wells of Hamilton, Ont., has the unique distinction of being the only listener, as far as we know, who has ever verified this amateur on 5437.5 kcs.

Ham Hounding

By OWEN CALLIN

The night is dark and cold, the snow heavy on the ground with a moaning wind sweeping the white granules in swirls around the winterstricken bushes and trees.

But inside it is bright and cheery, the fire in the fireplace lighting up every corner and sending bright reflections from the dials and chrome of my SX18 HALLICRAFTER there in its nook waiting to be turned on, chock full to the "h" in the speaker with DX.

I shed my coat, grab sandwich and coffee, check the clock that says 2 a.m. and turn the switch. Twirling the dials I shoot down to the 20-meter band — to find only a dead silence.

WHY DOESN'T THAT CURSED BAND OPEN UP?

Have you been experiencing the same thing, Radexers? The band has been unaccountably dead this winter and only in the mornings when the KA's and a few Asiatics wander in is the thrill there. Besides that, all that's left is the ten-meter band, which, thank goodness, is still at a customary winter peak.

Admiral Byrd kindly answered our letter and sair he was taking up the matter of QSL cards of the KC4 stations of Little America for SWLs with the executive committee of the expedition, of which he is a member.

He reported that the committee would have to discuss such a proposal and vote upon it. Here's hoping the answer is favorable. Are you saving your dope on KC4USA, USB and USC? If the committee agrees upon QSL cards you will need that dope for verification purposes.

Two more hams are among the Silent Keys. Western Richards reports that a QSL request to K7HCX was answered by K7HAR. In his letter he said that 7HCX had died Sept. 30.

Fred Starr, VK4FS, was a member of the crew of an Australian bomber which disappeared off the Queensland coast last October.

Mert Meade, the Kansas City Flash, is pulling up on Cliff Tavener, the Texas Terror, in our old-timers' contest, while George Eder jumped from fourth place up to third, passing Jack Wells.

Here are the scores to date:

Cliff Tavener . 23,184 pts.

Mert Meade . 22,724 pts.

George Eder . 18,090 pts.

Jack Wells . 17,544 pts.

Eugene Allen . 3,200 pts.

Weston Richards . 2,100 pts.

Mike Unger . 2,054 pts.

Ralph Kastner . 1,035 pts.

Mike Unger is doing fine in Radex's big contest. His coupons rate him 228 points. Coupons have been received from Harry O'Meara, 21 points; Mert Meade, 18 points; Bill Scott, 6 points; Al Renfro, Jr., 3 points, and one each from Vincent Longo and Roland Burson.

Prizes in Radex's big contest, you know, consist of two fine radios—HALLICRAFTERS SKYRIDER DEFIANT RECEIVER, and PHIL-CO PORTABLE RECEIVER, besides good of cash money.

Send your reports for Ham Hounding direct to

Owen P. Callin
6) W. California Ave.,
Columbus, Ohio

To Al Pickering, especially—no, the contestants in our ham band contest haven't logged all those points since October. Just count up the veris you have on the ham bands and multiply that number by the number of countries represented for your score. Then through this year that the contest runs (until October, 1941) you can keep adding to your score by the veris you are receiving.

For the winner Walter Koester, manager of the Return Postage Bureau at Rutherford, N. J., has donated \$2 credit toward the purchase of foreign stamps, while both first and second winners will be honored with writeups and their pictures in Ham

Hounding.

Three new members are hereby initiated into the Radex Club. Gang, meet White of Oakland, Cal., Dick Mertz of Akron, O., and Bob Miller of Detroit, Mich. Bob is R1939.

The American Radio Relay League is doing its bit for national defense. In response to the request of James L. Fly, chairman of the Deiense Communications Board, the ARRL has appointed the following representative and six advisors to the Amateur Radio Committee of the Board:

Representative: George W, Bailey, ARRL president, of Weston, Mass.; regional advisors: H. L. Caveness of Raleigh, N. C.; William A. Green of Abilene, Tex.; Kenneth T. Hill of Douglaston, L. I.; N. Y.; J. L. McCargar of Oakland, Cal.; Fred H. Schnell of Chicago; and Dr. Burton T. Simpson of Buffalo, N. Y.

The purpose of the committee, which includes representatives of the FCC, Army. Navy and the NYA, is to study all phases of amateur radio facilities based on national defense

requirements.

QRA and QSL Department

From L. Williams, 1823 Roscoe St., Chicago, comes a request for information in regard to one Bob White of Herndon, Ky., located near Hopkinsville. White operated a station at Herndon year before last but whether he is there yet is not known. Williams would like to know his call and any other information concerning him.

J2IB must have a new QRA since Phil Bates' card addressed to the Callbook QRA of J2IB came back stamped "address unknown."

For George Eder from Phil Bates: Cards for K4GTH and K4GSG should be sent c/o F. M. McCown, Family Court, 7, Loiza Rd., Santurce, Porto Rico; K4DSE is Jose Medina-Hernandez, Box 494, Rio Piedras, P. R.; and K7HAR is F. E. White, 613 11th St., Fairbanks, Alaska.

Vernon L. Gibbs, Rtc. 5, Lexington, Ky., would like to know the call letters of a station in Georgia running only 18 watts and heard R9 plus on 20 meter fone on Nov. 12 at 9:30 a.m., CST.

Joe Ribinski, 57 Oak St., Yonkers, N. Y., heard LS1TNY and RHC (or RHE) both in South America on the 20-meter fone band. "Help," he asks, "Who are they?"

Ed Laudansky wants the QRA of CO6BC.

The following have verified for Mike Unger: J5CW, KB6CBN, K6MXM, KA1CM, K4FAB, CP2AC, EA7BA, K6SRZ and K6PHD.

Foreign amateurs who QSLed for Phil Bates: CO2DR, 2RR, 2JM 2AM, 8JK, 2YW, 2BG, 2VK, 2VP, 2UT, 2LA, 8MP, K4EMG, 4FAB, 4FCG, 4FGC, HH4AS, PY2LN, 7AI, 5AQ, 2IT, XE1GE, 2HD, 3BK, K5AP, CE3AG, YV5ACG, CM2AR, K6NYD/KE6, K6PLZ, LU1CA, EK1AF, OA4R and HP1A.

Al Pickering says these supposedly "Non-QSLers" verified for him: CO8JK, PY2DA, HP1A and YN1IP. Harold Schubert has veries from: H13N, H15X, YV1AQ, HP1A, YV4AE and also YN1IP. He says that YS1MS and KF6JEG have not

verified.

Bill Adams sends his list of those who have QSLed: OA4R, LU1DA, 8AB, 1CA, CO2DR, 2RR, 2JM, 2KP, 2LA, 2VK, 2UF, 2YW, 2BG, 2JH, YV5ACG, HH4AS, CE3AG, PY21T, 7AI, 5AQ, 2LN, XE1GE, 2HD, 3AH, EK1AF and K5AM—all for NO return postage.

CW Section

Mike Unger heartily agrees with a CW Section and points to his 21 stations who verified out of 27 requests since October. He thinks that since the DX is off, now is a good chance for SWLs to learn the code.

* * * * * *

Now for a quick look to what's on the air:

ALASKA — K7GNN, located in Chichagof, and K7GTP heard with weak signals on 20 meter fone in Philadelphia. K7CBS is on nightly around 14220. On 10 meters K7HMM is being logged despite his 10 watts.

ARGENTINA — LU4BH sends a white card with red and black letters. He uses a kilowatt and a half to a

two-element beam.

CANAL ZONE—If you haven't yet logged K5AP, he's on 14150 kcs. nearly every evening between 6 and 7:30.

COLOMBIA—HKIAK is a new Colombian heard on 40-meter fone. He gave his QRA as Box 919, Bar-

ranguilla.

CUBA—CO2KP verified with the white, orange and black card of CO2MA is red, white and blue. CO8MP QSLed promptly with no postage needed. CO8JK QSLs for

return postage.

EL SALVADOR—From the second op of YS10L, Herbert Lindo, we have gratefully received the following dope on the YS stations: YS stations have been suspended but should be back on the air soon. When they are on, here is where you'll find them: YS10L, 20 and 40 meters,* fone and cw; YS10I, 20, 40 and 80; YS1ED, 20, 40 and 80; YS1MS, all bands; YS1RM, 20, 40 and 80; YS1AM, 20,

40 and 80; YS1KM, 20, 40 and 80; YS1JG, 20 and 40; YS1FM, 20 and 40; YS2MC, 20 fone; YS2RW, 20, 40 and 80 CW; YS3DL, 20, 40 and 80 fone.

1MS, 1RMS, 1AM, and 1KM have rotary beams; 10L, 1MS, 1KM, 1JG, and 2MC have home-made transmitters. Most of the rest have Stancor transmitters.

Herbert says they have an amateur radio club in San Salvandor called "CRAS," which stands for "Club de Radio Aficionados de Salvadorenos."

Herbert's brother, Oscar, is the other op at 10L. The QRH used is 14022 on the 20-meter band and 7011 on the 40-meter.

HAWAII—The K6's are rolling in, as usual. Harry O'Meara says that K6NYD is now W4HGM at Pensacola, Fla., and that he is Bob Henry's (W9ARA) brother.

INTERNATIONAL ZONE— EK1AF has been heard on the air but the reports have it that Jose Sierra is dead and it probably was someone else at the controls.

JAMAICA — VP5PZ now is a broadcast station—ZQI. Listen for the government station at Kingston on 4700 kcs. between 5:30 and 6:30 p.m. any weekday.

JAPAN-Be careful of the address

of J2IB (see QRA section).

MEXICO—XE1MF said he would answer all reports if accompanied by return postage. XE1CH verified with the orange and white card of XE1BE.

MIDWAY ISLAND — W6NKL left for Midway before Christmas and since he has taken a good-sized rig with him he should be on the air shortly. KD6NKL will be heard on both fone and CW.

PHILIPPINES — A veri received from KA1HQ says that his call now is KA1AC. He uses the same transmitter as before with a three-element beam antenna instead of a rhombic.

PORTO RICO—Quite a few of the K4's are on ten meters for you beginners who haven't yet logged this country.

ST. THOMAS — KB4HBX is W6PSP, operating on this island of the Virgin group on 28725 kcs. (10meter fone). His usual time on the air is Tuesday, Thursday, Saturday and Sunday between 9:30 a.m. and 3 p.m.

SWAN ISLAND-KD4GYM, Steve Paull, has left Swan Island but his successor is taking the exam soon so the island may still be on the air.

That's a pitiful amount of news, DXers, but considering the dead bands and the war, it can't be helped.

The W Section

The response has been very favorable following the first appearance of the W Section, and reports of U. S. hams have been rolling in. Therefore, we're more than pleased this time to report that only three of the nine hams asked failed to through with some news about themselves.

W2LZD-Ed Scatterday, Sunnyside, L. I. Ed is a broadcast engineer for WOR-has been one for several years. It seems to run in the Scatterday family, since his dad, uncle and two cousins are in the same game.

Ed is an Ohioan and his dad and uncle taught him both Morse and International codes in Bridgeport, Ohio. Born in Stubenville in the same state, he worked with his dad in the electrical contracting business. Started in Pittsburgh with the A. T. & T. and worked on network switching. his start in control room with WCAE in 1933. He went with WFIL in 1937 and then to WOR soon afterwards.

An RCA 810 in the final gives Ed a nice rig capable of 450 to 500 watts. Although he intends to go on 10 meters, at present he's working 160-meter fone and 80 meter CW. On the air anvtime after 3 a.m.

Ed's other hobby is photography. He took over 1800 feet of color film in Mexico last summer. He is also keeping a scrapbook of the war which he expects to be valuable some day.

W3FRH-U. D. Bryant, Box 34, Stonega, Va. Dropping down into Stonega a visitor would probably find Ulysses dwn in the bowels of the earth digging coal. Combining hobby with work, he is experimenting with a 21/2 meter rig underground to be used in connection with mine rescue work and has made quite a bit of progress along that line.

In 1920 when Ulysses was 15 he became acquainted with 3AOV, an oldtimer now among the Silent Keys. He used to stay up until the wee hours of the morning listening to the "buzz saw" signals and watching the rotary spark gap. The old-timer, S. J. Gundry, taught the young fellow all he knew and finally the young fellow built his own receiver.

From 1921 until 1935 Ulysses fooled around with the different types of tubes and transmitters popular in those days and finally received his license in 1935. Lakeland, Fla., was his first DX with his 71/2-watt transmiter using 45's in Class C. He then moved to Corbin and put together a ten-watt rig which contacted with VE3AIU.

Finally moving to Stonega, Ulysses now has a Stanco 60-P transmitter available on all bands, and with a T2- and T40 in the final. He has worked 39 states, including some snappy W7's on 160-meters, where he usually is found. And he will QSL all SWLs for return postage.

W4GHO—Lewis McLeod, bury, N. C. Ed was contacted 29 stations in Ohio, so he felt right at home in receiving our letter. His answer was here undoubtedly before the ink was dry in our signature. 23 years old and is preparing to go into the Naval Radio Reserve School.

"Shaking like a leaf," he took the exam in August, 1939, got his license in September, and in November was "adding a little QRM to the 160-meter band." "He's been broke ever

since!"

A TZ40 is in the final of his present rig and a pair of 46's in the modulator. Antenna is a half-wave doublet. With it Ed has contacted 2,634 stations in 13 months. Nevertheless, Ed says that he is not a DX hound, but a QSLing hound. He believes wholeheartedly in the QSL.

Ed is always glad to handle messages and if you want to hear him, tune in on the Knot Hole Net on about 1850 kcs. at 6:30 p.m., EST, on Tuesdays and Fridays. The Net boasts eight states already.

W5EHY—John Hawkins, Sallisaw, Okla. From the heart of the Indian country comes the letter from W5EHY. He is 22 years old, single, has spent four years as a motion picture operator. At present he is employed in his father's grocery business and handles Zenith radios in his district.

John became interested in amateur radio in high school about eight or nine years ago and went into the "receiver building" stage. He obtained his ticket in 1934. He will always QSL for postage and is a firm believer in the practice of QSLing.

The TZ20 and TZ40 are also used in W5EHY—the two tubes seeming to be very popular with the 160-meter phone boys. A pair of 56's drive a pair of 2A3's, which is coupled to 4-46's with Class B modulation.

Most of the ham work by W5EHY is done on 1817 kcs, although occasionally John goes to 40 and 20-meter CW. DX on the latter bands includes five continents. On 160-meter fone John has contacted 45 states, needing Utah, Delaware and Rhode Island for the list.

W7HAH — Francis D. Shepard, Kalispell, Mont. The hobby of amateur radio "just grew" on Francis, helped by friends and a flock of old radio parts that came into his possession. He is a bookkeeper in the Kalispell Laundry and is 18 years old.

The license was obtained in 1938 and he has been on since December of that year. He QSLs for postage and if the SWL is far enough away,

then he doesn't need to send post-age.

Francis does not like the ham who is not a sportsman. For example, he says, one morning when the 80-meter band sounded hot (he works CW all the time), he hooked a W3, a W2 and finally a W1. Since these were new districts and the W1 a new state he asked to QSL and the W1 promised. To cut the story short Francis sent him a total of four W7HAH cards and a letter with return postage—with no results!

Hams! W7HAH needs these states for his WAS, so listen for him: Connecticut, Vermont, Maine, Maryland, Rhole Island, Delaware and New Hampshire. Frequencies used were 3585, 3694, 7084 and 7264.

W8UGF—Samuel F. Carr, Akron, Ohio. Sam saw the rig of W8LUX a little over a year ago and became interested in this radio hobby. He made up his mind to find out what made it tick. He did! He passed the exam the first crack.

Right now the rig is a 20-watter on fone and 150 on CW. A 6L6 buffer and L final is hooked to a Meissner Signal-Shifter for excitation. The antenna is a half-wave single wire and fed, 149 feet long. On CW there is a T40 in the final and the same antenna is used. Frequency on the 40 band is 7053 kcs.

On CW the total of states is 42 plus the Hawaiian Islands.

Sammy works for a power company—the Ohio Edison—and has been a substation operator for five years. That seems to be combining work with a hobby.

OTHER W NEWS—These Philadelphia hams QSL for return postage: W31FI (20 fone and CW, 40 CW and 10 fone); W3ISN (10 fone); W3EOX (10 and 20 fone); and 3HYX, 3GVZ, 3FNA, 3GJZ, 3EVH, 3IND, 3AQM all on 10 fone.

From Massachusetts, Al Pickering says the W6's and W7's coming in good on 20 meters but that the band is going dead early. The band has been good for reception of W4's, W5's and W9's.

From Tom Smith, Jr., in Orlando, Fla.: W6NRI sends back postage, saying he doesn't feel right about taking stamps to QSL! W5HKM's card shows a picture of the St twnee Flour Mills in color; W7HIA SLs with a silver card with a map and call in black; W6MLG sends a Ruede del Oeste card.

These W's supposedly QSL: IGWK, IBMB, 2LBF, 1AW, 4EWY, 7FTV, 7GDE, 60SP, 8RNC, 8RLT, 8KUU, 8OGT, 9ZDM, 9UNI, 9BDO, 9SLS, and 9HHJ.

Bill Wells of Hamilton, Ont., has unique distinction of being the only listener—as far as we know—who has ever verified an amateur on 5437.5 kcs, the frequency used by the U. S. Army engineers.

In a letter to Bill, Jim Hawkes, the op of W11XL, rubs it in by saying that the boys (meaning the SWLs) evidently are not policing the frequencies in the spectrum as well as they might.

He says he was on three nights a week on the army frequency (but don't lok for him now because his permission to use that frequency was up Dec. 1). His amateur call was assigned while he was doing this special work

Now he's back on the ham bands, and we've missed a grand opportunity.

CHATTER—Mike Unger says to tell Cliff Tavener to move over, that the cards are rolling in by the dozens.

... Especially to all of you and not just Al Pickering, Jr.—sure, send in the dope on the W stations. ... Tom Smith, Jr., of Orlando, Fla., sends his

second report; he has Number R1953 in the Radex Club. . . . Phil Bates jumped from HAC to VAC since the Nov.-Dec. Radex issue; he has verified 23 of the 40 countries he has heard. . . . Bill Adams: haven't yet got my cards printed but will send one along when I do. . . . Mert Meade put up a four-element rotary beam (he's W9KXL now, you know). . . . Vernon Gibbs: we'll see what Admiral Byrd's executive committee says on the matter of veris for their Little America stations. . . . Joe Ribinski, 57 Oak St., Yonkers, N. Y., would like to hear from anyone using a Sky Buddy. . . . Mert: Thanks for your fine Xmas-O-Gram.

That's all Radexers. Get going on that contest and thanks for the many fine reports.



John Hawkins, operator of W5EHY, of Sallisaw. Okla., poses for this picture with his sister.

The Shortwave Stations

• The shortwave list is arranged by frequencies in kilocycles, and gives the schedules of the shortwave broadcasting stations. When requesting verifications from radio stations, return postage should always be sent. Return postage to foreign countries can be sent in the form of an International Reply Coupon, available at any post office, at 9c each. Unused postage stamps from many foreign countries, which can be sent instead of Reply Coupons, are available from the Return Postage Bureau, 85 Francisco Ave., Rutherford, N. J.

The Abbreviations

e-early morning, (midnight to 6 a.m.

m-morning (6 am to noon, EST) a-afternoon (noon to 6 pm EST) n-night (6 pm to midnight EST)

D-daily

Wkdys—daily except Sunday

M thru F-Monday through Friday Sun-Sunday

M-Monday Tues-Tuesday

W-Wednesday

Thur-Thursday

F-Friday

Sat-Saturday

This list is intended as an easy, quick and complete reference for dial twirlers. Here's how to use it. Jot your dial setting under the kilocycle reading as you log each station. For more details and complete schedules of many of these stations see "Shortwaves in Review" if you live in the Eastern or Central Standard Time zones, or "On the West Coast" if you live in the Mountain or Pacific Standard Time zones. To use this queik reference list refer to the above abbreviations; time listings herewith are not precise. They are intended merely to give an approximate idea of the time to time for stations.

2320 TGWC Guatemala City, Guat. D-an 3400 YV5RW Caracas, Venez. D-n.

3420 YV3RC Merida, Venez. D-n.

3470 ZQI Kingston, Jamaica. D-n.

4885 HJDP Medelin, Colombia, D-n 4920 YV5RN Caracas, Venez. D-n.

5875 HRN Tegucigalpa, Honduras, Tues-n.

6005 VE9DN Montreal, P. Q. D-n. 6010 CJCX Toronto, Ont. D-man.

6010 TIJK Puntarenas, Costa Rica. D-n.

6020 DJC Berlin, Germany. D-ne. 6030 CFVP Calgary, Alta. D-n.

6033 HP5B Panama City, Pan. D-n. 6050 GSA London, Gt. Britain. D-en.

6080 CKFX Vancouver, B. C. D-an.

6090 ZNS Nassau, Bahamas, D-man,

6185 TIRCC San Jose, Costa Rica. Irreg-e.

6190 JLT Tokyo, Japan. D-a.

6190 TGQA Quezaltenango, Guatemala. Irreg-n.

6235 HRD Tegucigalpa, Honduras. D-n.

6480 TGWB Guatemala City, Guat. D-man. 6480 Noumea, New Caledonia. D-a.

6980 XPSA Kweiyang, China. Sun-ne: Week days-ane.

7100 CLX Havana, Cuba. D-n.

7258 JVW Tokyo, Japan. D-a.

7260 GSU London, Gt. Britain. D-n.

7260 GSW London, Gt. Britain. D-n.

7285 JLG Tokyo, Japan. D-a.

7445 FG8AH Pointe-a-Pitre, Guadeloupe. D·a.

7600 KKH Kahuku, Hawaii, Sun-n.

7660 YNDG Managua, Nicaragua. Weekdavsn.

8700 COCO Havana, Cuba. D-man.

9125 HAT4 Budapest, Hungary. D-n.

9135 KTRC East Base, Little America. Irreg-n.

9505 JLG2 Tokyo, Japan. D-a.

9520 TPC13 Paris, France. D-a.

9520 "Station Y", Germany. D-an.

9535 JZI Tokyo, Japan. D-eman.

9536 VPD2 Suva, Fiji. D-n.

9545 MTCY Dairen, Manchukuo. D-em.

9580 VLR Melbourne, Australia. D-e.

9590 VUD2 Delhi, India. D-m.

9610 XGOY Chungking, China. D-m.

9615 VLQ Sydney, Australia. D-ema.

9630 12RO3 Rome, Italy, D-n.

9650 VLW2 Perth, Australia. D-n.

9660 LRX Buenos Aires, Arg. D-n.

9680 VLQ5 Sydney, Australia. D-man.

9680 XEQQ Mexico City, D. F. D-n.

9685 TGWA Guatemala City, Guat. D-n.

9688 LRA1 Buenos Aires, Arg. D-an.

9692 T14NRH Heredia, Costa Rica. Tues., Thur., Sat., n.

9700 CB970 Santiago, Chile. D-n.

9705 Fort de France, Martinique. D-n.

9825 SVJ Athens, Greece. D-m.

9855 EAQ Madrid, Spain. D-n.

9900 HH3W Port-au-Prince, Haiti. D-an.

10140 OPM Leopoldville, Belgian Congo. D-a. 10220 PSH Rio de Janeiro, Brazil. M., Tues., F-n.

10250 LSK3 Buenos Aires, Arg. D-a.

10350 LSX Buenos Aires, Arg. Dan.

10540 DZD Berlin, Germany, D-an,

10950 FIQA Tananarive, Madagascar. Sat-a.

11380 Paramaribo, Surinam. D-a.

11418 XGRV Chungking, China. D-en.

11680 EAQ Madrid, Spain. D-a.

11720 CIRX Winnipeg, Man. D-n. 11725 JWV3 Tokyo, Japan. D-m.

11740 CB1174 Santiago, Chile, D-n.

11740 DXC2 Oslo, Norway. D.m.

11760 12R015 Rome, Italy. D-a.

11760 TGWA Guatemala City, Guat. D-n.

11770 DJD Berlin, Germany. D-an.

11775 MTCY Dairen, Manchukuo, D-em.

11780 Saigon, Fr. Indo-China. D-em.

11800 JZJ Tokyo, Japan. D.eman.

11810 12R04 Rome, Italy. D-an.

11815 JVZ Tokyo, Japan. D-emn.

11870 VLQ2 Sydney, Australia. D-a.

11880 VLQ7 Sydney, Australia. D-ma. 11920 XGRS Shanghai, China. D-m.

11945 CB1180 Santiago, Chile. D-n.

11970 "Radio Brazzaville", French Equatorial Africa. D-a.

12450 HCJB Guayaquil, Ecuador. Daily exc. Mon., n.

12862 W2XGB Hicksville, N. Y. Tests-ma.

14935 PSE Rio de Janeiro, Brazil. W., Thurs., Fri.a.

15101 CP43 Cotagatia, Bolivia. D-n.

15105 JLG4 Tokyo, Japan. Dn.

15160 JLU3 Tokyo, Japan. D-m.

15170 TGWA Guatemala City, Guat. D-a. 15200 DJB Berlin, Germany. D-m.

15200 XGOX Chungking, Chiua. D-m.

17800 TGWA Guatemala City, Guat. Da.

17800 VLQ8 Sydney, Australia. D-ma.

21640 GRZ London, Gt. Britain. Sun-m.

Please send us the names of friends who have shown an interest in Dking and whom you think would be interestde in receiving a sample copy of RADEX. A postal card with the names and addresses on it will do. Thank you. RADEX, Emerson, N. J.

Radio Amateur Call Book LATEST EDITION

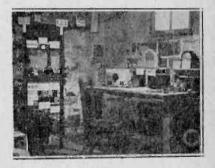
Lists over 40,000 amateurs in every country in the world, and complete lists of all the high the high frequency commercial stations. Every listener interested in amateur stations should have one. 292 pages.

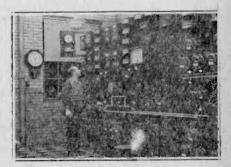


RADEX

\$1.25 Emerson, N. J.







Top: Francis Shepard, W7HAH, Kalispell, Mont. Center: W8UGF, Akron, Ohio. Bottom: Sam Carr, W8UGF, at work at Ohio Edison Power Co.

Page Fifty-one

That New Radio

Continued from page 14

to listen to distant stations.

A "regional channel" is one in which several radio stations can operate with individual station power not inexcess of 5 kilowatts. A "local channel" is one in which several stations may operate with individual power not in excess of 250 watts.

The Federal Communications Commission licenses broadcast stations to operate with 100 watts to 50,000 watts of power. These are the minimum and maximum standards held by the Commission to be in the public service. "Watt" typifies radio power just as "horsepower" reresents power in mechanics. The two hardly permit comparison but, roughly 746 watts are equivalent to one horsepower.

In order to provide broadcast facilities to varying population densities, the Commission licenses four general classes of broadcast stations. A Class I station, which operates on a clear channel, uses 10,000, 25,000, or 50,000 watts power to serve remote rural areas as well as a large center of population. A Class II station, which also operates on a clear chan-250, 500, uses 1000, 5,000, 10.000 25,000 or 50,000 watts, renders secondary service over a primary service area. A Class III station, which shares a regional channel with several similar stations, uses 500, 1000 or 5000 watts, and serves a center of population and adjacent rural area consistent with interference from other stations on the same channel. A Class IV station operates on a local frequency (shared by similar stations elsewhere) and uses 100 to 250 watts for such local service.

"Primary service" area means the area in which the ground wave is not subject to objectionable interference and fading. "Secondary service" area means an area served by the skywave without objectionable interference

but subjejet to intermittent variations in intensity. "Intermitten service" area means the area receiving service from the ground wave beyond the primary service area and subject to some interference and fading.

YOUR COPY OF RADEX DELIVERED TO YOUR HOME. SEE PAGE 96



H. V. Gribble, Traffic Box 42, Minneapolis, Minn. (SWL cards).

James R. L. Fitzgerald, Jr., 5324 Bloomingdale Ave., Richmond, Va. (Wishes reception reports on Richmond and Petersburg, Va. stations).

Jack Welsh, W9MZW, Kingston, Ill. (SWL Cards).

Glenn Thormann, 271 Park Ave.. Westbury, N. Y. (SWL cards and correspondence).

Frank J. Kosik, 1816 Allport St.,

Chicago, Ill. (SWL Cards).

John B. Blass, 102 N. Jefferson St., Batavia, Ill. (Swap large stamp collection for a used communication receiver).

Wm. Akens, 1029 Spring Brook, Ave. Moosic, Pa. (SWL Cards).

Frederick Kummer, 3248 W. 48th St., Cleveland, Ohio. (Correspond with BCB DXers).

Fred R. Borcherdt, 5103 N. Sherman Blyd., Milwaukee, Wis. (Correspond with DXers interested in hams).

W. H. Herman, 622½ E. 99th St., Cleveland, Ohio. (SWL Cards).

Rudolph C. Zak, 2509 E. 89th St., Cleveland, Ohio. (Trade radio parts, your choice, for autoradiator name plates and stamps of United States and Clechoslovakia).

Richard Galen, 4 Manhattan Ave., New York City. (SWL Cards).

Betty Galen, 4 Manhattan Ave., New York City. (SWL Cards).

Robert Camp, 1042 Water Street, Moosic, Pa. (SWL Cards).

E. S. Herndon, Paris, Texas. (SWL Cards).

Nicola Cannata, 1003 So. Halsted St., Chicago, Ill. (SWL Cards).

Francis Brooke, Reesville, Ohio. (Will swap SWL cards and will trade old National Geographics for old Radio Guides).

Forest L. Webb, 140 W. San Luis, Salinas, Calif. (Correspond with DX-ers interested in Pacific Coast, Cuban and TP stations—BCB Band).

Eldon Shipman, 621 Vine St., Ful-

ton, Mo. (Correspond).

Steven Paul Veres, 7 Orchard St., Garfield, N. J. (SWL Cards).

Don C. Johns, 1342 Campbell Ave., Des Plaines, I.. (SWL Cards).

JJoseph J. Becker, 415 So. 11th St., Hamilton, Ohio. (SWL Cards).

G. R. Jewell, Jr., Box 386, San Diego, Calif. (SWL Cards).

Vincent Stasen, 5347 Priscilla St., Philadelphia, Pa. (SWL Cards).

Allan B. Cadorath, 1825 Princess Ave., Brandon, Man., Canada. (SWL Cards).

Mae McKenzie, 823 Shelby St., In-

dianapolis, Ind. (SWL Cards).

Don Reynolds, 9 So. Miller St., Newburgh, N. Y. (Correspond with BCB DXers).

Oscar Williams, Shady Ave., Clari-

on, Pa. (SWL Cards).

Joe Ribinski, 57 Oak St., Yonkers, N. Y. (Correspond with owners of Sky Buddy).

Bob Murphy, 5630 S. E. Yamhill,

Portland, Ore. (SWL Cards).

Vernon Lee Gibbs, Route 5, Lexington, Ky. (SWL Cards).

Floyd Flater, 316 Campbell Ave., White Bear Lake, Minn. (SWL Cards).

YOUR COPIES OF RADEX WILL BE RESERVED. SEE PAGE 96

COMPLETE LIST OF "FM" STATIONS

(Broadcasting & Experimental)

FM regular broadcasting stations, most of which are not yet in operation bear distinctive call letters, the first letter being either W or K as is customary in this country, then follows the second and third number of the frequency to which the station is assigned and lastly one or more letters designating the location of the station. Regular "FM" stations are not rated by power in watts, rather by an area in square miles which they will be licensed to serve. Experimental stations bear ordinary experimental calls like W1XOJ-always a W or K with a ham district number, and an "X" plus one or two more letters. These stations are all licensed for three months expiring March 1, at which time licenses of some may or may not be renewed. It is the aim of the FCC to have these stations eventually apply for regular station licenses.

42600 kcs.

W1XK, Hull, Mass., Westinghouse Electric, 1000 watts.

WIXSN, E. Springfield, Mass., Westinghouse Electric, 1000 watts.

W3XMC, Washington, D. C., Mc-Nary & Chambers, 1000 watts.

W8XAD, Rochester, N. Y., WHEC, Inc., 250 watts.

W9XAO, Milwaukee, Wis., The Journal Co., 1000 watts.

42800 kcs.

W2XMN, Alpine, N. J., Maj. Armstrong, 40000 watts.

W9XZR, Chicago, Ill., Zenith Radio Corp., 5000 watts.

43000 kcs.

W2XMN, Alpine, N. J., Armstrong. 1000 watts.

W8XVH, Columbus, Ohio, WBNS, Inc., 250 watts.

43200 kcs.

W2XOR, Long Island City, N. Y., J. V. L. Hogan, 1000 watts.

W3XO. Washington, D. C., Jansky & Bailey, 1000 watts.

W8XVB, Rochester, N. Y., Stromberg Carlson, 1000 watts.

43500 kcs.

W2XOR, New York, N. Y., Bamberger Brdcst. Co., 1000 watts.

43700 kcs.

W1XSO, Hartford, Conn., The Travelers Brdcst. Service, 1000 watts.

43900 kcs.

W2XWG, New York, N. Y., N.B.C., Inc., 1000 watts.

W39B, Boston, Mass., (Mt. Washington, N. H.), Yankee Network, 31000 sq. mi.

44100 kcs.

W1XPW, Hartford, Conn., WDRC, Inc., 1000 watts.

44500 kcs.

K45LA, Los Angeles, Calif., Don Lee System, Inc., 6944 sq. mi.

W45CM, Columbus, Ohio, WBNS, Inc., 12400 sq. mi,

W45D, Detroit, Mich., Eve. News Ass'n., 6820 sq. mi.

W45RG, Baton Rouge, La., Baton Rouge Brdcst. Co., 8100 sq. mi.

W45V, Evansville, Ind., Evansville On The Air, 8397 sq. mi.

44700 kcs.

K47SL, Salt Lake City, Utah, Radio Service Corp. of Utah, 623 sq. mi. W47A, Albany, N. Y., (New Scotland), Capitol Brdcst. Co., 6589 sq. mi.

W47C, Chicago, Ill., WJJD, Inc., 10800 sq. m.

W47NV, Nashville, Tenn., Nat. Life & Accident Ins. Co., 16000 sq. mi.

W47P, Pittsburgh, Penna., Walker Downing Radio Corp., 8400 sq. mi.

44800 kcs.

W1XOJ, Paxton, Mas., Yankee Network, Inc., 50000 watts.

44900 kcs.

W49BN, Binghampton, N. Y., Howitt-Wood Radio Co., 6500 sq. mi.

45100 kcs.

W2XWG, New York, N. Y., N.B.C., Inc., 1000 watts.

W51C, Chicago, Ill., Zenith Radio Corp., 10800 sq. mi.

W51NY, New York, N.B.C., Inc., 8500 sq. mi.

45300 Rcs.

W53H, Hartford, Conn., (Avon), The Travelers Brdcst. Co., Inc., 6100 sq. mi.

45500 kcs.

W55M, Milwaukee, Wis., (Richfield), The Journal Co., 8540 sq. mi. W55NY, New York, N. Y., Wm. G. N. Finch, 8500 sq. mi.

45700 kcs.

W57A, Albany, N. Y., (New Scotland), General Elec. Co., 6589 sq. mi. 45900 kcs.

W59C, Chicago, Ill., WGN, Inc., 10800 sq. mi.

W59NY, New York, N. Y., (Brooklyn), Frequency Brdcst. Corp., 8500 sq. mi.

46300 kcs.

W63C, Chicago, Ill., N.B.C., Inc., 10800 sq. mi.

W63NY, New York, N. Y., (Cliff-side Park, N. J.), Marcus Lowe Agency, 8500 sq. mi.

W63SY (?), Syracuse, N. Y., Central N. Y. Brdcst. Co., 6800 sq. mi.

46500 kcs.

W65H, Hartford, Conn., (Meriden), WDRC, Inc., 6100 sq. mi.

46700 kcs.

W67NY, New York, N. Y., C.B.S., Inc., 8500 sq. mi.

W67C, Chicago, Ill., C.B.S., 10800 sq. mi.

46900 kcs.

W69PH, Philadelphia, Penna., WCAU Brdcst. Co.,

47100 kcs.

W71NY, New York, N. Y., Bamberger Brdcst. Corp., 8500 sq. mi. 47500 kcs.

W75NY, New York, N. Y., Metropolitan Television Corp., 8500 sq. mi.

W75P, Pittsburgh, Penna., Westinghouse Radio Stations, Inc., 8400 sq. mi.

(Cities or towns in parenthesis indicate exact transmitter location when this site differs from the primary city in the service area.)

YOU WILL SAVE 75 CENTS SEE PAGE 96

Page Fifty-four

The WORLD'S Radio Stations

A complete listing of the radio stations of

the world, from 500 kcs to 500,000 kcs.

The addresses of the shortwave broadcasting stations are not shown in this list.

Readers are referred to The Shortwave Broadcasting Station List for this information.

2994	KALF		30	a v e	Livengood T A Clifton W Hudson
2771	17 4 1 7	Ť	25		Livengood, T. A. Clifton W. Hudson. Grub Creek, T. A. E. C. Kraiger. Point Baker, T. A. A. R. Brueger. Burnett Inlet, T. A. Burnett Inlet Salmon Co- Bethel, T. A. Society of the United Brethren- for Propogating the Cospel Among the Heatlen.
	KANK KANM	1.12	10 10		Point Baker, T. A. A. R. Brueger. Rurnett Inlet T. A. Burnett Inlet Salmon Co.
	KAQM	ή	3		Bethel, T. A. Society of the United Brethren
	KASI		20		for Propagating the Gospel Among the Heathen.
	KASK		40		Hughes, T. A. Linious McGee.
	KILY		50		Excursion Inlet, T. A. Northern Radio Co.,
	WAZM	FA	40		Madison, Wis. Aeronautical Radio, Inc.
2996	WAZM CY30 WXE	FA			Charlie Lake, B. C. United Air Transport, Ltd.
2998 3005	WAZM	FA	40		Madison, Wis. Aeronautical Radio, Inc.
					Allakaket, T. A. Samon Dubin, Hughes, T. A. Linious McGee. Excursion Inlet, T. A. Northern Radio Co., 1422 Jos. Vance Bldg., Seattle, Wash. Madison, Wis. Aeronautical Radio, Inc. Charlie Lake, B. C. United Air Transport, Ltd. Anchorage, T. A. Madison, Wis. Aeronautical Radio, Inc. Ft. Jefferson Nat'l Mon., Fla. Nat'l. Park Service.
3040	KAOM YDA	TB	10000		vice. Tandjong Priok, Java, N.E.I. Calgary, Aha. Dominion Gov't. Wichita, Kans. Aeronautical Radio. Inc. Salt Lake City, Utah. Same as KGTD. Roberston, Mo. Same as KGTD. Kansas City, Mo. Same as KGTD. Amarillo, Tex. Same as KGTD. Albuquerque, N. Mex. Same as KGTD. Pittsburgh. Pa. Same as KGTD. Chicago, Ill. Same as KGTD. Columbus, Ohio. Same as KGTD. Indianapolis, Ind. Same as KGTD. Phoenix, Ariz. Aeronautical Radio, Inc. Toncontin, Honduras. Pan America Airways
3045	VBV6	C			Calgary, Alta. Dominion Gov't.
3062	KGTD KGTR	FA FA			Salt Lake City, Utah. Same as KGTD.
	KST KSV KSV	FA			Roberston, Mo. Same as KGTD.
	KSV	FA FA			Amarillo, Tex. Same as KGTD.
	WAEC	PA			Albuquerque, N. Mex. Same as KGTD.
	WAEO WHG	FA FA			Chicago, Ill. Same as KGTD.
2072 5	WHG WHM	FA			Columbus, Ohio. Same as KGTD.
3072.5 3082	KGUP HRD	FA	14		Phoenix, Ariz. Aeronautical Radio, Inc.
3032.5	KAAT KAAU	FA FA FA FA FA			Toncontin, Honduras. Pan America Airways
	KABN	FΑ	16		Launch "Panair II-P." Same as KAAT.
	KABO KABU	FA FA			Launch "Panair XI-P." Same as KAAT. Launch "Panair XP." Same as KAAT.
	KABV	FA			Launch "Panair XP." Same as KAAT.
	KAFO	FA			Toncontin, Honduras. Pau America Airways Wake Island. Pan American Ways. Launch "Panair II.P." Same as KAAT. Launch "Panair XI.P." Same as KAAT. Launch "Panair XP." Same as KAAT. Launch "Panair XP." Same as KAAT. Launch "Panair XP." Same as KAAT. Refueling and Service Barge at Sand Island. Same as KAAT. Pearl City, Oahu. T. H. Same as KAAT. Launch "Panair VI.P." Same as KAAT. Sand Island, Midway Island Group. Same as KAAT.
	KAFW	FA			Pearl City, Oahu, T. H. Same as KAAT.
	KANB	FA			Sand Island, Midway Island Group, Same as
					KAAT.
	KAPP KASC KASW	FA FA	71.1		Pago Pago, Tutuila. Same as KAAT. Sumay, Guam. Same as KAAT. Launch "Panair X-P." Same as KAAT. Launch "Panair XIII-P." Same as KAAT.
	KASW KAXN	FA FA	20		Launch "Panair X-P." Same as KAAT.
	KHAGH	· A	50		NC-14947. Lt. Col. G. R. Hutchinson, Balti-
	KINL	FA			NC-14947. Lt. Col. G. R. Hutchinson, Ballimore. Md. Juneau, T. A. Pacific Alaska Airways. Tanana, T. A. Same as KINL. Mokapu Peninsula. Oahu, T. H. Same as KAAT. Treasure Island, Calif. Same as KAAT. Seaplane Tender "Sea Gull," New York City. Same as KAAT. Burwash Landing, Y. T. Dominion Gov't. Grand Falls, Newfoundland, Nfld. Airport, Squadron Leader, H. A. L. Pattison.
	KIOA	FA	20	9	Tanana, T. A. Same as KINL.
	KNBF KTIC	FA FA	16		Treasure Island, Calif. Same as KAAT.
	KTIS	FA	20		Seaplane Tender "Sea Gull," New York City.
	VEZ	$_{\mathbf{F}\mathrm{A}}^{\mathrm{F}\mathrm{A}}$	1/4		Burwash Landing, Y. T. Dominion Gov't.
	VOAC	FA			Grand Falls, Newfoundland, Nfld. Airport,
	WASL	FA			Launch "Panair III-A." Same as KAAT.
3035	KBBO KBDG	F			Bozeman, Mont. Livingston, Mont.
3088	KGUP				Phoenix, Ariz. Aeronautical Radio, Inc. Albany, N. Y. Same as KGUP. Hood Ray, T. A. Hood Ray Canning Co. Portable in Alaska. Alaska Aeronauticas & Com-
3092.5	WSDM KAGI	FA T	50		Hood Bay, T. A. Hood Bay Canning Co.
	KAGN	Т	30		Portable in Alaska. Alaska Aeronauticas & Com-
	KAGO	Т	10		munications Commission. Portable in Alaska. Same as KAGN.
	KAIP	C-T T C T	18		Daly, T. A. Pacific American Fisheries, Inc.
	KAIX	Ċ			Kasaan, T. A. Same as KAIP.
	KENL	T	50 50		Iron Crek, T. A. Southwestern Herring Co. Portable in Alaska. Same as KAGN
	KAKL KBNL KEXO KEXP KGM	Ť	50		Portable in Alaska. Same as KAGN.
	KGM KIAO				Rose Inlet, T. A. Same as KGM.
2	KIAO KIAP		14.4		munications Commission. Portable in Alaska. Same as KAGN. Daly, T. A. Pacific American Fisheries. Inc. Holy Cross, T. A. Catholic Society of Alaska. Kasaan, T. A. Same as KAJP. Iron Crek, T. A. Southwestern Herring Co. Portable in Alaska. Same as KAGN. Portable in Alaska. Same as KAGN. Ketchikan, T. A. Same as KGM. Rose Inlet, T. A. Same as KGM. Rose Inlet, T. A. Same as KGM. Port Althrop, T. A. Same as KGM.
	KIAV	E 404	****		Port Althrop, 1. A. Same as KGM.

Pitty-five

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Port Althrop, T. A. Same as KGM.
Ketchikan, T. A. Sames KGM.
Ketchikan, T. A. Sames KGM.
Kake, T. A. Same as KGM.
Kake, T. A. Same as KGM.
Baly, T. A. Same as KGM.
Daly, T. A. Same as KGM.
Daly, T. A. Same as KAJP.
Luckyshot, T. A. Jack M. Karteman.
Squaw Harbor, T. A. Same as KBNL.
Iron Creek, T. A. Same as KBNL.
Iron Creek, T. A. Same as KBNL.
Iron Creek, T. A. Same as KBNL.
Seattle, Wash. Yellow Band Gold Mines, Inc.
Seattle, Wash. Yellow Band Gold Mines, Inc.
Port Althrop, T. A. Same as KGM.
Kake, T. A. Same as KGM.
Uganik Bay, T. A. San bas KGM.
Uganik Bay, T. A. San bas KGM.
Warren, T. A. Pacific American Fisheries, Inc.
                                       KIAW
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                                                                                                 CH
                                                                                                                                                            Squaw Harbor, T. A. Same as KAJO. Port Moller, T. A. Same as KAJO. Lazy Bay, T. A. Same as KAJO. King Cove T. A. Same as KAJO. Stuyshok, T. A. Vance Hitt. Kalskag, T. A. Fred H. Whitcher. Mountain Village, T. A. Norval Shepard
3093
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                                                                                                                                                                     Shepard.
                                                                                                                                                             Seward, T. A. (In Chugach Forest). U. S. Dept. of Agriculture, Forest Service.
3095
                                     KBAE
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                                                                          KBAG,
                                    KBAF,
KBCC
GBCM
KBCN
KBDD
KBDD
                                                                                                                                                             Same as Above.
Mt. Shasta, Calif.
                                                                                                                KBAH,
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                                                                                                                                                            Mt. Shasta, Calif.
Salmon, Idaho. (Salmon Forest).
Salmon, Idaho. (Salmon Forest).
Elko, Nev. (Humboldt Forest).
Elko, Nev. (Humboldt Forest).
Seward, Alaska.
Mt. Shasta, Calif.
Leavenworth, Wash.
Duluth, Minn. (Superior Forest).
Escanaba, Mich. (Upper Mich. Forest).
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                                     KBEN
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WWLI
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                                     WWLM
                                                                                                                                                          Allocated as an aircraft calling and working frequency for use by non-scheduled aircraft in the Western Hemisphere only. Only airplanes which are believed to be of inteerst to DXers are listed on these airplane frequencies.

NC-14947. Lt. Col. G. R. Hutchinson, Baltimore, Md

NC-18997. American Export Airlines.

NC-18997. American Export Airlines.

NC-18997. American Export Airlines.

NC-18997. American Export Airlines.

Red Bluff, Calif. Aeronautical Radio, Inc.

Burbank, Calif. Aeronautical Radio, Inc.

Sacramento, Calif. Same as KEU.

Okaland, Calif. Same as KEU.

San Diego, Calif. Same as KEU.

Fresno, Calif. Same as KEU.

Fresno, Calif. Same as KEU.

Pendelton, Ore. Same as KEU.

Pendelton, Ore. Same as KEU.

Reno, Nev. Same as KEU.

Elko, Nev. Same as KEU.

Mineral Wash. (Snoqualmie oFrest).

North Bend, Wash. (Snoqualmie Forest).
3105
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                                                                                                                                                           North Bend, Wash. (Snoqualinie Forest).
Coolin, Idaho.
Sandopint, Idaho. (Kaniksu Forest).
Sandopint, Idaho. (Kaniksu Forest).
Libby, Mont. (Kootenai Forest).
Libby, Mont. (Kootenai Forest).
Custer, S. Dak. (Harney Forest).
Thompson Falls. Mont. (Kootenai Forest).
Troy. oMnt. (Kootenai, Forest).
Deadwood. S. Dak.
Rhinelander. Wis. (Nicolet Forest).
Forest. Miss. (Mississippi Forest).
Lackson, Miss.
Sourabaya. Lava. N. E. I.
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Sourahava, Iava, N. E. I.
Red Bluff Calif. Aeronautical Radio, Inc.
Sheridan, Wvo. Aeronautical Radio, Inc.
Red Bluff. Calif. Same as KNCN.
Garden City, Kans. Same as KNCN.
Wichita, Kans. Same as KNCN.
                                    YDE4
3158
3162.5
                                    KRBD
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KRCW
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Red Cluff, Calif., Aeronautical Radio, Inc. Baldy Mesa, Calif. City of Los Angeles Dept. of Water and Power.
Clark Mts., Calif. Same as KADN.
Anchorage, T. A. Libby, McNeill & Libby Craig, T. A. Same as KAJH.
Taku, T. A. Same as KAJH.
Kenai, T. A. Same as KAJH.
Moored Scow V No. 1., in Alaska. Same as KAJH.
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                                                                                                                                                        Moored Scow No. 5 No. 171693, in Alaska. Same as KAJH.
                                   KANC
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                                                                                                                                                     Same as KAJH.

Salt Lake City, Utah. Telegram Pub. Co. Salt Lake City, Utah. Same as KASY.

Mt. Shasta, Calif. State of Calif.

St. Michael, T. A. Northern Commercial Co. Sitka, T. A. Pyramid Packing Co. Sitka, T. A. Same as KBNJ.

Sitka, T. A. Same as KBNJ.

Nushagak, T. A. Same as KAJH.

Lockanok, T. A. Same as KAJH.

Ekuk, Bristol Bay, T. A. Same as KAJH.

Egegik, T. A. Same as KAJH.

Reggiung, T. A. Same as KAJH.

New York City. American Legion, Ira Lou-

Spring Post-No. 149.

Portable in Ill. State of Ill. Dept. of Pub.

Works, State Highway and Maintenance Police.
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Missoula, Mont.
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Missoula, Mont.
Papublic Wash. (Colville Forest).
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Missoula, Mont.
Republic Wash. (Colville Forest).
Alturas, Calif.
Missoula, Mont.
Missoula, Mont.
Missoula, Mont.
Missoula, Mont.
Laconia, N. H. (White Mt. Forest).
Laconia, N. H. (White Mt. Forest).
Berea, Ky.
Laconia, N. H. (White Mt. Forest).
McKee, Ky.
Cleveland. Ten. (Cheroke Forest).
Tellico Plains, Tenn. (Cherokee Forest).
Laconia, N. H. (White Mt. Forest).
Duluth, Minn. (Superior Forest).
Duluth, Minn. (Superior Forest).
St. Louis, Mo.
Duluth, Minn. (Superior Forest).
Rutland, Vt. (Green Mt. Forest).
Rutland, Vt. (Green Mt. Forest).
Rutland, Vt. (Green Mt. Forest).
Bristol, Tenn. (Cherokee Forest).
Bristol, Tenn. (Cherokee Forest).
Sabana Grande, Puerto Rico.
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Placerville. Calif.
Forth Worth, Texas. Aeronautical Radio, Inc.
Beaumont, Texas. Same as KGTF.
El Paso, Texas. Same as KGTF.
Big Spring. Texas. Same as KGTF.
Abilene, Texas. Same as KGTF.
Douglas, Ariz. Same as KGTF.
Tucson, Ariz. Same as KGTF.
Phoenix, Ariz. Same as KGTF.
Indio. Calif. Same as KGTF.
Glendale. Calif. Same as KGTF.
Glendale. Calif. Same as KGTF.
NC-21750. Canadian-Colonial Airways, Inc.
NC-21750. Same as above.
Elkins, W. V. (Days only). Aeronautical Rad
Olympia, Wash.
Olympia, Wash.
Ouinev. Calif.
Logandale. Nev. (Challis Forest).
                                   KBEV
KBEW
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Logandale. Nev. (Challis Forest).
Hailey. Idaho. (Sawtooth Forest).
Sonora, Calif., Supply Dept.
Kamela, Ore.
Mesa Verde Nat'l. Park, Colo., U. S. Nat'l.
Park Serv., Dept. of Interior.
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	WSEH	G	i design	Houghton, Mich. (Isle Royal N. P.) Same as KNJN.
	WSEI	G	7.4.	Mott Island, Mich. Isle Royal N. P.) Same as KNJN.
3265	KAKR		2112	Candle, T. A. Candle Community Radio Ass'n.
	KALY	c	25	Egavik, T. A. R. B. Julian.
8 .	KBBE	F		Grangeville, Idaho. (Nezperce Forest).
	KBBF KBBH KBBI	F		Orofino, Idaho. (Clearwater Forest). Orofino, Idaho. (Clearwater Forest).
	KBBII	F F F	9.70	Pierce, Idaho. (Clearwater Forest).
	KBBJJ KBBU KBCU	F		Orofino, Idaho. (Clearwater Forest). Elk City, Idaho. (Nezperce Forest).
	KBDP	F	* (* *	Grangeville, Idaho. (Nezperce Forest).
	KBDT	F	*	Descanso, Cailf. (Cleveland Forest). Cascade Locks Ore (Mt Hood Forest)
	KBFC KIBZ	Ť	m 700	Nevada City, Calif.
	KILO KLA	100	100	Skowl Arm, T. A. Den Sea Salmon Co.
	WWLY CZ7N CIA	F		Waterfall, T. A. Same as KIBZ.
3270	CZ7 N	FA T		Cache Bay, P. O. Canadian Airways Ltd
. 3200	CIPS			Elk City, Idaho. (Nezperce Forest). Grangeville, Idaho. (Nezperce Forest). Descanso, Cailf. (Cleveland Forest). Cascade Locks, Ore. (Mt. Hood Forest). Nevada City, Calif. Waterfall, T. A. Nakat Packing Corp. Skowl Arm, T. A. Dep Sea Salmon Co. Waterfall, T. A. Same as KIBZ. Villalba, Puerto Rico. Cache Bay, P. Q. Canadian Airways, Ltd. Barriefield, Ont. Dept. of Nat'l. Defense, Dominion Gov't.
	VEW	C		Calgary, Alta Same as CIA
:3295 :3300	WWLX CY3J	F	****	Calgary, Alta. Same as CIA.
. 5500	_		*	Luquillo, Puerto Rico. Anyox, B. C. Consolidated Mining & Smelting Co.
	CZ5Y CZ7H	C-T T		Anyox, B. C. Same as CV3T
3320	YDH4	В	30	Cedar Creek, B. C. Same as CY31.
3322.5 3350	KRBD K7XFQ	FA SE	400 150	Red Bluff, Calif. Aeronautical Radio Inc.
		SE		Anyox, B. C. Consolidated Mining & Smelting Co. Anyox, B. C. Same as CY3J. Cedar Creek, B. C. Same as CY3J. Bandoeng, Java, N. E. J. Red Blutt, Calif. Aeronautical Radio, Inc. Anchorage, T. A. Alaska Aeronautical & Communication Commission. Ketchikan, T. A. Same as above. Ketchikan, T. A. Same as above. Juneau, T. A. Same as above. Juneau, T. A. Same as above. Gravina Island, T. A. Same as above. Ralston, T. A. Same as above. So. Washington, Va. Aeronautical Radio, Inc. Grand Rapids, Mich. Same as WAQE. Detroit, Mich. Same as WAQE. Milwaukee, Wis. Same as WAQE. Pittsburgh, Pa. Same as WAQE. Norfolk, Va. Same as WAQE. Saginaw, Mich. Same as WAQE. Saginaw, Mich. Same as WAQE. Saginaw, Mich. Same as WAQE. Cleveland, Ohio. Same as WAQE. Cleveland, Ohio. Same as WAQE. Buffalo, N. Y. Same as WAQE. New Cumberland, Pa. Same as WAQE. Lansing, Mich. Same as WAQE.
	K7XFR K7XFS K7XFU K7XGG K7XGH K7XGI WAOE WAOS	SE	150 150	Ketchikan, T. A. Same as above.
	K7XFU	SE. SE	150	Ketchikan, T. A. Same as above.
	K7XGH	SE	150	Cordova, T. A. Same as above.
3372.5	K7XGI WAOF	SE	150	Gravina Island, T. A. Same as above.
.337 4.3	WAOS	FA FA	100,00	So. Washington, Va. Aeronautical Radio, Inc.
	WAOU	FA FA	W # 211	Orand Rapids, Mich. Same as WAQE. Detroit, Mich. Same as WAQE.
	WAOW	FA	18.8.6	Milwaukee, Wis. Same as WAQE.
	WAÖV WAÖW WARC WAUA	FA FA	****	Chicago, Ill. Same as WAOE.
3	WBSC	FA	£	Norfolk, Va. Same as WAOE.
- <u>h</u>	WBSS WBTC	FA FA FA	2000	Sault Ste. Marie, Mich. Same as WAOE.
	WPAL WPXB	FA		Traverse City, Mich. Same as WAQE.
	WPXH	FA FA		Buffalo, N. Y. Same as WAOE.
	WPXL	FA FA FA	3111	New Cumberland, Pa. Same as WAQE.
	WPXW	FA	200	Muskegon, Mich. Same as WAQE.
	WPYA WPYB	FA		New Cumberland, Pa. Same as WAQE. New Cumberland, Pa. Same as WAQE. Lansing, Mich. Same as WAQE. Muskegon, Mich. Same as WAQE. Williamsport, Pa. Same as WAQE. Flint, Mich. Same as WAQE. Baltimore, Md. Same as WAQE. Portland, Ore. (Radio Laboratory). U. S. Dept.
3386	KBAA	FA F	4,4,470	Baltimore, Md. Same as WAQE.
	KBCG	F	5000	of Agriculture, Forest Service. Yreka, Calif. (Rlamath Forest). Same as KBAA.
3400	K7XFQ	SE	150	Anchorage, T. A. Alaska Aeronautical and Communications Commission. Ketchikan, T. A. Same as above. Ketchikan, T. A. Same as above. Juneau, T. A. Same as above. Cordova, T. A. Same as above. Gravina Island, T. A. Same as above. Ralston, T. A. Same as above. Ralston, T. A. Same as above. Caracas. Venezulea. "Radio Turmieto," Cesar Banuls.
	K7XFR	SE	150	Ketchikan, T. A. Same as above.
	K7XFR K7XFS K7XFU	SE	150 150	Ketchikan, T. A. Same as above. Tuncau, T. A. Same as above.
	K7XGG	SE SE	150 150	Cordova, T. A. Same as above.
	K7XGG K7XGH K7XGI	SE	150	Ralston, T. A. Same as above.
	YV5RW	В		Caracas, Venezulea. "Radio Turmieto," Cesar Banuls.
3410	ксво	LH	50	Tillamock Rock Light, Ore. U. S. Lighthouse
	KNKG			Ash Mt. Sequoia Nat'l. Park, Calif. Death Valley, Calif.
	KNLP	F		Portland, Maine

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WPB
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WSEO
WST
WWAL
WWAM
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Catlinsburg, Tenn. Great Smoky Nat'l, Park
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46371/2 KAMB
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Serv., Dept. of Interior.
                              KNJP
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                                                                                                                           Grand Teton N. P., Wyo. Same as KNJO.
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Death Valley Nat'l. Mon., Calif. Same as KNJO.
Mt. Rainier N. P., Wash. Same as KNJO.
Olympic N. P., Wash. Same as KNJO.
Great Smoky Mts. N. P. Same as KNJO.
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Hender "Hollyhock."
Del Rosa, Calif.
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Atlin, B. C., B. C. Provincial Police.
Bousquet, P. Q. General Airways, Ltd.
Baldy Mt., B. C. Minister of Lands for B. C.
Bralorne, B. C. Same as CY2Q.
Armstrong, Ont. Out. Dept. of Lands and
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Basswood, Ont. Same as CZ4B.
Alert Bay, B. C. Same as CZ2Q.
Fort Worht, Texas. Aeronautical Radio, Inc.
El Paso, Texas. Same as KGTF.
Big Spring, Texas. Same as KGTF.
Big Spring, Texas. Same as KGTF.
Douglas, Ariz. Same as KGTF.
Douglas, Ariz. Same as KGTF.
Detroit, Mich. Same as KGTF.
Detroit, Mich. Same as KGTF.
Syracuse, N. Y. Same as KGTF.
E. Hartford, Conn. Same as KGTF.
Knoxville, Tenn. Same as KGTF.
Chicago, Ill. Same as KGTF.
Camden. N. J. Same as KGTF.
Portable. Same as KGTF.
Portable. Same as KGTF.
Camden. N. J. Same as KGTF.
Chicago, Ill. Same as KGTF.
Charleston, W. V. Same as KGTF.
Charleston, W. V. Same as KGTF.
Chicago, Ill. Same as KGTF.
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So. Washington, Va. Same as KGTF.
Chicago, Ill. Same as KGTF.
Lidinapolis, Ind. Same as KGTF.
Buffalo, N. Y.
Port Columbus, Ohio. Same as KGTF.
Indianapolis, Ind.
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Mellington, New Zealand.
Rangoon, Burma.
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Wellington, New Zealand,
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Lourenco Marques, Mozambique.
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                              CR7AB
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W4XID
W6XCS
W6XOW
W6XXT
W7XBA
W7XEZ
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W8XIJK
W8XIJL
W10XJJ
W10XJJ
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2107	WIOXJS	• • •		Portable in Asia. Same as W10XJP.
3497	CLX		250	Portable in Asia. Same as W10XJP. Havana, Cuba. Observatorio Nacional, Casa Blanca. 3500 to 4000 kcs.
3500	YV5RV	В		Amateurs
3732	TGB	FA		La Guaira, Venez. "Emisora Vargas," Gonzalo Veloz Mancera. Aviaccion Nacional, Pais de la Aurora, Guate-
3750	CS2ZU	В	80	mala. Ponta Delgada, Azores. Deodata Emilio Soares
4002 4030	PWH CT2AJ VK8SC	SEM	****	Abrolhos, Brazil. Ponta Delgada, Azores. Port Hedland, Australia Australian Airways
4055	K7XFQ	SE	150	Medical Service, Anchorage, T. A. Alaska Aeronautical and Communications Commission.
	K7XFR	SE SE	150	Ketchikan, T. A. Same as above.
	K7XFS K7XFU	SE	150 150	Ketchikan, T. A. Same as above. Ketchikan, T. A. Same as above. Juneau, T. A. Same as above. Cordova, T. A. Same as above. Gravina Island, T. A. Same as above. Ralston, T. A. Same as above. Juneau, T. A. Alaska Aeronautical and Commissions Computer Comput
	K7XGG K7XGH K7XGI	SE SE GE	150 150	Cordova, T. A. Same as above.
1065	KZXGI	SE	150	Ralston, T. A. Same as above.
4065	K7XFU	• • •	••••	Juneau, T. A. Alaska Aeronautical and Com-
4098	WND	T	400	Juneau, T. A. Alaska Aeronautical and Com- munications Commission. Hialeah, Fla. American Tel. & Teleg. Co., 32 Sixth Ave., New York City.
4107 4122.5	HCJB2 KBLC	$_{\mathrm{FA}}^{\mathrm{B}}$	1000 50	
	KBLC KBRN KHAGH	FA FA A	3000 30	Corpus Christi, Texas. Aeronautical Radio. Brownsville, Texas. Same as KBLC. NC-14947. Lt. Co. G. R. Hutchinson, Baltimore,
	WAHY .	FA	1000	Md.
	WAHZ WARS	FA FA	5 0 50	Memphis, Tenn. Same as KBLC. Birmingham, Ala.Same as KBLC.
	WEEL	$\mathbf{F}\mathbf{A}$	5 0	Muscle Shoals, Ala. Same as KBLC.
	WGSA WPAE	FA FA	50. 50	Greenville, S. C. Same as KBLC.
4125	WGSA WPAE WSIM KIQA	FA FA	400 20	Philadelphia, Pa. Same as KBLC. Tampa, Fla. Same as KBLC.
4130	VKSSK	SĒM		Muscle Shoals, Ala. Same as KBLC. Beaumont, Texas. Same as KBLC. Greenville, S. C. Same as KBLC. Philadelphia, Pa. Same as KBLC. Tampa, Fla. Same as KBLC. Tanana, T. A. Pacific Alaska Airways, Inc. Broken Hill, NSW, Australia. Australian Airways Medical Service.
4135 4140	KBAY KHCIY	F A	100	ways Medical Service. Milford, Utah.
4178	woo	A T	20000	NC-18997. American Export Airlines. Ocean Gate, N. J. American Tel. & Teleg. Co., Long Lines Dept., 32 Sixth Ave., New York
				City.
4200	WOY CP2ANA	C C C	• • • •	Lawrenceville, N. J. Same as WOO. Sipiapo, Bolivia.
4253	WKP	č	••••	Lawrenceville, N. J. American Tel. & Tel. Co., Long Lines Dept., 32-6th Ave., New York City.
4273 4280	RV15 KMI	$^{\mathrm{B}}$ C	200000	Lawrenceville, N. J. American Tel. & Tel. Co., Long Lines Dept., 32-6th Ave., New York City. Khabarovsky, U. S. S. R. Dixon, Calif. Transpacific Communications Co., Ltd., 140 Montgomery St., San Francisco. Pt. Washington, Wis. Lorain County Radio
4282.5	WAD	CHT	••••	
	WAS WAY	CHT		Duluth, Minn. Same as WAD. Lake Bluff, Il. Thorne Donneey. West Dover, Ohio (600 w. days). Radiomarine
	WCY	снт	400	Corp.
4007	WMI WOM	CHŢ		Lorain, Ohio. Same as WAD.
4287 4290	COY	Ġ	2.1	Lorain, Ohio. Same as WAD. Hialeah, Fla. American Tel. & Teleg. Co. Havana, Cuba. Press — Cultural Dept., Cuban Army.
4295	$f WTDV \ WTDW$		250 250	Charlotte Amalie, Virgin Islands. St. Croix, Virgin Islands. St. John, Virgin Islands. Dunedin, New Zealand. Rugby, Gt. Britain. GPO. Armour House, St. Martin's Le Grand, London ECI. Aklavik, N.W.T. Dept. of Nat'l. Defense, Dominion Covit.
4300	WTDX 4ZB		250 30	St. John, Virgin Islands. Dunedin, New Zealand.
1320	GOB	B		Rugby, Gt. Britain. GPO, Armour House, St. Martin's Le Grand. London ECI.
4340	VEF	G	• • • • •	
4348 4355	CGA9 CIA	CHT	****	Drummondville, P. Q. Canadian Marconi Co. Barriefield, Ont. Dept. of Nat'l. Defense, Do- minion Gy't.
	CZ9X LAC	FAE	1000.	minion Gv't. Carcross, Y. T. Northern Airways, Ltd. Pisa, Italy. Radio di Coltano Centro. Aklavik, N. W. T. Same as CIA. Montreal, P. Q. Dominion Skyways, Ltd. Cambridge Bay, N. W. T. Hudson's Bay Co.
1256	IAC VEF CY5D	Ğ		Aklavik, N. W. T. Same as CIA.
4356	VFN	FA.	2 × 4 ×	Cambridge Bay, N. W. T. Hudson's Bay Co.

	CZ4T	T	2.30	Cape Dorset, Baffin Land, N. W. T. Same as CY5D.
	CZ4Y CZ5H	T C	****	Cape Smith, N. W. T. Same as CY5D. Arctic Bay, Admiralty Inlet, N. W. T. Same as CY5D.
4390	NAA NSS	G G C	1000	Arlnigton, Va. Navy Time Signals.
4400 4415	CPP9 ZMBJ	C S	300	Vlacha, Bolivia. T.S.S. "Awatea," Union Steam Ship Co. of New
4422 1/2	W10XKG	E2	75	Zealand, Ltd. Tow Boat "Alex Mackensie," Radiomarine Corp. of America.
4436	VDO	T	400	Vancouver, B. C. North-West Telephone Co.,
4465	CFA2	C	eie.	Drummondville, P. Q. Can. Marconi Co., Box 1690, Montreal, P. Q.
4490	CZ2T	T	••••	Goldfields. Ltd.
4495 4500	CZ2B CIA	\mathbf{T}	14.4.	Bridge River. B. C. North-West Telephone Co. Barriefield, Ont. Dept. of Nat'l. Defense, Do-
	CIP8 CZ5K	C Fa	7.184	Calgary, Alta. Same as CIA. Shaboygama, P. Q. Dominion Skyways, Ltd. Calgary, Alta. Same as CIA. Rones Bav, B. C. Canadian Fishing Co., Ltd. Claydon Bay, B. C. North-West Telephone Co. Baie Comeau, P. Q. Ont. Paper Co., Ltd. Chutes oux Outardes, P. Q. Ont. Paper Co. Clarke City, P. Q. Gulf Pulp & Paper Co. Nassau, Bahamas. Sup't. of Telegraphs, Central Bay St.
4505	ČŽ5K VEW CFW	Fa CT TT		Calgary, Alta. Same as CIA. Bones Bay, B. C. Canadian Fishing Co., Ltd.
4510	CFW CZP CY2L CY2D	T		Claydon Bay, B. C. North-West Telephone Co. Baie Comeau, P. Q. Ont. Paper Co. Ltd.
	CYSE	T T T		Clarke City, P. Q. Gulf Pulp & Paper Co.
4512	ZFS		••••	
4550 4560	WDN	C C	• • • •	Rocky Point, N. Y. RCA Frequency Bureau. 30 Rockeieller Plaza, N.Y.C. LaPaz, Bolivia.
4600 4610	CPO4 HC2ET KBAI	B F		LaPaz, Bolivia. Guayaguul, Ecuador Ketchikan, T. A. U. S. Department of Agriculture, Forest Service. Iuneau, T. A. Same as KBAI. Juneau, T. A. Same as KBAI. Juneau, T. A. Same as KBAI. Petersburg, T. A. Same as KBAI. Patrol Boat "Forester." Same as KBAI. Patrol Boat "Ranger 10." Same as KBAI. El Paso, Texas. U. S. Immigration Border Patrol
	KBEO KBEP	F E		Juneau, T. A. Same as KBAI. Juneau, T. A. Same as KBAI.
	KBFM KBFN	F F F		Juneau, T. A. Same as KBAI. Petersburg, T. A. Same as KBAI.
	KBFO KMYA KMYB KYZA	F F G		Patrol Boat "Porester." Same as KBAI.
4617		Ğ		El Paso, Texas. U. S. Immigration Border Patrol.
	KYZD KYZG KYZF KYZE	ტი განი განი განი განი განი განი განი გან	3.13	El Paso, Texas. U. S. Immigration Border Patrol. Chula Vista, Calif. Same as KYZA. Del Rio, Texas. Same as KYZA. El Centro. Calif. Same as KYZA. Alpine, Texas. Same as KYZA. Tucson, Ariz. Same as KYZA. McAllen, Texas. Same as KYZA. Laredo, Texas. Same as KYZA. Lynden, Wash. Same as KYZA. Lynden, Wash. Same as KYZA. Detroit Wick. Same as KYZA.
	KYZF KYZE	G G		El Centro, Calif. Same as KYZA. Alpine, Texas. Same as KYZA.
	KYZC KYZK KYZL	G		McAllen, Texas. Same as KYZA.
	KYZM WWMA	Ğ		Laredo, Texas. Same as KYZA. Lvnden, Wash. Same as KYZA. Detroit, Michel Same as KYZA. Buffalo, N. Y. Same as KZA.
	WWMB	ğ		Buffalo, N. Y. Same as KZA.
	WWMD WWMO WWMP	G G		Ogdensburg, N. Y. Same as KYZA.
3515	KNIO	SEM	50	Alhambra, Calif. Southern Calif. Edison Co.
4650	KODZ KAZV KBOF	FA FA	100 50	Buitalo, N. Y. Same as K.Z.A. Derby Line, Vt. Same as K.Y.Z.A. Ogdensburg, N. Y. Same as K.Y.Z.A. Rousses Point, N. Y. Same as K.Y.Z.A. Alhambra, Calif. Southern Calif. Edison Co. Anaheim. Calif. Same as K.A.M.B. Fairbanks, T. A. Harold Gillam. Rainy Pass District, T. A. Star Air Lines, Inc., Rhon River Emergency Field.
	KFRA	FA C	100	Rainy Pass District, T. A. Star All Lines, Fits, Rhon River Emergency Field. Flat, T. A. Star Air Lines. Candle, T. A. Same as KFRA. Amapala, Honduras. Gobierno de Tonduras. Roatan. Honduras. Gobierno de Honduras. Fort Worth, Tex. Aeronautical Radio, Inc.
4707	HRT KFRD HRS	FA C	200 100	Amapala, Honduras. Cobierno de Tonduras.
4710 4730	KGTF KGUA	FA FA	100	Fort Worth, Tex. Aeronautical Radio, Inc. El Paso, Tex. Same as KGTF. Tucson, Ariz. Same as KGTF.
	KGUO	FA FA	1	Tucson, Ariz. Same as KGTF. Phoenix Ariz Same as KGTF.
	KGUR KGUT	FA FA	1311	Phoenix, Ariz. Same as KGTF. Glendale. Calif. Same as KGTF. Robertson. Mo. Same as KGTF. Oklahoma City Okla. Same as KGTF.
	KIOO KIOT	FA FA	11.11	Oklahoma City, Okla. Same as KGTF. Tulsa, Okla. Same as KGTF.
	WARO	FA FA		Portable. Same as KGTF. So. Washington, Va. Same as KGTF.
	WSDC WSDF	FA FA		Phoenix, Ariz. Same as KGTF. Phoenix, Ariz. Same as KGTF. Glendale, Calif. Same as KGTF. Glendale, Calif. Same as KGTF. Robertson. Mo. Same as KGTF. Oklahoma Citv. Okla. Same as KGTF. Tulsa. Okla. Same as KGTF. Portable. Same as KGTF. So. Washington, Va. Same as KGTF. Newark. N. J. Same as KGTF. Louisville, Kv. Same as KGTF. Chicago, Ill. Same as KGTF.
	WSDG	FA	****	Chicago, Ill. Same as KGTF.

	WSDH WSDK WSDP WSDO	FA		Nashville, Tenn. Same as KGTF.
	WSDK	FA FA		Cincinnati, Ohio. Same as KGTF
	WSDP	FA		Memphis, Tenn. Same as KGTF.
	WSDQ	FA		Port Columbus, Ohio. Same as KGTF.
4740		EA	3000	Berea, Ohio. Same as KGTF.
	WAHY	FA FA	1000	Brownsville, Tex. Aeronautical Radio, Inc.
	WAHY WSDI WOET	FA		Memphis, Tenn. Same as KBRN.
	WOEL	FA	1000	Charlotte, N. C. Same as KBRN.
47421/2	WSIM KBLC	FA	400	Tampa, Fla. Same as KBRN.
77 72 72	KBRN	FA FA	50 3000	Corpus Christi, Tex. Aeronautical Radio, Inc.
	WAHY	FA	1000	Mamphia Tone Same as KBLC.
	WAHY WARS WEEG WEEJ	FA	50	Muscle Shoole Ala Same as KRIC
	WEEG	FA		Greenshoro N C Same as KRIC
	WEEL	FA		Lacksonville Fla Same as KRLC
	WEEK WEEL	FA		Washington, D. C. Same as KBLC.
	WEEL	FA	50	Beaumont, Tex. Same as KBLC.
	WEEP WGSA	FA	50	Newark, N. J. Same as KBLC.
	WOET	FA	50	Greenville, S. C. Same as KBLC.
	WOLL	FA FA	1000 50	Charlotte, N. C. Same as KBLC.
	WPAE	FA	400	Philadelphia, Pa. Same as KBLC.
4745	KBRN	FA FA	3000	Brownsville Toy Assonautical Padia Luc
	WAHY	FA	1000	Memphis Tenn Same as KRDN
	WOET	FA FA	1000	Charlotte, N. C. Same as KBRN
	WOET WSIM WOO	FA	400	Tampa, Fla. Same as KBRN.
4753 4755	WOO	T	20000	Ocean Gate, N. J.
4755	CY4A CY6E YV1RT	$\mathbf{F}\Lambda$		Nashville, Teum. Same as KGTF. Cincinnati, Ohio. Same as KGTF. Memphis, Tenn. Same as KGTF. Port Columbus, Ohio. Same as KGTF. Berea, Ohio. Same as KGTF. Berea, Ohio. Same as KGTF. Berea, Ohio. Same as KBRN. Constitution of the same as KBRN. Charlotte, N. C. Same as KBRN. Came as KBRN. Corpus Christi, Tex. Aeronautical Radio, Inc. Brownsville, Tex. Same as KBLC. Memphis, Tenn. Same as KBLC. Greensboro, N. C. Same as KBLC. Jacksonville, Fla. Same as KBLC. Beaumont, Tex. Same as KBLC. Greenville, S. C. Same as KBLC. Charlotte, N. C. Same as KBLC. Tampa, Fla. Same as KBLC. Tampa, Fla. Same as KBLC. Brownsville, Tex. Aeronautical Radio, Inc. Memphis, Tenn. Same as KBRN. Charlotte, N. C. Same as KBRN. Charlotte, N. J. Bousquet, P. Q. General Airways, Ltd. Maracaibo, Venezuela.
4770	CYGE	1. V		Beavertail Lake, Man. Arrow Airways, Ltd.
4775	CJD	B	1311	Maracaibo, Venezuela. Campbell River, B. C. Minister of Lands for
4773		r	• • • •	Campbell River, B. C. Minister of Lands for
	CY2Q CZC CZ4B	C		Addin, B. C., B. C. Provincial Police. Bralorne, B. C. Same as CY2Q. Armstrong, Ont. Dept. of Lands & Forests.
	CZČ	P		Bralorna P. C. Sama as CV20
	CZ4B	F		Armstrong, Ont. Ont. Dept. of Lands &
				Forests.
	CZ5C CZ7A H17GAB	F		Basswood, Ont. Same as CZ4B. Alert Bay, B. C. Same as CY2Q. Bucaramanga, Colombia.
	CZ7A	P P P P		Alert Bay, B. C. Same as CY2O.
	H17GAB	\mathcal{P}	750	Bucaramanga, Colombia.
4780	YV1RO	R		Bucaramanga, Colombia. Triujillo, Venezuela. Bralorne, B. C., B. C. Provincial Police. Atlin, B. C. Same as CZC. Alert Bay, B. C. Same as CZC. Barranquilla, olombia. Caracas, Venezuela. Bogota, Colombia.
4785	CZC CY2O CZ7A	P	3.8 1.8	Bralorne, B. C., B. C. Provincial Police .
	C771	P		Atlin, B. C. Same as CZC.
	HILARD	P	600	Alert Bay, B. C. Same as CZC.
4790	YVSRY	B B		Barranquilla, olombia.
4795	HILABB YV5RY HI3CAF HI66FAI	B	750	Caracas, Venezuela.
	HI66FAI	B	501	Ibague, Colombia.
4797 1/2		RB	100	NC.10004 Howard P Hughes N V C
	KSFM K6XAK WNBM	RB		New York City NBC, Inc. 30 Rockefeller Plaza
	KAXAK	GE	1500	Kaena Point, Oahu, T. H. Globe Wireless, Ltd.
	WNBM	RB		New York City. NBC, Inc.
	WAXID W6XCS W6XXT W6XOW W7XBA	E1 GE	50	W. Palm Beach. Fla. Gray Radio Co.
	WKYYT	ĞĒ	50 5000	San Francisco, Calif. Garlynn Eng. Co.
	WAXOW	GF	1000	Portable. Press Wireless, Ltd.
	WZXBA	GE	15	Palo Alto, Calif. Stanford University.
	WILL	Ei	60	Ibague, Colombia. NC.19004. Howard R. Hughes, N. Y. C. New York City. NBC. Inc., 30 Rockefeller Plaza. Kaena Point. Oahu. T. H. Globe Wireless, Ltd. New York City. NBC, Inc. W. Palm Beach. Fla. Gray Radio Co. San Francisco, Calif. Garlynn Eng. Co. Portable. Press Wireless, Ltd. Palo Alto, Calif. Stanford University. Portable. Northern Radio Co. Seattle, Wash. Radio Labs., Inc. Portable. W. V. Univ. Dept. of Physics. Portable. Same as W8XUK. Elgin. Ill. Time sienals. Portable. Harvey Radio Labs., Inc.
	WAXIIK WEXIIL WOXAM WIONII	GE	10	Portable W V Univ Dent of Physics
	WEXUL	\mathbf{GE}	10	Portable. Same as W8XIIK
	WOXAM	Time		Elgin, Ill. Time signals.
4800	WIUXIJ	GE	25	Portable. Harvey Radio Labs., Inc.
4000	WUDIN	RB		New York City. CBS, Inc., 485 Madison Ave.
4805	YVIRV HI6FAB	В		Maracibo, Venezuela.
4810	CYC	B	501	Manizales, Colombia.
1010	YDE2	B	100	Amos, P. Q. Canadian Nat'l. Railway.
~	VV-RIT	R	100	Portable. Harvey Radio Labs Inc. New York City. CBS, Inc., 485 Madison Ave. Manacibo, Venezuela. Manizales, Colombia. Amos, P. Q. Canadian Nat'l. Railway. Solo, Java, N.E.I. NIROM. Maracaibo, Venezuela.
4815	HI2BAB	B	600	Cuauta Colombia
4280	GDW	Τ̈́		Rughy Ct Britain C.P.O. Armour House St.
		•	2,77.0	Martin's Le Grand London FCI
1	YV3RN CY6P CZ3B	В		Barquisimeto, Venezuela.
4825	CY6P	FA		Channing, Man. Wings, Ltd.
	CX3B	FA B		Berens River, Man. Wings, Ltd.
4020	HI5EAD	В	720	Calif. Colombia.
4830 4835	YV5RH	B B T T	* : : :	Caracas, Venezuela.
4840	CV2L	В	525	Cartagena. Colombia.
1010	HIIABE CY2L CY2O CY2T	T		Chuten our Outerden P. O. Some on CVOT
	CY2T	F		Berens Piver Man Man Deat of Mines
				Solo, Java, N.E.I. NIROM. Maracaibo, Venezuela. Cucuta, Colombia. Rugby, Gt. Britain G.P.O., Armour House, St. Martin's Le Grand, London ECI. Barquisimeto, Venezuela. Channing, Man. Wings, Ltd. Berens River, Man. Wings, Ltd. Calif. Colombia. Cartaceas, Venezuela. Cartaceas, Venezuela. Cartacean, Colombia. Baie Comeau, P. Q. Ont. Paper Co., Ltd. Chutes any Outarles, P. O. Same as CV2L. Berens River, Man. Man. Dept. of Mines & Resources. Clarne City, P. O. Gulf Pulp & Paper Co.
	CY3E VUC2	Т	1	Clarne City, P. O. Gulf Pulp & Paper Co. Calcutta, India. All-India Radio. Maracay, Venezuela.
	VUC2	В	10000	Calcutta, India, All-India Radio.
	YV4RX	В		Maracay, Venezuela.

4845 4850	HJ3CAD YV1RZ	B	720	Bogota, Colombia. Trujillo, Venezuela.
4855	VBV6	C		Calgary, Atla.
4860	CZ5K	FA	• • • •	Chiboygama, P. Q. Dominion Skyways, Ltd.
	CZ5L	$\mathbf{F}\mathbf{A}$		Mud Lake, Ont. Same as CZ5K.
	CZ5M	FA		Rouyn, P. Q. Same as CZ5K.
	CZ9U	FA		St. Felicien, P. Q. Same as CZ5K.
	TGY	_C	15.00	Guatemala City, Guat.
	VOWM	FA		Northwest River, Dabrador. Newfoundland Sky-
	MILLERY			ways, Ltd.
1265	YV1RL.	B	300	Maracaibo, Venezuela.
4365	НІЗВАІ	В	751	Santa Marta, Colombia.
	VDO	T	400	Vancouver, B. C. North-West Telephone Co.,
				768 Seymour St.
4870	CIA	\mathbf{T}	e	Barriefield, Ont. Dept. of Nat'l. Defense, Do-
				minion Gov't.
	VSW	C		Calgary, Atla.
	YV2RN	В		San Cristobal, Venezuela.
4875	HJ6FAH	В	600	Armenia, Colombia.
4878	ZTD	$\overline{\mathbf{B}}$	*4 * *	Armenia, Colómbia, Durban, Union of S. Africa.
4880	' VDQ	T		Cedar Bay, P. Q. Telephone Centre du Lae
				St. Jean.
	YUB2	В	10000	Bombay, India.
	YV6RU	В		Ciudad Bolivar, Venezuela.
4885	HJ4DAP	В	501	Medellin, Colombia,
4890	HRK	С	200	Tegucigalpa, Honduras, Gobierno de Hond,
	YV-RX	В		Tegucigalpa, Honduras, Gobierno de Hond. Maracaibo, Venezuela.
4895	HJ3CAH	В	720	Bogota, Colombia,
4900	YVoRT	В		Bogota, Colombia. Giudad Bolivar, Benezuela.
4910	YV-RY	В		Coro, Venezuela.
4917 1/2	WAZM	FA	40	Madison, Wis. Aeronautical Radio, Inc.
4920	VUM2	В	1000	Madras, India.
	-			Caracas, Venezuela.
4930	YV4RP	. B		Valencia, Venezuela
4837 1/2	KGUP	FA		Valencia, Venezuela. Phoenix, Ariz. Aeronautical Radio, Inc.
17.	WSDM	FA		Albany, N. Y. Same as KGUP.
4940	YV5RO	В		Caracas, Venezuela.
4947 1/2	KGUP	FA		Phoenix, Ariz. Aeronautical Radio, Inc.
	WSDM	FA		Albany, N. Y. Same as KGUP.
4950	YV4RO	В		Valencia, Venezuela.
4952 1/2	KGUP	$\overline{\mathbf{F}\mathbf{A}}$		Phoenix, Ariz. Aeronautical Radio, Inc.
	WSDM	FA	1111	Phoenix, Ariz. Aeronautical Radio, Inc. Albany, N. Y. Same as KGUP.
4960	VUD2	В	10000	Delhi, India.
	YV5RS	$\bar{\mathbf{B}}$		Caracas, Venezuela
4967 1/2	KGUP	FA		Caracas, Venezuela. Phoenix, Ariz. Aeronautical Radio, Inc.
	KHAGH	A	50	NC-14947. Lt. Col. G. H. Hutchinson, Bauti-
				more, Md.
	WSDM	$\mathbf{F}\mathbf{A}$		Albany, N. Y. Same as KGHP
4975	GBC	T	5000	Rugby, Gt. Britain.
	YV-RI	$\bar{\mathbf{B}}$		Coro, Venezuela.
4980	YV5RT	B		Caracas, Venezuela.
4990	YV3RX	В		Barquisimeto, Venezuela.
5000	TFL	C		Reykjavik, Iceland.

Explanation of the Third Column Symbols:

A-Aircraft.	EM—Emergency.
B—Broadcast.	EM—Entergency.
	SEM—Special emergency.
C—Commercial Telegraph.	MF-Marine fire.
F—Forestry.	MR-Marine Relay.
G—Government.	PR-Press relay.
P-Police.	RB-Relay broadcast.
	FAC-Facsimile.
SShip.	TV-Television video.
T—Radio Telephone.	TA—Television audio.
FA-Aeronautical (ground).	NCE Management
FMB - Frequency modulated broadcasting	NCE-Non-commercial educational.
station.	CC-Coastal Telegraph,
GLO—Geophysical.	CH-Coastal harbor.
RC—Circular radiobeacon.	CHC-oastal harbor telegraph.
	MT-oastal harbor telephone.
RD-Directional radiobeacon.	F.
RG-Direction, finding station.	Ē1
LH—Lighthouse.	F2
RR—Radio range station.	E3
MPMunicipal police.	
	Experimental.
SP—State police.	GE-General Experimental.
ZP—Zone police.	SE—Special Experimental

All the Mobile and Portable-Mobile police stations installed in police automobiles bear the same call letters as the Fixed police broadcast station to which they report, and in many cases they work on the same frequency. We list herewith the Fixed station, and in parentheses we show the number, and the power of the Portable and Portable-Mobile units attached to the station, as for example: WRHD MP 250 Louisville, Kv. (2 units-12 w).

NORTH AMERICAN BROADCASTING STATIONS BY FREQUENCIES WITH VERIFICATION SIGNERS

KEY TO SYMBOLS

As Shown in the Index by Frequencies

Frequencies are given in kilocycles per second, and wavelengths in meters. Night power is shown in watts in third column and daytime power is shown in parentheses in kilowatts. Thus: (.25) indicates 250 watts. Exact frequencies, when not multiples of ten are shown in the second column.

second column.		
Second Column Symbols A—Status in doubt. B—National "Blue" Network.	Network)	a-b-c—Small letters show sta- tions using same trans- mitter.
C—Columbia Network.	P—Has Construction Permit only.	1-2-3—Figures denote stations
D—Daytime only. E—Minor Network.	Q-Station not in use.	sharing time. ?—Reported but not officially
F—Canadian Network,	R—National "Red" Network. S—Synchronized.	confirmed. —No information.
G—Specified Hours. H—Assigned another frequency	Sx-Indicates a "Booster" (or	Fourth Column Symbols
—using this one under Special Authorization.	amplifier, or satellite) station working with a larger station. The main	
J-Assigned lower power that	larger station. The main station is indicated by \$1.	
using this power under Special Authorization.	X—Has Permit to change	
K—Licensed for facsimile. L—Limited time.	power. YHas Permit to change lo-	f-Verifies for 10 cents.
M-Mutual Network,	cation.	g—Card for 10s
N—National "Red" and "Blue" Networks.	Z—Has Permit to change frequency.	z—No information available.
540 kcs. (552.2 m.)		
2011	Watrous Sask. Pinar del Rio, Cuba	
550 kcs. (545.1 m.)	, mar der me, dage	
	Fredericton, N. B.	
CMW 2500	Havana, Cuba	W. R. Griffin, DX Ann'cr.
	a Corvallis, Ore.	Luke L. Roberts, Mgr.
	p Phoenix, Ariz. ■ St. Louis, Mo.	Geo. Burbach, Mgr.
KTSA C 1000(5)	a San Antonio, Texas a Waterbury, Vt. a Buffalo, N. Y.	G. W. Johnson, Mgr. Melvin Stickles, Ch. Eng.
	a Waterbury, Vt. a Buffalo, N. Y.	I. R. Lounsberry, Gen. Mgr.
WKRC M 1000(5)	Lincinnati, Unio	Vera Tyson Wendell Siler Prog. Dir.
560 kcs. (535.4 m.)	a riallisonouty va.	Wenden Sher Flog. Dir.
CJKL F 1000	Kirkland Lake, Ont.	
KFDM N 1000	Beaumont, Texas	Bernice Anderson, Sec'y.
	a Denver, Colo. a San Francisco, Calif.	G. W. Meyer, Mgr. Philip G. Lasky, Mgr.
KWTO D 5000	s Springfield, Mo.	Philip G. Lasky, Mgr. Rlaph D. Foster, Mgr. Roger W. Clipp, Gen. Mgr.
WGAN CHXZ 500	a Portland, Me.	
WIND CX 1000(5)	a Gary, Ind. a Columbia, S. C.	Kennefh Shirk, Ch. Eng. Floyd Rodgers, Prog. Dir.
	a Miami, Fla.	Norman MacKay, Prog. Dir.
570 kcs. (526 m.)		
2,,,,,,	a Holguin, Cuba a Fort Worth, Tex.	Harold V. Hough, Mor.
KMTR 1000	Los Angeles, Calif.	Harold V. Hough, Mgr. Kenneth Tinkham, Mgr.
KVI C 5000 TI5CV 575 100	z Alaieula, Costa Rica	J. W. Wallace, Ch. Eng. Carlos Vidache A.
WKBN C1 500(1)	Youngstown, Ohio	A. O. Hardy
		F. Hapton
WNAX C 1000(5)	a Yankton, S. Dak.	Clifton Todd, Ch. Eng A. Hammerschmidt, Ch. Eng.
WSYR B 1000	Suracuea N. Y	Armand G. Belle Isle Chi. Eng.
W W I V C 1000	Asheville, N. C.	G. B. Hoskins Ch. Eng.
580 kcs. (516.9 m.)	Prince Runort B C	Felix E. Batt
CHRC 100		renx E. Datt
	a Quebec, P. Q. a Toronto, Ont. a Fort William, Ont.	
CRI R	, o william, om	

CKUA F 500 KMU EN 5000 KSAC 2 500(1 WCHS 50015 WDBO 100(5 WIBW 10000(5 WILL D 5000 WTAG R 1000(5 XEMU 250) a Charleston, W. Va.) a Orlando, Fla.) a Topeka, Kans. a Urbana, III.	I. E. Dickinson, Ch. Eng. L. L. Longsdorf Prog Dir. Odes Robinson, Ch. Eng. G. Burnett Ben Ludy, Gen. Mgr. A. James Ebel, Ch. Eng. Lillian Murphy, Prog Dir.
590 kcs. (508.2 n		
CMCY 0 20000	- Hayana Cuba	
KHQ ER 5000 WEEL C 5000 WKZO B 1000 WOW R 5000	a Spokane, Wash. a Boston, Mass. a Kalamazoo, Mich. a Omaha. Nebr.	Harvey Wixson, Mgr. Margaret Grady John Fetzer, Gen. Mgr. Wm. Kotera, Ch. Eng.
600 kcs. (499.7 n	1.)	
CFCF BF 500 CFOC F 1000 CJOR 1000 FON 609 250 KFSD BX 1000 TIGPH 605 WCAO C 500(1 WICC BM 500(1 WMT BM 1000(5) WREC C 1000(5)	f Bridgeport, Conn. a Cedar Rapids, Iowa	Kenneth Paul, Ch. Eng. A. A. Murphy, Gen. Mgr. D. E. Laws, Mgr. G. Salomon Leah McMahon, Prog. Dir. Gonzalo Pinto H. Mary Lewis Garo Ray C. F. Quentin, Ch. Eng. S. D. Wooten Jr., Ch. Eng.
610 kcs. (491.5 n	1.)	
CHNC F 1000 CMJN O 1000 KFAR 1000 KPRC M 5000 WCLE DM 500 WDAF R 5000 WIOD NX 1000 WIP 5000 WMUR P 1000(5	a New Carlisle, P. Q. a Camaguey, Cuba z Fairbanks, Alaska b San Francisco, Calif. a Cleveland, Ohio a Kansas City, Mo. a Miami, Fla. a Philadelphia, Pa.	Dr. Charles Houde, owner A. E. Lathrop, owner Ward Ingrim, Mgr. E. L. Gove, Tech. Sup. A. Curl Ruth Richardson James Allen Prog. Dir.
620 kcs. (483.6 m	1.)	
KGW R 1000 (5 KTAR ENX 1000 KWFT 250 (1 TIPG 625 5000 WAGE P 1000 (5 WH)B D 250 WHBZ MN 500 (1 WSUN N 1000 (5 WH)B N 1000 (5 W	a Phoenix, Ariz. z Wichita Falls, Tex. b San Jose Costa Rica z Salina, N. Y. a Tampa, Fla. a Greensburg, Pa. a Bangor, Maine 5) a St. Petersburg, Fla.	H. C. Singleton, Ch. Eng. Richard Lewis, Mgr. D. A. Kahn, Mgr. Claudia Hartinos W. Walter Tison, Mgr. Walter McCoy, Ch. Eng. Lucille Weeks Louis Link, Ch. Eng. Don Abert, Mgr.
WTMJ 1000 (5		Don Abert, Mgr.
CFCO F 1000 CJRC F 1000 CKOV F 1000 KFRU 1NXZ 5000 KGFX D 2000 KVOD B 1000 WGBF 1NXZ 5000 CKEZ 2000	a Chatham, Ont. a Charlottetown, P. E. I. a Winnipeg, Man. a Kelona, B. C. a Havena, Cuba a Columbia, Mo. a Pierre, S. Dak. a Reno, Nev. a Denver, Colo.	John Beardall John Q. Adams, Ch. Eng. G. A. Titus, Mgr. James Browne, Ch. Eng. J. Benitez, Mgr. Robert Haigh, Ch. Eng. Merie Snider, Prog. Dir. T. C. Ekrem, Mgr. Pat Roper, Prog Dir. A. E. Johnson, Ch. Eng. Margaret O'Rourke Jorge Palomeque
640 kcs. (468.5 r		
CMKN 0 1000 HOK KFI R 5000 VONF 12500 WHKC LM 500 WOI D 5000 XEBX 250 YSS 500	a Santiago, Cuba z Colon, Panama f Los Angeles, Calif. a St. John's, Nfld. a Columbus, Ohio a Ames, Iowa z Sabinas, Cosh. a San Salvador, E. S.	Dorothy Roe J. E. Anderson, Ch. Eng. W. E. Stewart, Ch. Eng. Benito Garzo O.

650 kcs. (461.3 m.)		
TIGPH P WSM N 50000	z San Jose, C. R. a Nashville, Tenn.	Gonzalo Pinto H. Harry Stone, Gen. Mgr.
660 kcs. (454.3 m.)		
KOWH BD 500 WEAF R 50000 XEAO 250	a Omaha, Nebr. a New York, N. Y. a Mexicali, B. Cfa.	W. F. Myers, Mgr. Audience Mail Dept.
670 kcs. (447.5 m.)		
WMAQ R 50000 XELO 50000	b Chicago, III. a. Tijuana, B. Cfa.	Audience Maif Dept,
680 kcs. (440.9 m.)		
KFEQ 500 (2.5) KPQ R 50000 VAS 685 2000	a St. Joseph, Mo. a San Francisco, Calif. f Glace Bay, N. S.	J. Wesley Koch, Ch. Eng. Audience Mail Supervisor
WLAW DX 1000 WPTF NX 5000 EP 5000	a San Francisco, Calif. f Glace Bay, N. S. a Lawrence, Mass. a Raleigh, N. C. z Santiago de Cuba	H. W. Brown Graham Poyner, Prog. Dir.
690 kcs. (434.5 m.)	9	
CFRB C 10000 CJCJ F 100 CMQ N 25000	a Toronto, Ont. a Calgary, Alta. a Hayana. Cuba	H. Sedgwick, Man. Dir. R. H. Henderson, Ch. Eng.
TIGH 1000 XET 5000	a Havana, Cuba b San Jose, Costa Rica a Monterrey, N. L.	Gonzalo Garcia
700 kcs. (428.3 m.)		
VOWR 500 WLW KN 50000 WBXO Exp 500000	b St. John's, Nfld. a Cincinnati, Ohlo a Cincinnati, Ohlo	Wilfred Guenther, Mgr. Wilfred Guenther, Mgr.
710 kcs. (422.3 m.)		
CMGH 200 KIRO CX 1000 KMPC CX 1000(5) WOR KM 50000	a Matanzas, Cuba a Seattle, Wash. a Beverly Hills, Calif.	H. J. Quilliam, Mgr. L. A. Schambin, Mgr. J. R. Poppele, Ch. Eng.
EP 5000	a Newark, N. J. z Santa Clara, Cuba	J. R. Poppele, Ch. Eng.
720 kcs. (416.4 m.)	a Mayana Cuba	
CMBL 5000 TI4NRH 725 750 WGN KM 50000 XEWE 20	a Havana, Cuba f Heredia, Costa Rica b Chicago, III. z Silao, Gto.	Amando Cespedes Marin Quinn A. Ryan, Gen. Mgr.
730 kcs. (410.7 m.)		
CFPL F 100 CJCA F 1000 CKAC C 5000	a London, Ont. a Edmonton, Alta. a Montreal, P. Q.	L. J. Yorke, Ch. Eng. W. T. Cranston, Mgr. Leonard Spencer Ch. Eng.
CMKU E 1000 XEQ 50000	a Victoria Tunas, Cuba a Mexico Clty, D. F.	J. M. Marroqui 🕕
740 kcs. (405.2 m.)		
KMMJ L 1000 KTRB D 250 WHEB D 1000	a Grand Island, Nebr. a Modesto, Calif.	Randall Ryan, Mgr. Don. R. Stevens
WHEB D 1000 WSB R 50000 XEH 250 XEPN AQ 50000	a Portsmouth, N. H. a Atlanta, Ga. a Monterrey, N. L. z Piedras Negras, Coah.	T. R. McTammany, Mgr. C. F. Dougherty, Ch. Eng. Consantine de Ternava
750 kcs. (399.8 m.)		
CMK 200	a Havana, Cuba	
KGU LN 2500 TING 375	a Honolulu, Hawaii z San Jose, Costa Rica	Marion A. Mulrony, Mgr. Narcisco Garcia
Page Sixty-six		

WJR C 50000 XEAA 200 XEAM 25 XEON 2000	a Detroit, Mich. a Mexicali, B. Cfa. z Matamoros, Tam. a Tijuana, B. Cfa.	Geraldine Elliott, Prog. Dir. Alberto Gonzalez Manuel L. Salinas
760 kcs. (394.5 m.)		
CMGN E 1000 CMKJ E 1000 KXA L 1000 WBAL HSX 2500 WCAL D2 5000 WEW D 1000 WJZ BS 50000 WLB D2 5000	Jovellanos, Cuba a Santa Clara, Cuba a Guantanamo, Cuba a Seattle, Wash. a Baltimore, Md. Northfield, Minn. a St. Louis, Mo. a New York, N. Y. a Minneapolis, Minn.	Florence Wallace, Mgr. Gerald Cooke, Ch. Eng. Milford Jensen, Ch. Eng. Geo. Rueppel, Ch. Eng. Audience Mail Dept. Waldemar Klima, Ch. Eng.
770 kcs. (389.4 m.)		
	a Lincoln, Nebr.	Mark W. Bullock, Tech. Dir.
KFAB CSXZ 10000 TiLJ 775 450 WBBM CS 50000	a Lincoln, Nebr. 2 San Jose, C. Rica a Chicago, III.	Lola Monje Peralta Frank Fligel
780 kcs. (384.4 m.)		
CHWK F 100	f Chilliwack, B. C.	Jack Pilling, Ch. Eng. W. E. Mason
CMBC 5000	a Sudbury, Ont. a Havana, Cuba	
KECA X 1000(5) KFDY D 1000	a Los Angeles, Calif. a Brookings, S. Dak.	Jack Gross, Mgr. S. W. Jones, Mgr. R. E. McDonald, Mgr.
KFOD 250	 Anchorage, Alaska Billings, Mont. 	R. E. McDonald, Mgr. Ed Yocum, Mgr.
WEAN BMX 1000(5)	a Providence, R. I.	Rose M. Powers J. C. Eggleston, Mgr.
WMC JR 5000 WPIC DX 250	a Sharon Pa.	John MacDonald, Eng.
WPRA 1000 (2.5) WTAR NX 1000 (5)	a Mayague, P. R. g Norfolk, Va.	Lee Chadwick, DX Correspondent
XEN 1000	Mexico City, D. F.	Guillermine de del Conde
790 kcs. (379.5 m.)		
KGO B 7500	a San Francisco, Calif.	Lloyd E. Yoder, Mgr.
KOAM DN 1000 WGY R 50000	a Pittsburg, Kans. a Schenectady, N. Y.	R. L. Jones, Eng. W. J. Purcell, Ch. Eng. K. P. Brown, Sec'y.
ZNS 1000	d Nassau, Bahamas	K. P. Brown, Sec'y.
800 kcs. (374.8 m.)		
HIX 800	a Trujillo, D. R.	J. R. Saladin
TIXD 1000 WBAP ENa 50000	z San Jose, Costa R. a Fort Worth, Texas	Andrea Venegas Ellen Flake, Sec'y.
WFAA ENa 50000	a Dallas, Texas a Cumberland, Md.	Adams Calhoun Geo. R. Lenhert, Ch. Eng.
WTBO D 250	a Cumbonand, Md.	
810 kcs. (370.2 m.)		
CMCF 5000 WCCO C 50000	a Havana, Cuba	Oscar Gutierrez Hugh McCartney Ch. Eng.
WNYC D 1000	g Minneapolis, Minn. a New York, N. Y.	Issac Brimberg, Ch. Eng.
XEBZ 100	a Mexico City, D. F.	••••
820 kcs. (365.6 m.)		
WHAS C 50000	a Louisville, Ky.	Lawrence Pohl Angel B. Fernandez
XEBG 1000	z Tijuana, B. Čfa.	Angel B. Fernandez
830 kcs. (361.2 m.)		
CMHI 0 10000	a Santa Clara, Cuba	••••
KELIO D 1000	a Clayton, Mo. a Denver, Colo.	T. E. Stepp
TIEP 3000	a San Jose, C. Rica a Reading, Pa. a Boston, Mass.	Eduardo Pinto H. M. Leonard Savage, Eng.
WEEU DN 1000 WHDH L 1000	a Boston, Mass.	M Breenshan
WRUF L 5000 XERC 500	a Gainesville, Fla. z Mexico City, D. F.	Joseph Weil, Ch. Eng. Carlos Dragome Narro
		D 6' 1-

Page Sixty-seven

840 kcs. (356.9 m.)			
CBL F 50000		Toronto, Ont.	W. C. Little, Ch. Eng.
VOGY 400 XERA 250000	8	St. John's, Nfld. Villa Acuna, Coah.	Don Howard
	_		
850 kcs. (352.7 m.)		Harris Coba	V. Monton
CMCM 200 KIEV D 250	a	Havana, Cuba Glendale, Calif.	V. Montes David H. Cannon
WHCU CD 1000 WKAR D 5000	a	Glendale, Calif. Itaca, N. Y. E. Lansing, Mich.	True McLean, Ch. Eng. Norris Grover, Ch. Eng. J. D. Bloom, Ch. Eng.
WWL C 50000	8	New Orleans, La.	J. D. Bloom, Ch. Eng.
860 kcs. (348.6 m.)			
CM1A 200	a	Camayuey, Cuba CMBL	Rafael Valdes
CMKS 200 TIEMC 250 WABC C 50000	Z	Guantanamo, Cuba San Jose, C. Rica New York, N. Y.	Rafael Hine Ch.
WABC C 50000 WHB DM 1000	4	New York, N. Y. Kansas City, Mo.	F. Donald Ickes M. H. Straight, Mgr.
XEMO 5000	ā	Kansas City, Mo. Tijuana, B. Cfa.	Fernando Federico Ferreira
870 kcs. (344.6 m.)			
CMJM 0 1000	a	Ciego de Avila, Cuba.	
WENR Ba 50000 WLS Ba 50000	8	Chicago, III.	T. L. Rowe, Ch. Eng.
XEFB 500	a	Monterrey, N. L.	Jesus Quintanilla
880 kcs. (340.7 m.)			
CBO F 1000	a	Ottawa, Ont.	Lillian E. de Olloqui
CFJC F 1000 CMX 10000	e	Havana, Cuba	Raoul Karman, Dir.
KFKA M2 1000 KLX 1000	a	Greeley, Colo	H. E. Green, Mgr. P. D. Allen, Mgr.
KPOF 2 1000	a	Kamloops, B. C. Havana, Cuba Greeley, Colo Oakland, Calif. Denver, Colo. Sherman, Texas	L. Irwine, Ch. Eng. Raoul Karman, Dir. H. E. Green, Mgr. P. D. Allen, Mgr. Wesley O. Lomlin, Annc'r.
KRRV M 1000 KVAN D 250	Z	Vancouver, Wash.	Paul W. Spargo, Ch. Eng.
KVAN D 250 TILS 500 WCOC C 1000	b a	Vancouver, Wash. San Jose, C. Rica Meridan, Miss. Scranton, Pa.	Paul W. Spargo, Ch. Eng. Luis Saenz Mata John B. Rogers, Ch. Eng. K. R. Cooke, Ch. Eng.
WGBI CI 500(1) WQAN 1 500(1)	f	Scranton, Pa.	K. R. Cooke, Ch. Eng.
WRNL B 1000	8	Scranton, Pa. Richmond, Va. Iowa City, Iowa	Walter R. Selden, Ch. Eng. Sylvanus Ebert, Ch. Eng.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	a	Towa City, Towa	Sylvanus Ebert, Ch. Eng.
890 kcs. (336.9 m.)			
KARK NX 1000 KFNF 2 500(1) KFPY C 5000	8	Little Rock, Ark. Shenandoah, Iowa	Jack Lewis, Prog. Dir. Wm. MacDonald, Com. Mgr. T. W. Symons, Mgr. Chas. P. Scott, Mgr. B. B. Brockett, Mgr. Ralph R. Townsley, Ch. Eng. Ben Akerman, Ch, Eng. Thomas Prior, Ch. Eng. J. R. Heck, Ch. Eng.
KFPY C 5000 KTKC M 1000	f	Spokane, Wash. Visalia, Callf. Vermillion, S. Dak.	T. W. Symons, Mgr. Chas. P. Scott, Mgr.
KUSD 2 500		Vermillion, S. Dak. W. Lafayette, Ind.	B. B. Brockett, Mgr.
WBAA X 500(1) WGST C 1000(5) WJAR RX 1000(5)	8	Atlanta, Ga.	Ben Akerman, Ch, Eng.
WBAA X 500(1) WGST C 1000(5) WJAR RX 1000(5) WMMN CX 1000(5)	8	Atlanta, Ga. Providence, R. I. Fairmont, W. Va. Mexico City, D. F.	J. R. Heck, Ch. Eng.
XEW 100000	a	Mexico Čity, D. F.	a
900 kcs. (333.1 m.)			
CMJX 200	a	Camaguey, Cuba Trujillo, D. R. Ketchikan, Alaska	Andres Cordero Puello
HIG 250 KGBU X 500		Ketchikan, Alaska	James A. Britton, Mgr. Lewis Allen Weiss, Mgr.
KHJ MX 1000 (5) KSEI N 250 (1)	a	Los Angeles, Calif. Pocatello, Idaho	R. A. Fletcher, Prog. Dir
TIAFB 600 WBEN RX 1000 (5)	Z	Pocatello, Idaho San Jose, C. Rica Buffalo, N. Y. Frederick, Md.	Mayid Borzuna Ralph Kingsley Ch Foo
WFMD D 500	a	Frederick, Md. Jacksonville, Fla.	R. A. Fletcher, Prog. Dir. Mayid Borzuna Ralph Kingsley, Ch. Eng. John A. Fels, Ch. Eng. Harry Cole, Mgr. Earl C. Hull, Ch. Eng. F. R. Calvert. Mgr.
WJAX N 1000(5)	a		Earl C. Hull, Ch. Eng.
WEBL D 5000 WPAT DP 1000	a	Oklahoma City, Okla. Stevens Point, Wis. Paterson, N. J.	
WIND 3 1000	2	Quincy, III.	Paul E. Miller, Ch. Eng.
910 kcs. (329.6 m.)			
CBF FN 50000 CJAT F 1000		Montreal, P. Q. Trail, B. C.	Francis Gondraner, Mgr.
CKY F 15000		Winnipeg, Man.	

Page Sixty-eight

CMKD 1000 XEFE 250 XENT Q 50000	a Santiago de Cuba a Nuevo Laredo, Tam. a Nuevo Laredo, Tam.	Francisco Meneau Rafael T. Carranza T. Yount, Mgr.
920 kcs. (325.9 m.)		
CMHT 200 CMZ 5000 KFEL MX 1000 KOMO RX 1000(5) KPRC EXR 1000(5) TIRS 925 200 WAAF D 1000 WORL D 500 WPEN X 1000 WSPA D 1000 WWY AX D 1000 WY AX D 1000 WY AX 1000 WY AX 1000 WY AX 1000 WY AX 1000(5)	z Trinidad, Cuba z Havana, Cuba Denver, Colo. a Seattle, Wash. Houston, Texas San Jose, C. Rica Chicago, Ill. Boston, Mass. Philadelphia, Pa. a Spartanburg, S. C. Detroit, Mich.	F. E. Soto del Valle Gene O'Fallon, Mgr. Lee Barnes, Aud. Mail Dept. Kery Tips, Mgr. Rogelio Sotela B. Wm. E. Hutchinson, Mgr. Geo. Luckey, Ch. Eng. E. S. Long, Ch. Eng. Ty Tyson
930 kcs. (322.4 m.)		
CFAC F 1000 CFCH F 100 CFLC 100 CHNS F 1000 CKPC 100 CMJF 500 KMA B 1000(5) KROW 1000 WBRC RX 1000(5) WDBJ CX 1000(5) WELI 250(.5)	a Calgary, Aita. a North Bay, Ont. a Prescott, Ont. halifax. N. S. a Brantford, Ont. camaguey, Cuba Shenandoah, Iowa Oakland, Calif. Birmingham, Ala. Roanoke, Va. a New Haven, Conn. Hermosillo, Son.	R. H. Thomson Vincente Salgado J. Rapp, Mgr. H. P. Drey, Mgr. James T. Milne, Mgr. Carlos Balderrama
940 kcs. (319 m.)	a riemosmo, son.	Carros Balderrama
KOIN C 5000 TIOS 500 WAAT DX 500 WAVE NX 1000 WCSH RX 1000(2.5) WDAY NX 1000(5) WHA D 5000 WICA D 1000 WKGA P 1000(5)	Portland, Ore. San Jose, C. Rica Jersey City, N. J. Louisville, Ky. Portland, Maine Fargo, N. Dak. Madison, Wis. Ashtabula, Ohlo Tampa, Fla.	B. J. Parrish, Mgr. Guillermo Castro S. Paul H. LaStayo, Mgr. G. Fred Crandon, Ch. Eng. Julius Hetland, Ch. Eng. C. A. Rowley
XEFO 5000	z Tampa, Fla. a Mexico City, D. F.	• • • •
950 kcs. (315.6 m.) CBV F 1000 CJRM F 1000 CKWX F 1000 CMHW 200 CMKL 200 KFWB E 5000 VOAR 25 WHAL DP 500 WRC RX 1000(5) WTRY D 1000	a Quebec, P. Q. a Regina, Sask. a Vancouver, B. C. f Santa Clara, Cuba Bayamo, Cuba Los Angeles, Calif. a Kansas City, Mo. 5 St. John's, Nfld. 5 Saginaw, Mich. a Washington, D. C. a Troy, N. Y.	Alberto Alvarez Ferrera Harry Maizlish, Mgr. Arthur B. Church, Mgr. K. H. Berkeley
960 kcs. (312.3 m.)		
CBM FR 5000 CFRN F 100 XEAW 100000	a Montreal, P. Q. B Edmonton, Alta. Reynosa, Tam.	H. D. Munat
970 kcs. (309.1 m.) CMCK 5000 KJR. B 5000 WCFL N 5000 WIBG L 1000	z Havana, Cuba a Seattle, Wash. a Chicago, fil. a Glenside, Pa.	Luis Casas R. Audience Mail Dept. Maynard Marquardt, Ch. Eng.
980 kcs. (306 m.) KDKA B 50000 XEAC 5000	b Pittsburgh, Pa. a Tijuana, B. Cfa.	A. E. Nelson Mgr. Jorge I. Revera
990 kcs. (302.8 m.) WBZ BS 50000 WBZA BS 1000 KENT 150000	a Boston, Mass. a Springfield, Mass. a Nuevo Laredo, Tam.	Dwight Myer, Ch. Eng. H. E. Randol, Mgr. T. Yount, Mgr.

1000 kcs. (299.8 m.)	1000 1 /200 6	,	
TIFA	CMKG 10000	_	
Nogales, Son. Nogales, Son	TIFA 250	a Los Angeles Calif	Frank Burke, Mgr. Francisco Ariel
1010 kcs. (296.9 m.)	XEAF 750	a Des Moines, Iowa	
CKCK F 1000 a Regina, Sask. CKCK F 1000 a Regina, Sask. CMBZ 5000 a Control of the same of the sam		a Aguascalientes, Ags.	
CKCK F 1000 a Regina, Sask. CKCC F 1000 a Oftawa, Ont. CKBZ 5000 a Havana, Cuba CKGG M2 1000 a Coffeyville, Kans. CKGG M2 1000 a New York, N. Y. CKEQ 5000 a New York, N. Y. CKEQ 5000 a New York, N. Y. CKEQ 5000 a Veracruz, Ver. C. 1020 kcs. (293.9 m.) CMHO 2000 z Camaguey. Cuba CKYV RX 10000 b Philadelphia, Pa. KYV RX 10000 a Camagne, Sub. CKLW FM 5000 a Vincer, Chh. CKLW FM 5000 a Camagne, Cuba CKKW 1000 a Tuscola, III. CKLW FM 5000 a Camagne, Cuba CKKW 1000 z Camaguey. Cuba CKKW 1000 a Tuscola, III. CKLW FM 5000 a Windsor, Ont. CKMAC P 100 z Santiago de Cuba CKMAC P 100 z Santiago de Cuba CKWJ HL 500 a Portland, Oran, CKYOS DM 200 a Portland, Oran, CKYOS DM 200 a Hartford, Conn. CKYOS DM 500 a Hartford, Conn. CKYOS DM 5000 a Santiago de Cuba CKY)	
CMBZ KGGF M2 1000 a Havana, Cuba Coffeyville, Kans. Hugh J. Powell Coffeyville, Kans. Coffeyville, Kans. Coffeyville, Kans. Hugh J. Powell C. S. Harper, Mgr. KQW M 5000 a San Jose, Calif. C. S. Harper, Mgr. T. M. Beaird, Prog. Dir. Pedro L. Diaz WNAD 2 1000 a Knowville, Tenn. T. M. Beaird, Prog. Dir. Pedro L. Diaz Fernando Pazos S. 1020 kcs. (293.9 m.) Z Cienfuegos, Cuba C. Cuba C. Camaguey, Cuba C. Cuba	CKCK F 1000	a Regina, Sask.	
New York, N. Y. Norman, Okla. Norman, Ok	CHIRT	a Havana, Cuba	
WNOX C 1000 (5) a Knoxville Tenn. XEFQ Simple Si	KQW M 5000	a San Jose, Calif. a New York, N. Y.	C. S. Harper, Mgr.
Name	WNOX C 1000(5)	a Knoxville, Tenn.	T. M. Beaird, Prog. Dir. Pedro L. Diaz
CMHO CMJK RX 10000 RYW RX 10000 RY RY RX 10000 RY RY RX 10000 RY RY RX 10000 RY		a Veracruz, Ver. C.	Fernando Pazos S.
Camaguey, Cuba Cama	CMHO		
1030 kcs. (291.1 m.) CFCN F 10000 a Rimouski, P. Q. CKLW FM 5000 a Windsor, Ont. CMKW 1000 z Santiago de Cuba XEB 20000 a Mexico City, D. F. 1040 kcs. (288.3 m.) KRLD C 50000 a Mexico City, D. F. 1040 kcs. (288.3 m.) KRLD C 50000 a Mexico City, D. F. 1050 kcs. (288.3 m.) KRLD C 50000 a Mexico City, D. F. 1060 kcs. (288.3 m.) CHANCEL C SOUND A Mexico City, D. F. 1070 kcs. (288.3 m.) CHANCEL C SOUND A Mexico City, D. F. 1080 a Portland, Ore. CHANCEL C SOUND A Harfford, Conn. CHANCEL C SOUND A Harfford, Conn. CHANCEL C SOUND A Matanzas. Cuba 1050 kcs. (285.5 m.) CBA F 50000 a Sackviiie, N. B. CMCH 200 z Guanabacoa, Cuba CMCK 200 z Guan	CMJK 200 KYW RX 10000	z Camaguey, Cuba b Philadelphia, Pa.	2233
CFCN F 10000 a Rimouski, P. Q. CKLW FM 5000 a Windsor, Ont. CMKW 1000 z Santiago de Cuba CMAC P 100 z Santiago de Cuba CMAC P 1000 z San Jose, C. Rica CMAC P 1000 z San Jose, C. Rica Given Boyd Guillermo Zuniga R. 1040 kcs. (288.3 m.) KRLD C 50000 a Dallas, Texas Given Boyd Ari Morey, Ann'cr. John W. Crews, Mgr. VOCM 1000 z St. John's, Nfid. WTIC R 50000 a Hartford, Conn. P 1000 z Matanzas. Cuba 1050 kcs. (285.5 m.) CBA F 50000 a Havana, Cuba CMCC 200 z Guanbabcoa, Cuba CMCC 200 z Guanbabcoa, Cuba CMCC 200 z Guanbabcoa, Cuba Wichita, Kans. KNX C 50000 a Wichita, Kans. KNX C 50000 a Wichita, Kans. KNX C 50000 a Los Angeles, Calif. WEAU L2 1000(5) a Eau Claire, Wis. WIBC D 1000 a Indianapolis. Ind. 1060 kcs. (282.8 m.) KTHS HN 10000 a Hot Springs, Ark. VOAC 1065 40 z St. John's, Nfid. WJAG L 1000 a Baltimore, Md. WJAG L 1000 a Baltimore, Md. WJAG L 1000 a San Francisco, Calif. WJAG L 1000 a San Francisco, Calif. San Jose, C. Rica Miriom Ford, Traffic Dept. Oscar Martinez N, May Draxell	1471	a Tuscola, III. a Juarez, Chih.	Mark C. Spies, Ch. Eng. Pedro Meneses, Jr.
CJBR F 1000 a Rimouski, P.Q. CKLW FM 5000 a Windsor, Ont. CKLW FM 5000 z Santiago de Cuba CMAC P 100 z Pinar Del Rio, Cuba TIHO 500 z Santiago de Cuba CMBE 20000 a Mexico City, D. F. 1040 kcs. (288.3 m.) KRLD C 50000 a Dallas, Texas Amexico City, D. F. KRLD C 50000 a Portland, Ore. KYOS DM 250 a Merced Calif. YoCM 100 z St. John's, Nfld. WTIC R 50000 a Harlford, Conn. T. C. McCray 1050 kcs. (285.5 m.) CBA F 50000 a Havana, Cuba T. C. McCray 1000 c MCX 200 z Guanabacoa, Cuba CMCX 200 z Trujillo, D R. KFBI LX2 5000 a Wichita, Kans. Los Angeles, Calif. WEAU L2 1000(5) a Eau Claire, Wis. Indianapolis, Ind. 1060 kcs. (282.8 m.) KTHS HN 10000 a Hot Springs, Ark. Wis. WIBC D 1000 a Baltimore, Mgr. Mary F. Loyd, Sec'y. St. John's, Nfld. Baltimore, Mgr. Art Thomas, Mgr. Mary F. Loyd, Sec'y. San Jose, C. Rica Miriom Ford, Traffic Dept. Oscar Martinez N, May Draxell			
CMKW 1000 z Santiago de Cuba Cidado Cidado Alvarez Soriano Cidado Cida	CJBR F 1000	a Caigary, Alta, a Rimouski, P. Q.	
1040 kcs. (288.3 m.) KRLD C 50000 KWJJ HL 500 a Portland, Ore. KYOS DM 250 a Merced, Calif. VOCM 100 z St. John's, Nfld. WTIC R 50000 a Hartford, Conn. P 1000 z Matanzas, Cuba 1050 kcs. (285.5 m.) CBA F 50000 a Havana, Cuba CMCX 200 z Guanabacoa, Cuba CMCX 1000 a Wichita, Kana, KKRJ LX2 5000 a Wichita, Kana, KNX C 50000 a Los Angeles, Calif. WFAU L2 1000(5) a Eau Claire, Wis. WFAU L2 1000(5) a Eau Claire, Wis. WFAU L2 1000 a Indianapolis, Ind. 1060 kcs. (282.8 m.) KTHS HN 10000 a Baltimore, Md. WJAG L 1000 A Baltimore, Md. WJ	CMKW 1000	z Santiago de Cuba z Pinar Del Rio, Cuba	Claudio Alvarez Soriano
RRLD	TIHO 500	z San Jose, C. Rica a Mexico City, D. F.	
Note	1040 kcs. (288.3 m.)		
VOCM	KRLD C 50000	a Dallas, Texas	Given Boyd
1050 kcs. (285.5 m.) CBA F 50000 a Sackviile, N. B. CMCH 200 a Havana, Cuba CMCX 2000 z Guanabacca, Cuba CMKW 1000 z—Santiago de Cuba HIT 50 z Trujillo, D. R. KFBI LX2 5000 a Wichita, Kans. KNX C 50000 a Los Angeles, Calif. WEAU L2 1000(5) a Eau Claire, Wis. WIBC D 1000 a Indianapolis, Ind. 1060 kcs. (282.8 m.) KTHS HN 10000 a Beltimore, Md. WBAL BMX 10000 a Beltimore, Md. WBAL BMX 10000 a Beltimore, Md. WIAG L 1000 a Norfolk, Nebr. 1070 kcs. (280.2 m.) CMJW 200 z Camaguey, Cuba KJBS L 500 a San Jose C. Rica WCAZ D 100 a Carthage, III. WTAM R 50000 a Carthage, III. May Draxell	KYOS DM 250	a Merced, Calif. z St. John's, Nfld.	John W. Crews, Mgr.
CBA F 50000 a Sackville, N. B. CMCH 200 a Havana, Cuba CMCX 200 z Guanabacoa, Cuba CMKW 1000 z—Santiago de Cuba HIT 50 z Trujillo, D. R. KFB1 LX2 5000 a Wichita, Kana. KNX C 50000 a Los Angeles, Calif. WEAU L2 1000(5) a Eau Claire, Wis. WIBC D 1000 a Indianapolis, Ind. 1060 kcs. (282.8 m.) KTHS HN 10000 a Hot Springs, Ark. VOAC 1065 40 z St. John's, Nfld. WBAL BMX 10000 a Baltimore, Md. WJAG L 1000 a Norfolk, Nebr. 1070 kcs. (280.2 m.) CMJW 200 z Carnaguey, Cuba KJBS L 500 a San Jose C. Rica WCAZ D 100 a Carthage, III. WTAM R 50000 a Cleveland, Ohio May Draxell	WTIC R 50000 P 1000	a Hartford, Conn.	
CMCH 200 a Havana, Cuba Cuba Cumba 200 z Guanabacoa, Cuba Cuba CMCX 2000 z Santiago de Cuba Cuba CMCX 1000 z Trujillo, D R. KFBI LX2 5000 a Wichita, Kans. KNX C 50000 a Los Angeles, Calif. WEAU L2 1000(5) a Eau Claire, Wis. WIBC D 1000 a Indianapolis, Ind. 1060 kcs. (282.8 m.) KTHS HN 10000 a Hot Springs, Ark. VOAC 1065 40 z St. John's, Nfld. WBAL BMX 10000 a Baltimore, Md. WBAL BMX 10000 a Baltimore, Md. WJAG L 1000 a Norfolk, Nebr. 1070 kcs. (280.2 m.) CMJW 200 z Camaguey, Cuba KJBS L 500 a San Francisco, Calif. Miriom Ford, Traffic Dept. Oscar Martinez N, WAM R 50000 a Carthage, III. May Draxell	1050 kcs. (285.5 m.)		
CMKW 1000 z—Santiago de Cuba HIT 50 z Trujillo, D R. KFBI LX2 5000 a Wichita, Kans. KNX C 50000 a Los Angeles, Calif. WEAU L2 1000(5) a Eau Claire, Wis. WIBC D 1000 a Indianapolis, Ind. 1060 kcs. (282.8 m.) KTHS HN 10000 a Hot Springs, Ark. VOAC 1065 40 z St. John's, Nfld. WBAL BMX 10000 a Baltimore, Md. WJAG L 1000 a Norfolk, Nebr. 1070 kcs. (280.2 m.) CMJW 200 z Camaguey, Cuba KJBS L 500 a San Jose C, Rica WCAZ D 100 a Carthage, Ill. WTAM R 50000 a Cleveland, Ohlo MA L. Pichardo Donald Thornburgh, Mgr. L. H. Bowman Mary F. Loyd, Sec'y. Mary F. L	CMCH 200	a Havana, Cuba	
KRBI LX2 5000 a Wichita, Kans. C 50000 a Los Angeles, Calif. Eau Claire, Wis. H. Bowman 1060 kcs. (282.8 m.) KTHS HN 10000 a Hot Springs, Ark. VOAC 1065 40 z St. John's, Nfld. WBAL BMX 10000 a Baltimore, Md. WJAG L 1000 a Norfolk, Nebr. Md. Art Thomas, Mgr. Art Thomas, Mgr. Mgr. Mgr. Mgr. Mgr. Mgr. Mgr. Mgr.	CMKW 1000	z-Santiago de Cuba	A I Pichardo
TOGO kcs. (282.8 m.) KTHS HN 10000 a Hot Springs, Ark, VOAC 1065 40 z St. John's, Nfld. WBAL BMX 10000 a Baltimore, Md. WJAG L 1000 a Norfolk, Nebr. Mary F. Loyd, Sec'y. Gerald Cooke, Ch. Eng. Art Thomas, Mgr. TOTO kcs. (280.2 m.) CMJW 200 z Camaguey, Cuba KJBS L 500 a San Francisco, Calif. TINBC P 5000 z San Jose C. Rica WCAZ D 100 a Carthage, Ill. WTAM R 50000 a Cleveland, Ohlo May Draxell	KFB1 LX2 5000 KNX C 50000	a Wichita Kane	Donald Thornburgh, Mgr.
KTHS HN 10000 a Hot Springs, Ark, VOAC 1065 40 z St. John's, Nfld. WBAL BMX 10000 a Baltimore, Md. WJAG L 1000 a Norfolk, Nebr. 1070 kcs. (280.2 m.) CMJW 200 z Camaguey, Cuba KJBS L 500 a San Francisco, Calif. TINBC P 5000 z San Jose C. Rica WCAZ D 100 a Carthage, Ill. WTAM R 50000 a Cleveland, Ohlo May Draxell Mary F. Loyd, Sec'y. Gerald Cooke, Ch. Eng. Art Thomas, Mgr. M. Caymares Silva Miriom Ford, Traffic Dept. Oscar Martinez N. May Draxell	WEAU L2 1000 (5)	a Eau Claire, Wis. a Indianapolis, Ind.	
VOAC 1065 40 z St. John's, Nfld. WBAL BMX 10000 a Baltimore, Md. WJAG L 1000 a Norfolk, Nebr. Gerald Cooke, Ch. Eng. Art Thomas, Mgr. 1070 kcs. (280.2 m.) CMJW 200 z Camaguey, Cuba KJBS L 500 a San Francisco, Calif. TINBC P 5000 z San Jose C. Rica WCAZ D 100 a Carthage, ill. WTAM R 50000 a Cleveland, Ohlo May Draxell	1000		
WJAG L 1000 a Norfolk, Nebr. Art Thomas, Mgr. 1070 kcs. (280.2 m.) CMJW 200 z Camaguev, Cuba KJBS L 500 a San Francisco, Calif. TINBC P 5000 z San Jose C. Rica WCAZ D 100 a Carthage, Ill. WTAM R 50000 a Cleveland, Ohio May Draxell	VOAC 1065 40	z St. John's, Nfld,	·
CMJW 200 z Camaguey, Cuba M. Caymares Silva KJBS L 500 a San Francisco, Calif. Miriom Ford, Traffic Dept. TINBC P 5000 z San Jose C. Rica Oscar Martinez N. WCAZ D 100 a Carthage, III. May Draxell		a carring of the	Art Thomas, Mgr.
KJBS L 500 a San Francisco, Calif. TINBC P 5000 z San Jose C. Rica WCAZ D 100 a Carthage, Ill. WTAM R 50000 a Cleveland, Ohio May Draxell			
WCAZ D 100 a Carthage, III. WTAM R 50000 a Cleveland, Ohio May Draxell	KJBS L 500	a San Francisco, Calif.	Miriom Ford, Traffic Dept.
Page Seventy	WCAZ D 100	a Carthage, III.	••••
	Page Seventy		

1000 KC3.	(2),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
CMCG	200	a Havana, Cuba	
CMKM	200	a Manzanillo, Cuba a Charlotte, N. C. a Chicago, III.	Jesus Armesto
WBT C	50000	a Charlotte, N. C.	• • • •
WCBD LI	5000	a Chicago, III.	A P Fore Ch For
WMBI LI	500 0	g Chicago, III. z Guzman, Jal. z Nuevo Laredo, Tam. a Mexico City, D. F.	A. P. Frye, Ch. Eng Javier Velasco J. M. Cortes
XEBA	20	z Guzman, Jai.	I M Cortes
XEBK	100	z Nuevo Laredo, Iam.	
XEDP	500	a Mexico City, D. F.	
	(0.55.)		
1090 kcs.	(275.1 m.)		
CMHA	200	z Sagua la Grande, Cuba	Abelardo Menocal
HIN	100	7 Truiillo D R	J. M. Bonetti
KMOX C	50000	z Trujillo, D. R. a St. Louis, Mo. a Tijuana, B. Cfa.	J. M. Bonetti G. L. Tevis, Ch. Eng.
XERB	50000	a Tijuana, B. Cfa.	
ALIKE	,,,,,,		
1100 1	(272 C)		
IIUU KCS.	(272.6 m.)		
CBR F	5000	a Vancouver, B. C.	
CMHP	5000 200	z Placetas, Cuba	
KGDM DM	1000	f Stockton, Calif.	A. H. Green, Mgr.
KWKH C	50000	a Shreveport, La.	John McCormack, Mgr.
WCAR DP	1000	z Pontiac, Mich.	
wov x	5000	z Pontiac, Mich. a New York, N. Y.	S. H. Alper
1110 kgs	(270.1 m.)		
1110 kcs.	(270.1 m.)		
CMCU	5000	a Hayana, Cuba	
CMKH	200	z-Guantanamo, Cuba	
KSOO LN	200 5000 5000	a Sioux Falls, S. Dak. a Richmond, Va.	* * * *
WRVA CM	50000	 Richmond, Va. 	M. D. Roddenbury
XECL	1000	z Mexicali, B. Cfa.	Alfonso A. Lacarra
1120 kcs	(267.7 m.)		
		Chi	
CBJ F	100	a Chicoutimi, P. Q. a Montreal, P. Q. a St. John, N. B.	
CHLP F	100	a Montreal, P. Q.	L. W. Bewick, Sec'y-Treas.
CHSJ F	1000	a St. John, N. B. a Hamilton, Ont.	L. W. Bewick, Sec y-Treas.
CKOC F	1000	a Hamilton, Ont. a Brandon, Man.	••••
CKX F CMGF	1000	a Matenzas Cuba	Bernabe de la Torre
CMGF	200	a Matanzas, Cuba a Spokane, Wash. a Los Angeles, Calif.	Arthur L. Smith, Mgr.
KFIO D	100	a Los Angeles, Calif.	Ruth Pritchard
KFSG a KRKD a	1000 (.5)	a Los Angeles, Calif.	Dr. Giles N. Knight, Mgr.
KKKU a	500(1)	a Salina Kans.	
KSAL	1000	a Seattle, Wash.	
KSAL KRSC E KTBC DG2	1000		
WCOP D	500	a Boston, Mass. a Wilmington, Del. a Milwaukee, Wis.	
WDEL R	250(17	a Wilmington, Del.	
WISN C	250(1)	a Milwaukee, Wis.	
WIBO BX	500	a Baton Rouge, La. a New Kensington, Pa. a College Station, Texas	C. R. Cooper
WKPA D	250 500	a College Station Taxas	C. IX. Cooper
WTAW G2X	500	a College Station, Texas	
	12CE 2 1		
1130 kcs.	(265.3 m.)		
CMJI	200	 Ciego de Avila, Cuba 	Gilberto Gesse Lopez
KSL C	50000	a Salt Lake City, Utah a Chicago, III.	E. G. Pack; Earl J. Glade
בונאי ב	20000	a Chicago, III.	J. L. Allabough
XEJP	20000 100	z Mexico City, D. F.	Salvador Monterrubio R.
			.4
1140 k	(263 m.)		
1140 KC8.		0 11 0 1	
CMKY	5000	z Santiago, Cuba	Wm. B. Way, Mgr.
KVOO N	25000	a Tulsa, Okla.	N. McFarland
WAPI C	5000	z Santiago, Cuba a Tulsa, Okla. a Birmingham, Ala. a Springfield, Mass.	Hillis W. Holt
WSPR LMZ	500	a Springfield, Mass.	1 11113 17. 11011
1150 L	(260 7 m)		
I I DU KCS.	(260.7 m.)		
CMBO	5000	a Havana, Cuba	John I John Ch Eng
WHAM N	50000	a Rochester, N. Y.	John J. Long, Ch. Eng.
XEBP	250	z Durango, Dgo.	Manual Cano M
YFC	250 100 300	a Havana, CUDa Rochester, N. Y. Durango, Dgo. Tijuana, B. Cfa. Minatitian, Ver. C. Mexico City, D. F.	Manuel Cano M. Luis F. Encisco Hector Silva Canto
XEDW	300	A Mexico City D F	Hector Silva Canto
XEL	258	z Oaxaca, Oax.	····
XEXH	400	- Veneue, ven	
			Page Seventy-or

1080 kcs. (277.6 m.)

	1160	kcs.	(258.5 m.)			
	CMHJ			a	Clenfuegos, Cuba	Richardo Ugalde
	KEX	B		а	Clenfuegos, Cuba Portland, Oreg.	H. C. Singleton, Ch. Eng.
	WOWO	B1 C1	5000	2	Fort Wayne, Ind. Wheeling, W. Va.	E A. Hadden, Eng.
	XEAS		100	ä	Saltillo, Coah.	Manuel R. Rodriguez
	XED	100	2500	a	Guadalajara, Jal.	• • • •
	XEFM KEP	:::	500	Z	Leon, Gto. Juarez. Chih.	Estaban Dorre
			_	-	Juarez. Crim.	Estaban Perra
	1170		(256.3 m.)		Dhii dada	1.6.1-224
	WCAU	C	50000 1000	ž	Philadelphia, Pa. Mexico City D. F.	J. G. Leitch
		k.a	(254.1 m.)	-	Mexico City D. F.	••••
		NCS.				
	CMBX	• • •	1.50 0 200	a a	Havana, Cuba Havana, Cuba	
	KOB	NX	10000	a	Albuquerque, N. Mex.	T. M. Pepperday, Mgr.
	WDGY	LMXZ	1000 (5)	a	Albuquerque, N. Mex. Minneapolis, Minn.	Dr. Geo. W. Young
	WINS	CL	1000 1000 (5)		New York, N. Y.	
				Ą	Macon Ga	****
		kcs.	(252 m.)			
	CMGH		500 200		Matanzas, Cuba	
	CMKX	EN	200 50000	Z	Banes, Cuba	Oscar Vidal Benitez
	WSAZ	LZ	1000	•	San Antonio, Texas Huntington W Va.	S. Swann
				-		3. 3#4111
		KCB.	(249.9 m.)			
	CHAB	F	100 (.25) 100	8 Z	Moose law, Sask.	A. E. Jacobson, Ch. Eng. G. Thomas Desjardins
	CITOD		100	-	St. Anne de la Pocatierre. P Q	G. Thomas Despardins
	CKNX	Ė	100		Wingham, Ont.	B. Howard Bedford, Asst. Mgr.
	CKTB	F	100 100		St. Catharines, Ont, Val d'Or, P. Q.	E .T. Sandell
	KADA	EM	250	Z	Ada Okla.	Warren Moore, Prog. Dir.
	KAST		250 250	ā	Astoria Ore,	Lawrence King, Ch. Eng. Jay P. Beard, Mgr.
	KBTM	N	100 (.25)		Jonesboro Ark.	Jay P. Beard, Mgr.
	KFDA	EM	250 250 250 250 250 250	8	Sioux Falls. S. Dak. Amarillo, Tex.	Joseph Henkin, Mgr.
	KFJB		250		Marshalltown, lowa	Homer Griffith, Mar.
	KFXD		250	•	Namna Idaho	Homer Griffith, Mgr. Edward Hurt, Mgr.
	KFXJ KGDE		250		Grand Junction, Colo.	Kex Howell, Mar.
	KGEK	ją.	100 (.25) 100	Ь f	Sterling Colo	Mat E. Wakz, Ch. Eng. Elmer G. Beehler
	KGFJ		100	a	Grand Junction, Colo. Fergus Falls, Minn. Sterlino Colo. Los Angeles Calif. Little Rock, Ark.	Thelma Kirchner, Prog. Dir. Orville Rennie, Mgr.
	KGHI KHAS	• • •	250 250		Little Rock, Ark.	Orville Rennie, Mgr.
	KHBC	ĊM	250 250	a •	Hastings, Nebr. Hilo, Hawall	Webley Ewards, Mgr.
	KMLB	P	250 250		Monroe 1 a	J. C. Liner, Jr., Mgr.
	KODL		100(.25)	Z	The Dalles, Oreg. Marshfield, Ore.	
	KOOS KPHO	MA	250 250	8	Phoenix Ariz	Roger L. Spaugh, Ch. Eng.
	KSUN	Ë	250	ã	Phoenix, Ariz. Lowell, Ariz.	Carleton W. Morris, Mgr.
	KVCV	M	250	8		Harold Smithson, Mar.
	KVEC	M	250 250		San Luis Obispo, Calif.	Earl Travis, Ch. Eng. J. M. Reeder, Ch. Eng.
	KVOS	· M	250 250 250 250 250 250	á	Logan, Utah Bellingham, Wash. Stockton, Calif. Winona, Minn.	J. M. Reeder, Ch. Eng.
	KWG	BE	100		Stockton, Calif.	George Ross, Mgr.
	KWNO TIRCC	Ε	250 500		Winona, Minn.	A. E. Mickel, Mgr.
	WABI	Ċ	250	Z.	Bangor Maine	Carlos Borge Ralph Wallace Mar
	WAIM		100 250	ā	Anderson, S. C.	Ralph Wallace, Mgr. Cecil Crawford
	WAJR	P	250	Z	San Jose, C. Rica Bangor, Maine Anderson, S. C. Morgantown, W. Va.	
í	WBAB		250	8	Waycross, Ga.	Jack Williams
	WBBZ	M	250 250	8	Waycross, Ga. Atlantic City, N. J. Ponca City, Okla. Huntsville, Ala.	Don Mitchell, Ch. Eng.
	WBHP	M X P	100		Huntsville, Ala.	
	WBLJ	P N	100 250 250	Z	Daeton, Ga. Terre Haute Ind	
	WCAT	Ď	100	a	Rapid City, S. Dak.	C. M. Rowe, Prog. Dir.
	WCAX	Č	250 250	ā	Daeton, Ga. Terre Haute, Ind. Rapid City, S. Dak. Burlington, Vt. Roanoke Rapids, N. C.	James Tierney, Ch. Eng.
	WCED	P	250 2 50	Z	Roanoke Rapids, N. C.	
	WCED WCLO					Charles Brannen, Ch. Eng.
	WCOL	Ň	25¢ 250 250	a	Columbus, Ohio	****
	WCPO		250	8	Janesville, Wis. Columbus, Ohio Cincinnati, Ohio Panama City, Fla.	Glen A. Davis, Ch. Eng.
,	WDLP	•••	100 (.25)	8	ranama City, Fla.	

WDSM	M	160 250 250 100 250 250 250 250 250 250 250 2	z	Superior, Wis.	Fred A. Baxter
WEST	M	250	ď	Superior, Wis. Elmira, N. Y.	
WEST	M	100	4	Easton, Pa. Salem, Mass.	J. E. Mathiot, Ch. Eng.
WEAM	4	100	a	South Bend, Ind.	Al Todd; Paul Mangus
WETC		250	a	Kinston N. C.	Jonas Weiland
WGRB WHBC WHBY	M	250	a	Grand Rapids, Mich. Canton, Ohio	Kenneth Sliker, Ch. Eng.
WHBY	E	250	a	Appleton, Wis.	W. J. Stangel, Ch. Eng.
WHOP	خ.٠٠	250 250	a	Hopkinsville, Ky.	David Foote Ch. Fng.
WIL		250	a	Utica, N. Y. St. Louis, Mo.	David Foote Ch. Eng. C. H. Stoup, Ch. Eng. A. M. McGregor
WJBC		250	a	Bloomington, III.	A. M. McGregor
WIHL	xż	· 250	8	New Orleans, La. Johnson City, Tenn. W. Palm Beach, Fla.	Charles C. Carlson O. K. Garland, Ch. Eng.
MINO	C	250		W. Palm Beach, Fla.	
WJOB WJRD	4	100	a	Hammond, Ind.	Randolph Bean, Prog. Dir.
WKBO WLOF	Z	250	a	Harrisburg, Pa.	Reginald B. Martin Randolph Bean, Prog. Dir. James R. Doss, Jr. Charles Myers, Ch. Eng. Sid Tear, Annc'r. J. T. Orch, Eng. E. J. Day, Ch. Eng. A. B. Quigley Hollis F. Hayes, Ch. Eng. O. Lee Stone Oliver Hely, Ch. Eng.
WLOF	P	250	Z	Orlando, Fla.	Cid Torr Armete
WLOG	D	250	a	Logan, W. Va.	J. T. Orch. Eng.
WMFR	• • •	2 50	a	High Point, N. C.	E. J. Day, Ch. Eng.
WMOB WMPC	314	250	a	Mobile, Ala.	A. B. Quigley
WOLS	N	250	a	Florence S. C.	O. Lee Stone
WRBL	Ç	250	a	Columbus, Ga.	O. Lee Stone Oliver Hely, Ch. Eng.
WSAM WSKB	G	250	a	Saginaw, Mich. McComb, Miss. Sault Ste. Marie, Mich. Hartford, Conn. Toledo, Ohio	
W500		100 (25):	a	Sault Ste. Marie, Mich.	
WTHT	M	250	a	Hartford, Conn.	Richard K. Blackburn
WTOL	Р	250	Z.	Baltimore, Md.	Frank B. Ridgeway
1010		(b a m a			
1210	KCS.				
CHLT		100	z	Sherbrooke, P. Q.	Marcel Provst, Mgr. Frank M. Squires Gerald Prest
CKBI	FX	50 250		Stratford, Ont.	Frank M. Squires
CKCH	F	50 250 100 50	5	Hulf, P. O.	Geraid Frest
CKMC	···	.50	•	Cobait, Offic.	R. L. MacAdam
CWCO		200	a a	Campbellton, N. B. Havana, Cuba	C. S. Chapman, Mgr.
CMHK		200 200	Z	Havana, Cuba Cruces, Cuba Havana, Cuba	R. G. Gonzalez
CMOA KALB	• • •	250		Alexandria I a	Virgil Evans, Prog. Dir.
KANS	N	250	•	Wichita, Kans.	Virgil Evans, Prog. Dir. Herbert Hollister, Mgr.
KASA KBIZ	M	1 00 100		Wichita, Kans. Elk City, Okla. Ottumwa, Iowa Devils Lake, N, Dak.	Lyman Brown, Prog. Dir.
KDLR		2 50	-	Devils Lake, N. Dak.	Merle Bjork, Ch. Annc'r.
KDON	. W	100	-	Monterey, Calif. Klamath Falls, Ore.	
KFJI KFOR KFXM	EMX M2 C	100 100(.25)	-	Lincoln, Nebr.	Don Searle, Mgr.
KFXM	M2	250		San Bernardino, Calif.	J. C. Lee, Mgr.
KGLO KGY	W	250 100	Z	Mason City, Iowa Olympia, Wash	W. R. Taft Mar.
KHBG		100(.25) 250 250 100 250	-	Okmulgee, Okla.	A. F. Schultz, Ch. Eng.
KIUL		100		Garden City, Kans.	F. D. Conard, Mgr.
KOCA		250 250		Monterey, Calif. Klamath Falls, Ore. Lincoln, Nebr. San Bernardino, Calif. Mason City, Iowa Olympia, Wash. Okmulgee, Okla. Garden City, Kans. Carlsbao, N. Mex. Kilgore, Texas	H. A. Degner, Mgr.
KOCA	EM	250 250 250 250 250	a	riovo, etan	
KPFA KPPC KROY	EN C	250 100		Helena, Mont. Pasadena, Calif.	E. B. Craney, Mgr. David Black, Mgr.
KROY	Ĉ	iŏŏ	-	Sacramento, Calif.	Milton Cooper, Ch. Eng. Paul W. Ross, Ch. Eng.
KVSO KWAT	M	100 100 100 (.25) 250	8	Ardmore, Okla. Watertown, S. Dak.	Paul W. Ross, Ch. Eng.
KWJB	• • •	250		Globe, Ariz.	Bartley Sims, Mgr.
KXOX KYUM		250 250	z	Sweetwater, Tex.	• • • •
WATN	E P	250 250 250 250 250	a Z	Globe, Ariz. Sweetwater, Tex. Yuma, Ariz. Watertown, N. Y.	••••
WBAX	AM 5 P 3	250 100 100 100 (25)	8		Drury Lenington, Prog. Dir.
WBBL	P	100 (25)	Z	Knowille Topp	• • • •
WBRB	3	100	а	Red Bank, N. J.	3 1 1 1 1 1 m m
wcou	M	100 250	a '	Lewiston, Maine	Leslie Hall, Ch. Eng.
WCOV WCRW	4	100 100	Z	Chicago, III.	Clinton R. White
WEBO		250		Harrisburg, III.	J. R. Tate, Ch. Eng.
WEDO	• - :	250		Chianna III	Calob Frick Ch Eng
WEDC WFAS	G4 3	250 250 250 250		Harrisburg, III. Chicago, III. White Plains, N. Y.	Leslie Hall, Ch. Eng. Al Thompson, Ch. Eng. Clinton R. White J. R. Tate, Ch. Eng. Caleb Frisk, Ch. Eng. Frank Seitz Bradley Overton, Ch. Eng.

Page Seventy-three

WFTM		25 0		Ft. Myers, Fla.	
WGAC	P	250	a	Augusta, Ga.	* * * *
WGBB WGCM	3	100		Freeport, N. Y.	Harry H. Carman C. H. Dyess, Ch. Eng.
WGCM		250 250		Freeport, N. Y. Gulfport, Miss.	C. H. Dvess, Ch. Eng.
WGGM	P	25 0	z	Gainesvile, Ga. Greenwood, Miss. Greenfield, Mass.	C 2,000, C 2g.
WGRM		250	8	Greenwood, Miss.	C. A. Perkins, Ch. Eng.
WHAI	M	250	-	Greenfield, Mass.	James I Spates Mor
WHBU		250 250 250 250	ā	Anderson, Ind. Zanesville, Ohio Povnette, Wis. Louisville, Ky. Gadsden, Ala. Hacerstown, Md.	James L. Spates, Mgr. R. F. Fulwider, Ch. Eng.
WHIZ	N	250	ā	Zanesville, Oblo	Ronald Woodyard, Mgr.
WIBU		250	ā	Povnette Wis	Konaid Woodyald, Mgi.
WINN		100(.25)	ā	Louisville Kv.	
WINN	Ë	250	ä	Gadedan Ala	Vernon Story, Ch. Eng.
WJEJ		250 250		Hagerstown, Md.	G. Harold Brewer
WILW	B	250	Z	Lansing Mich	Leo Yiba Ch Eng
WILS		250	ž	Lansing, Mich. Beckley, W. Va. Rice Lake, Wls. Jamestown, N. Y.	Leo Yiha, Ch. Eng. Joe L. Smith, Jr.
WIMC		250 250	ž	Dica I aka Wie	Walter McGenty
WJTN	B	250 250 250 100	â	Immertown N V	watter McGenty
WLW	й	250	-	Akron Ohio	Gone LeValle Proc Dir
WKOK	***	250	ā	Akron, Ohio	Gene LaValle, Prog Dir. Paul L. Miller, Eng. S. L. Gladfelter, Ch. Eng. Charles Persons, Ch. Eng.
WLOK	···×	100	ā	Sunbury, Pa. Lima, Ohio	C . Cladfolder Ch Eng
	^	350	:	Hibbing Minn	S. L. Gladfelter, Ch. Eng.
WMFG	С	250	_	Hibbing, Minn.	Charles Persons, Ch. Eng.
WOCB	• • •	250 250 100	a	Hyannis, Mass.	Francis M. Kadam
WOMT		100		Manitowoc, Wis.	Francis M. Kadow
WPAX	,	250	a	i nomasville, Ga.	H. Wimpy
WPID	. 5	250	а	Petersburg, Va.	5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
WRAL	M	250 250 250 250 250	а	Thomasville, Ga. Petersburg, Va. Raleigh, N. C. Rochester, N. Y.	R. E. Ritch
WSAY	M	250	a	Rochester, N. Y. Chicago, III.	Thurlow Greene
WSBC	G4	250 250		Chicago III	Ed Jacker, Ch. Eng.
WSIX	M	250		Nashville, Jenn.	James Turner
WSNJ		250		Nashville, Tenn. Bridgeton, N. J. Charoltte, N. C.	
WSOC	MNX	100 (.25)		Charoltte, N. C.	L. L. Caudle, Ch. Eng. Edward Ring, Ch. Eng. D. M. Dradham, Ch. Eng.
WTAX		100	8	Springfield, III.	Edward Ring, Ch. Eng.
WTMA	N	1 00 250	а	Springfield, III. Charleston, S. C.	D. M. Dradham, Ch. Eng.
XEAT		250 50	a	Parral, Chih.	David G. Cervantes
XEE		50	8	Durango, Dgo.	Alejandro O. Stevenson
XEFV		50	a	Durango, Dgo. Juarez, Chih.	Dario Cordoba
1220	KCS.	(245.8 m.)			
KFKU		1000 (5)	8	Lawrence, Kans.	Harold Ingham, Mgr.
14046	_				
KPAL		500	а	Port Arthur, Texas	Joe Walters Ch Fng
KPAC	BEX	500 500	-	Port Arthur, Texas Santa Barbara, Calif	Joe Walters Ch Fng
KTMS	BEX	500	z	Santa Barbara, Calif. Seattle, Wash	Joe Walters Ch Fng
KTMS KTW	BEX 2 2	500 1 0 00	z	Santa Barbara, Calif. Seattle, Wash. Pullman, Wash	Joe Walters Ch Fng
KTMS KTW KWSC	2	500 1000 1000(5)	Z 8	Santa Barbara, Calif. Seattle, Wash. Pullman, Wash	Joe Walters Ch Fng
KTMS KTW KWSC TIGPH	2 1225	500 1000 1000(5)	z a b	Santa Barbara, Calif. Seattle, Wash. Pullman, Wash	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H.
KTMS KTW KWSC TIGPH WCAD	1225 D	500 1000 1000(5) 1000 500	z a b a	Santa Barbara, Calif. Seattle, Wash. Pullman, Wash	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng.
KTMS KTW KWSC TIGPH WCAD WCAE	1225 D MR	500 1000 1000(5) 1000 500 500	z a b a	Santa Barbara, Callf, Seattle, Wash. Pullman, Wash. San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa.	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng. James Schultz, Ch. Eng.
KTMS KTW KWSC TIGPH WCAD WCAE WDAE	1225 D MR C	500 1000 1000(5) 1000 500 5000 5000	z a a b a a a	Santa Barbara, Callf, Seattle, Wash, Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fla.	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng.
KTMS KTW KWSC TIGPH WCAD WCAE WDAE WGNY	1225 D MR C	500 1000 1000(5) 1000 500 5000 5000	z	Santa Barbara, Callf, Seattle, Wash, Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fla.	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng. James Schultz, Ch. Eng. Joseph Smiley, Mgr.
KTMS KTW KWSC TIGPH WCAD WCAE WDAE WGNY WREN	2 2 1225 D MR C D aB	500 1000 1000(5) 1000 500 5000 5000 250 1000(5)	z a a b a a a a a	Santa Barbara, Callf, Seattle, Wash, Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fla.	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng. James Schultz, Ch. Eng. Joseph Smiley, Mgr.
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KTMS KTW KWSC TIGPH WCAE WDAE WDAE WREN XEBL XEDA XETF	2 1225 D MR C D aB	500 1000 1000(5) 1000 5000 5000 250 1000(5) 500 200 12 (243.8 m.)	zaabaaaaaa zza	Santa Barbara, Callf, Seattle, Wash, Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fla. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F. Veracruz, Ver. C.	Joe Walters, Ch. Eng., Norman McLaughlin, Mgr. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng. James Schultz, Ch. Eng. Joseph Smiley, Mgr. Vern Omer, Ch. Eng. Ignacio L. Saiz Pedro Riestra Diaz Jose Rodriguez Lopez
KTMS KTWSC KWSC TIGPH WCAE WDAE WGNY WREN XEBL XEDA XETF 1230 CMJE	2 1225 D MR C D aB 	500 1000 1000(5) 1000(5) 1000 5000 5000 250 1000(5) 500 200 12 (243.8 m.)	zaabaaaa zza	Santa Barbara, Callf, Seattle, Wash, Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fla. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F. Veracruz, Ver. C.	Joe Walters, Ch. Eng., Norman McLaughlin, Mgr. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng. James Schultz, Ch. Eng. Joseph Smiley, Mgr. Vern Omer, Ch. Eng. Ignacio L. Saiz Pedro Riestra Diaz Jose Rodriguez Lopez
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KTMS KTWSC TIGPH WCAD WCAE WGNY WREN XEBL XEBL XETF 1230 CMJE KGBX KGBX KGBA	22 1225 MR C D aB kcs.	1500 1000 1000(5) 1000 5000 5000 250 1000(5) 500 200 112 (243.8 m.) 200 500	za aba aa azza	Santa Barbara, Callf, Seattle, Wash, Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fla. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F. Veracruz. Ver. C. Camaquey, Cuba Springfield, Mo. Albuquerque, N. Mex, San Francisco, Callf,	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng. James Schultz, Ch. Eng. James Schultz, Ch. Eng. Joseph Smiley, Mgr. Vern Omer, Ch. Eng. Ignacio L. Saiz Pedro Riestra Diaz Jose Rodriguez Lopez Primo Alfonso Casares R. D. Foster, Mgr. Mike Hollander, Mgr. Frances Pike, Prog. Dir.
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KTMS KTWSC TIGPH WCADE WDANE WDANE WREN XEBL XETF 1230 CMJE KGBX KGBX KGBX WALB WALB WHALB WHALB	1225 DR MRC DB aB NX CE DPX CRX	500 1000 1000(5) 1000 5000 5000 250 1000(5) 500 12 (243.8 m.) 200 500 1000 1000(5) 1000 5000 1000(5)	za aba a a azza aza a aza a	Santa Barbara, Callf, Seattle, Wash, Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fla. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F. Veracruz, Ver. C. Camaguey, Cuba Springfield, Mo. Albuquerque, N. Mex. San Francisco, Callf, Albany, Ga. Indianapolis, Ind. Boston, Mass.	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng. James Schultz, Ch. Eng. Joseph Smiley, Mgr. Vern Omer, Ch. Eng. Ignacio L. Saiz Pedro Riestra Diaz Jose Rodriguez Lopez Primo Alfonso Casares R. D. Foster, Mgr. Mike Hollander, Mgr. Frances Pike, Prog. Dir.
KTMS KTWSC TIGPH WCAE WCAE WDAY WREN XEBL XETF 1230 CMJE KGBM KYAE WHBM WNAC WOI	2 1225 MR C D aB kcs.	500 1000 1000 (5) 1000 (5) 1000 (5) 5000 5000 250 1000 (5) 500 200 12 (243.8 m.) 200 5000 1000 (5) 1000 (5)	zaabaaa zza	Santa Barbara, Callf, Seattle, Wash, Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fla. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F. Veracruz, Ver. C. Camaquey, Cuba Springfield, Mo. Albuquerque, N. Mex. San Francisco, Callf, Albany, Ga. Indianapolis, Ind. Boston Mass. Washington, D. C.	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng. James Schultz, Ch. Eng. Joseph Smiley, Mgr. Vern Omer, Ch. Eng. Ignacio L. Saiz Pedro Riestra Diaz Jose Rodriguez Lopez Primo Alfonso Casares R. D. Foster, Mgr. Mike Hollander, Mgr. Frances Pike, Prog. Dir.
KTMS KTWSC TIGPH WCAE WCAE WDAY WREN XEBL XETF 1230 CMJE KGBM KYAE WHBM WNAC WOI	1225 DRC DB XC EPCXX	500 1000 1000 (5) 1000 (5) 1000 (5) 5000 5000 250 1000 (5) 500 200 12 (243.8 m.) 200 5000 1000 (5) 1000 (5)	Zaabaaaazza zaaazaaaz	Santa Barbara, Callf, Seattle, Wash, Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fla. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F. Veracruz, Ver. C. Camaguey, Cuba Springfield, Mo. Albuquerque, N. Mex. San Francisco, Callf, Albany, Ga. Indianapolis, Ind. Boston, Mass. Washington, D. C. Tampico, Ten.	Joe Walters, Ch. Eng. Norman McLaughlin, Mgr. Norman McLaughlin, Mgr. Dr. M. A. Matthews. Mgr. Kenneth Yeend, Mgr. Gonzalo Pinto H. Dr. Ward C. Priest, Ch. Eng. James Schultz, Ch. Eng. James Schultz, Ch. Eng. Joseph Smiley, Mgr. Vern Omer, Ch. Eng. Ignacio L. Saiz Pedro Riestra Diaz Jose Rodriguez Lopez Primo Alfonso Casares R. D. Foster, Mgr. Mike Hollander, Mgr. Frances Pike, Prog. Dir N. N. Lyon, Ch. Technician Nicolas M. Picet
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Page Seventy-four

XEAD A 500	z Aguascalientes Ags.	
XEBC A 100	w Morella Micho.	Filiatora Longo Islan
XEBU 50 XECW 250	z Chihuahua, Chih. z Cordoba Ver. C. a Nuevo Laredo, Tam.	Feliciano Lopez Isias
XEDF 100	a Nuevo Laredo, Tam.	Ruperto Villarreal
XEDL 500 XEJS 100	z Navojoa, Son. z Cananea, Son.	••••
XEKL A 500	b Leon, Gto.	
XEKS 100 XEME 400	b Leon, Gto. z Saltillo, Coah. z Merida, Yuc.	P. Villamil Cisero
XEOA 450	a Oaxaca, Oax.	****
1250 kcs. (239.9 m.)		
CMBS 200	a Havana, Cuba a Havana, Cuba	
CMCB 200	- Sentiago Cuba	Ramon Duran
KFOX 1000	- Long Reach Calif	Hal G. Nichols, Mgr.
KXOK XZ 1000	z St. Louis, Mo.	James A. Murphy, Mgr. Allen Franklin, Prog. Dir.
WAIR DM 250	 Winston-Salem, N. C. 	Geo. D. Walker, Mgr. Fred Fabre, Ch. Eng.
WDSU BX 1000 WHBI 2 1000(2.5)	A Newark, N. J.	Irwin R. Wolfe, Ch. Eng.
WKST D 1000	a New Castle, Pa.	Irwin R. Wolfe, Ch. Eng. A. W. Graham Leo S. Burch, Ch. Eng. Max Weiner, Ch. Eng.
WMRO D 250 WNEW 2X 1000 (5)	z Aurora, III. a New York, N. Y.	Max Weiner, Ch. Eng.
WTCN B 1000(5)	a Minneapolis, Minn. z Mexico City, D. F.	Carmen Gutierrez
XEA1 500	z Mexico City, D. 1.	Carmen Gutterrez
1260 kcs. (238 m.)		B 14 1 11 14
CMJO 200 KGVO C 1000(5)	a Ciego de Avila, Cuba a Missoula, Mont.	Bonifacio Ildefonso A. J. Mosby, Mar.
KHSL M 500(1)	a Chico Calif.	A. J. Mosby, Mgr. Harold Smithson, Mgr.
KOII CEMX 1000(5)	a Omaha, Nebr. a Weslaco, Texas a Siloam Springs, Ark.	Ken I Gibson Mar
KUOA D 5000	a Siloam Springs, Ark.	C. M. Books, Mgr. Gil Maynier, Prog. Dir.
KVOA EN 1000 WEVA D 250	a Tucson, Ariz.z Fredericksburg, Va.	
WHIO CX 1000(5)	a Dayton, Ohio	Ernest Adams, Ch. Eng.
WHLD D 1000 WNBX CMXY 1000	 Springfield, Vt. 	Norman Steinbruch Wm. B. Smart, Prog. Dir.
WNBX CMXY 1000 WTOC C 1000(5)	a Savannah Ga.	Wm. B. Smart, Prog. Dir.
1270 kcs. (236.1 m.)		
CMHD 200 KGCA DQ2 100	d Caibarien, Cuba a Decorah, Iowa a Seattle, Wash.	Manuel Alvarez M. Elmer Pederson, Mgr.
KGCA DQ2 100 KOL M 1000(5) KVOR C 1000	a Seattle, Wash.	Charles Crosslay
KWIC D2 100	a Decoration Springs, Color	Hugh Terry, Mgr. Dr. O. J. H. Preuss Sandy Mek, Prog. Dir. Wm. Q. Ranft, Ch. Eng. Percy Root, Ch. Eng. Sandy Meek, Prog. Dir.
WASH DN 500 WFBR R 1000 (5)	a Grand Rapids, Mich.	Sandy Mek, Prog. Dir.
14/10V P 1(00)(5)	a Grand Rapids, Mich. a Baltimore, Md. a Jackson, Miss. a Grand Rapids, Mich. z Watertown, N. Y.	Percy Root, Ch. Eng.
WOOD N 500	a Grand Rapids, Mich. z Watertown, N. Y.	Sandy Meek, Prog. Dir.
XESM 100	z Mexico City, D. F.	
XEXB A 250 XEXF 17	z Mexico City, D. F. a Jalapa, Ver. C. z Texcoco D F	::::
1280 kcs. (234.2 m.)		
		Manuel Angulo Faran
KERR CX 1000(5)	z Holguin, Cuba a Great Falls, Mont. a Oakland, Calif.	Jessie Jacobson, Mgr. S. W. Warner, Mgr. R. L. Horn, Prog. Dir.
KLS X 250 WCAM 2 500 WCAP 2 500 WDOD CX 1000(5)	a Oakland, Callf. a Camden, N. J. a Asbury Park, N. J. b Chattanooga, Tenn. a Madison, Wis.	R. L. Horn, Prog. Dir.
WCAP 2 500 WCOD CY 1000(5)	 Asbury Park, N. J. Chattanooga, Tenn. 	Frank S. Lane, Mgr.
	a Madison, Wis.	Frank S. Lane, Mgr. M. F. Chapin, Ch. Eng. M. P. Stanton Chas Jordan, Prog Dir E. P. Knowles, Ch. Eng.
WORC CX 500 WRR MX 500	a Worcester, Mass. a Dallas, Texas	Chas Jordan, Prog Dir
WTNJ 2 500 XEKR 100	a Dallas, Texas a Trenton, N. J. z. Mexico City, D. F.	E. P. Knowles, Ch. Eng.
XERR 100	Z Mexico City, D F.	Alfonso Avalos
P 1000(5)	z Indianapolis, Ind.	
1290 kcs. (232.4 m.)		
CJHC P 1000	7 Halifax, N. S.	
CMBD 5000 CMBF 5000	z Havana, Cuba z Havana, Cuba	
	- Cale Labor Class Liber	C C Fow Mar
KDYL R 1000(5) KLCN D 100	 Salt Lake City, Utah Blytheville, Ark. 	S. S. Fox, Mgr. C. L. Lintzenich, Mgr.

KTRH	С	1000 (5)		Houston, Texas Waterbury, Conn. Duluth, Minn. Pittsburgh, Pa. Jacksonville, Fla. Saranac Laka, N. Y. San Juan, Puerto Rico	B. F. Orr, Mgr.
WEBC	N	1000 (5)	a	Duluth, Minn.	Chas, Persons, Ch. Eng.
WJAS	C	1000 (5)	8	Pittsburgh, Pa.	Walter McCoy, Ch. Eng.
WNBZ	D	100	8	Saranac Lake, N. Y.	Albert J. Kanze, Ch. Eng.
WNEL	X	1000 (.25)	2	San Juan. Puerto Rico	Juan Piza
1300	kcs.	(230.6 m.)			
KALE	M	1000 (5)	8	Portland, Ore.	Dick Rand, Prog. Dir.
KFH	CX	1000(5)	a	Wichita, Kans.	Russell L. Lowe, Mgr.
WBBR	2	1000		Brooklyn, N. Y.	
WFBC	NX	1000 (5)	-	Greenville, S. C.	Frank Blair, Prog. Dir.
WHAZ	2	1000	a	Troy, N. Y. Sheboygan Wis	H. D. Harris, Ch. Eng.
WLOL		1000	ă	Portland, Ore. Los Angeles, Calif. Wichita, Kans. Brooklyn, N. Y. New York, N, Y. Greenville, S. C. Troy, N. Y. Shebovgan, Wis. Minneapolis, Minn.	merbert Mayer, Ch. Eng.
1310	kcs.	(228.9 m.)			
CFGP		100	а	Grande Prairie, Alta.	• • • •
CHCK	· · · é	50 100	a	Charlottetown, P. E. I.	Laurie I Smith
CKCV	F	100	ā	Quebec, P. Q.	
CMKE	5	250	Z	Manzanillo, Cuba	Lou Kaplinger Mar
KBND	· · · <u>·</u>	250	z	Bend, Ore.	
KCKN	E F	250 250	a _.	Kansas City, Kans. Jerome, Ariz.	Ralph Nelson, Prog. Dir.
KFPL	* 1.5	100 (.25)	f	Dublin, Texas	C. B. Baxter, Mgr.
KFYO KGEZ	M	100	a	Kalispell, Mont.	De Witt Landis, Mgr.
KGFW		250	a	Kearney, Nebr.	Clark Standiford, Mgr.
KMYR	· · ·	100(.25)	a	Denver, Colo.	John Bennett, Mgr.
KOCY	1-11	250	a	Oklahoma City, Okla.	M. H. Bonebrake, Mgr.
KPDN	EM	100	8	Pampa, Texas	S. L. Patterson, Mar.
KRJF	Р	250 250	Z,	Miles City, Mont.	6 V William M
KROC	EN	250	a	Rochester, Minn.	F. C. Clarke, Ch. Eng.
KRRV D	MXZ	250 250	a	Sherman, Texas Santa Rosa, Calif	Tom Spellman, Ch. Eng.
KSUB		100	a	Cedar City, Utah	Wayne Boothe, Anno'r.
KUIN	* * *	250 250	a	Victoria, Texas	
KVOL	· · · <u>·</u>	250	a	Lafayette, La.	Geo. H. Thomas, Mgr.
KVOX	č	100	a	Santa Fe. N. Mex.	M. M. Marget, Mgr.
KWFC	164	250	а	Hot Springs, Ark.	• • • •
KWUC	ь	250	z a	Poplar Bluff, Mo.	Randall Jasena Mor
KWOS	144	250	a	Jefferson City; Mo.	R. L. Rose, Mgr.
TGI	M	250	ď	Guatemala City, Guat,	Harry R. Spence, Mgr.
WAML	1 N	250 250	a	Laurel, Miss.	R. V. DeGruy, Mgr.
WBRK	M	250	a	Pittsfield, Mass.	Norman H. Blake, Ch. Eng.
WBRW		100	Z. a	Welch, W. Va. Joliet III	E Hause Ch S
WCMI	M	250	a	Ashland, Ky.	Paul W. Holton, Eng.
WDAK	10,000	250 250	a	Mest Point, Ga. Marquette, Mich.	• • • •
WEBR	В	250	a	Buffalo, N. Y.	Albert Zink, Mgr.
WEXL		50	a	Royal Oak, Mich.	Roy Host, Ch. Eng.
WFBG	R PY7	250	a	Altoona, Pa.	Roy Thompson, Eng.
WFHR	P	100 (.25)	z	Wisconsin Rapids, Wis.	F. S. Loeb, Mgr.
WEALL	• • •	100 (.25) 250	a	Sumter, S. C.	J. Samuel Brody
WGH	K	250	a	Newport News, Va.	Edward Bishop, Gen Mor
WHAT	4	100	a	Wilson, N. C. Philadelphia, Pa	Jack Hudson, Ch. Eng.
WINX	P	250	z	Washington, D. C.	ruitus Geise, Ch. Eng.
WJPF		250	a	Herrin, III.	****
WIAK	N	250 250	Z	Greenville, Miss.	Laurie L. Smith Laurie L. Smith Lou Keplinger, Mgr Ralph Nelson, Prog. Dir. Irvin Faulkner, Ch. Op. C. B. Baxter, Mgr. Donald Treloar Clark Standiford, Mgr. John Bennett, Mgr. F. W. Meyer M. H. Bonebrake, Mgr S. L. Patterson, Mgr. G. V. Wilson, Mgr. F. C. Clarke, Ch. Eng. Tom Spellman, Ch. Eng. W. R. Nichols, Ch. Eng. Wayne Boothe, Annc'r Geo. H. Thomas, Mgr. M. Marget, Mgr. Randall Jessee, Mgr. R. L. Rose, Mgr. Randall Jessee, Mgr. R. L. Rose, Mgr. L. Rose, Mgr. Harry R. Spence, Mgr. Col. Eduardo Perez F. R. V. DeGruy, Mgr. Louis G. Baltimore Norman H. Blake, Ch. Eng. Paul W. Holton, Eng. E. Hayes, Ch. Eng. Rirk Knight, Prog. Dir. Roy Thompson, Eng. F. S. Loeb, Mgr. J. Samuel Brody A. Lynne Brannen Edward Bishop, Gen. Mgr. Jack Hudson, Ch. Eng. Julius Geise, Ch. Eng.
WLAV	14	250	ā	Grand Rapids, Mich.	John R. Pepper

WLBJ WLNH M WMBO WMFF B WNBH MX WRAW N WROL NXZ WSAJ G3 WSAV N WSGN BEM WSJS MN WSOY WSTV GP3 WTAL WTEL 4 WTJS XZ WTRC XEAG XEFW XETB XETB	250 a a 250 a a 100 (.25) a a 250 a a 100 a a 250 a a	Grove City, Pa. Savannah, Ga. Birmingham, Ala. Winston-Salem, N. C. Decatur, III. Steubenville, Ohio Tallahassee, Fla.	Donald A. Burton Kenneth Taylor, Ch. Eng. Herbert House, Ch. Eng. John Nazak, Ch. Eng. I. Vermilya M. Leonard Savage L. Strunk Herbert Harmon, Mgr. Phil Hedrick Richard Kingston, Prog. Dlr. B. C. Rummell, Ch. Eng. R. R. Baker, Mgr. Diodoro Zunlga Aurelio G. Zaragoza
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KGHF B KGM BCMZX 11 KID KRNT CX 1 WADC C 5 WORK N 1	500 a 000 a 500(1) a 000(5) a	Lalaba Falla Idaba	J. H. McGill, Pub. Dir. Webley Edwards, Mgr. Jack Duckworth, Mgr. Edmund Linehan, Prog. Dir. Robert Wilson J. E. Mathiot, Ch. Eng. H. G. Nebe, Ch. Eng.
1330 kcs. (22	25.4 m.)		
KGB M 1 KMO M 1 KRIS N KSCJ NX 1 WDRC C 5 WSAI MNX 1 WTAO CX 1	200 z 000 a 000 a 500 a 000(5) a 000(5) a 000(5) a 1000 a	Tacoma, Wash. Corpus Christi, Tex. Sioux City, Iowa Hartford, Conn. Cincinnatl, Ohio Green Ray, Wis	David R. Young, Prog. Dir. Carl E. Haymond T. Frank Smith, Mgr. C. W. Corkhill, Mgr. Italo Martino, Ch. Eng. Bill Bailey, Pub. Dir. Alfonso Martinez
1340 kcs. (22	23.7 m.)		
KDTH P 15 KFRO 5 KGIR EN 5 KGNO WCOA N WFEA MN WFNC D WSPD R SYPD R SEBJ XEBJ XEBJ XEBS XEBW XEDH XELW	000 a 500(1) a 5500(1) a 6500(1) a 6500(1) a 6000 a 6000 a 7000 a	Butte, Mont. Dodge City, Kans. Pensacola, Fla. Manchester, N. H. Fayetteville, N. C. Toledo, Ohio	Harold C. Johnson, Mgr. E. B. Craney, Mgr. N. C. Peterson, Mgr Emilio Manzanilla Fernando Elizalde Maria Remedios Delgado Vincente Hernandez Julio Molina Font
1350 kcs. (22	22.1 m.)		
CMC CMCA CMKB KIDO N 1 KBWD P KTSM N KWK BM 1 WAWZ 2	200 a 200 a 200 z 1000(2.5) a 500 a 1000(5) a 1000 a 5000 a 5000 a 5000 a 5000 z	St. Louls, Mo. Zarephath, N. J. New York, N. Y. Richmond, Va.	J. M. Gonzalez, Dir. C. G. Phillips, Mgr. Karl O. Wyler, Mgr. Clarence Cosby, Mgr Wifred H. Wood Brown County Brdcstg. Co.
1360 kcs. (22	20.4 m.)		
CW1H	200 d	Ciego de Avila, Cube	Luis Marauri H.
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1370 kcs. (218.8 m.)	KCRC KGER KLPM KSLM WCSC WFBL WGES WQBC WSBT	EM M C CX 2 D C2Z	1000	8 8 8 8 8 8 8	Enid, Okla. Long Beach, Calif. Minot, N. Dak. Salem, Ore. Charleston, S. C. Syracuse, N. Y. Chicago, III. Vicksburg, Miss. South Bend, Ind.	ĺ	Wm. Butterfield, Annc'r. Jay Tapp, Ch. Eng. Richard Schmidt, Mgr. Clyde Wiegand, Ch. Eng. I. M. Weaver, Ch. Eng. M. Wilcox
CAMSE ZOT A Cardenas Cubbs Genero Sebater KELD 250 z El Dorado, Ark F. E. Bolls KEND 250 z El Dorado, Ark F. E. Bolls KEND 3 100 a San Agea, Ark F. E. Bolls KEPW 250 a Fort Smith, Ark KEND Arthur Dailey, Mgr. KFPW 250 a Cape Girardeau, Mo. KGFL Arthur Dailey, Mgr. KFPW 250 a Cape Girardeau, Mo. KGFL Lovis, N. Mex. E. Whitmore, Mgr. KILA 100 a San Angelo, Texas Earle Yates, Mgr. Chas. C. Alsup, Mgr. KILA 100 a San Antonio. Tex. Chas. C. Alsup, Mgr. Chas. C. Alsup, Mgr. KULF 250 a Galveston, Tex. Earle Yates, Mgr. Ray Beckner, Mgr. KULF 250 a Galveston, Tex. Lawrence Yates, Mgr. Ray Beckner, Mgr. KOHO 100 a La Junta. Colo. Ray Beckner, Mgr. Arbianta. Colo. KONO 5 250 a San Antonio. Tex. Robert Dean, Mgr.	1370	kcs.					
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KENO P 250 z Las Yeogas, Nev. Arthur Dailey, Mgr. KEVR 3 100 a Seattle, Wash. Arthur Dailey, Mgr. KEVR 3 100 a Double Iowa Arthur Dailey, Mgr. KEVR 3 100 a Cape Girardeau, Mo. Arthur Dailey, Mgr. KEVR 250 a Cape Girardeau, Mo. Chandeau, Mo. Chandeau, Mo. Chandeau, Mo. Chandeau, Mo. Chandeau,	CKRN		250 200		Rouyn, P. Q.	,	J. O. Tardif, Mgr.
KENO P 250 z Las Yeogas, Nev. Arthur Dailey, Mgr. KEVR 3 100 a Seattle, Wash. Arthur Dailey, Mgr. KEVR 3 100 a Double Iowa Arthur Dailey, Mgr. KEVR 3 100 a Cape Girardeau, Mo. Arthur Dailey, Mgr. KEVR 250 a Cape Girardeau, Mo. Chandeau, Mo. Chandeau, Mo. Chandeau, Mo. Chandeau, Mo. Chandeau,	HIZ		75	z	Trujillo, D. R.	ì	Frank Hatton
## FPW 250 a Fort Smith, Ark. ## FPW 250 a Gape Girardeau, Mo. ## KFPK 250 a Cape Girardeau, Mo. ## KFPK 250 a Cape Girardeau, Mo. ## KFPK 250 a Cape Girardeau, Mo. ## KFPK 250 a San Angelo, Texas ## KIUN 100 a Pecca, Texas ## Boune Iowa ## Roswell, N. Mex. ## Boune Iowa ## Roswell, N. Mex. ## Clovis, N. Mex. ## Clovis, N. Mex. ## Boune Iowa ## Boune Iowa ## Clovis, N. Mex. ## Boune Iowa ## Boune Iowa ## Boune Iowa ## Boune Iowa ## Clovis, N. Mex. ## Boune Iowa ## B	KEND	P	250 250		El Dorado, Ark.	- 1	F. E. Bolls
## FPW 250 a Fort Smith, Ark. ## FPW 250 a Gape Girardeau, Mo. ## KFPK 250 a Cape Girardeau, Mo. ## KFPK 250 a Cape Girardeau, Mo. ## KFPK 250 a Cape Girardeau, Mo. ## KFPK 250 a San Angelo, Texas ## KIUN 100 a Pecca, Texas ## Boune Iowa ## Roswell, N. Mex. ## Boune Iowa ## Roswell, N. Mex. ## Clovis, N. Mex. ## Clovis, N. Mex. ## Boune Iowa ## Boune Iowa ## Clovis, N. Mex. ## Boune Iowa ## Boune Iowa ## Boune Iowa ## Boune Iowa ## Clovis, N. Mex. ## Boune Iowa ## B	KEVR	3	100		Seattle, Wash.	Ä	Arthur Dailey, Mgr.
KFYS 250 a Cape Girardeau, Mo. E. Whitmore, Mgr. KGFL 4 100 a Roswell, N. Mex. Earle Yates, Mgr. KICA 100 a San Angelo, Texas Earle Yates, Mgr. KIUN 100 a Pecos, Texas Lawrence Yates, Mgr. KIUP 250 a Galveston, Tex. Lawrence Yates, Mgr. KULIF 250 a Rapid City, S. Dak. Robert Dean, Mgr. KOBH 250 a Rapid City, S. Dak. Robert Dean, Mgr. KONO 100 a La Junta, Colo. Morel Snider KORN 250 a Fremont, Nebr. Een Colo. KORN 250 a Fremont, Nebr. A Fremont, Nebr. A Fremont, Nebr. KRE 250 a Fremont, Nebr.	KEDW		250		Boone Iowa		• • •,•
Clovis	KFVS		250		Cape Girardeau, Mo.		
Clovis	KGFL	4	100	a	Roswell, N. Mex.	Ę	. Whitmore, Mgr.
KIUN 100 a Pecos, Texas Jack Hawkins, Mgr. KIUP 250 a Durango, Colo. Lurango, Colo. Ray Beckner, Mgr. KULF 250 a Galveston, Tex. Ray Beckner, Mgr. KOBH 250 a Rann Antonio, Tex. Howard Davis, Mgr. KORN 100 a La Junta, Colo. Robert Dean, Mgr. KORN 250 a Feremont, Nebr. Robert Dean, Mgr. KORN 250 a Feremont, Nebr. Robert Dean, Mgr. KRE 250 a Feremont, Nebr. Leo Mudgett KRE 250 a Feremont, Nebr. Action Westlund, Mgr. KRE 250 a Ferentont, Nebr. Action Westlund, Mgr. KTEM 250 a Landsown, N. Dak. Frank Gillespie Prog. Dept. KTEK 250 a Tucson, Ariz. Kurs. KYYD G. 250 a Fort Dodge, lowa KW. Timble, Gen. Mgr. KWYB G. 250 a Rock Springs, Wyo. Ken. Nielson, Mgr. KWYAN P. 250 a Chambal, Wash. Ken. Nielson, Mgr.	KICA		100		Clovis, N. Mex.	·	tarie rates, mgr. Chas. C. Alsup. Mar.
KONO 5 250 a San Antonio, Tex. KORN 250 a Fremont, Nebr. KRK 250 a Berkeley, Celif. KRKO 3X 30 a Everett, Wash. KTKM 250 a Jamestown, N. Dak. KTEM M 250 a Temple, Texas VKTK EMN 250 a Oklahoma City, Okla. Emporia, Kans. KTOK EMN 250 a Tucson, Ariz. VXTV	KIUN	• • •	100		Decos Teves		Jack Hawkins, Mgr.
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KONO 5 250 a San Antonio, Tex. KORN 250 a Fremont, Nebr. KRK 250 a Berkeley, Celif. KRKO 3X 30 a Everett, Wash. KTKM 250 a Jamestown, N. Dak. KTEM M 250 a Temple, Texas VKTK EMN 250 a Oklahoma City, Okla. Emporia, Kans. KTOK EMN 250 a Tucson, Ariz. VXTV	KMAC	5	250		San Antonio, Tex.	Į.	Howard Davis, Mgr.
KONO 5 250 a San Antonio, Tex. KORN 250 a Fremont, Nebr. KRK 250 a Berkeley, Celif. KRKO 3X 30 a Everett, Wash. KTKM 250 a Jamestown, N. Dak. KTEM M 250 a Temple, Texas VKTK EMN 250 a Oklahoma City, Okla. Emporia, Kans. KTOK EMN 250 a Tucson, Ariz. VXTV	KOH	NXZ	500		Reno, Nev.	,	Kobert Dean, Mgr. Aerle Snider
KORN 250 a Fremont, Nebr. Ugene Korn, Mgr. KRE 250 a Berkeley, Celif. Arthur Westlund, Mgr. KRKO 3X 30 a Ferrenort, Nebr. Arthur Westlund, Mgr. KRKO 3X 30 a Ferrenort, Nebr. Arthur Westlund, Mgr. KRMC 250 a Temple, Texas Lee Mudgett KTOK EMN 250 a Temple, Texas Lee Mudgett KTOK EMN 250 a Temple, Texas Lee Mudgett KTUC CE 250 a Temple, Texas Lee Mudgett KUJ XZ 100 a Walla Walla, Wash. K.W. Trimble, Gen. Mgr. KVFD G 250 a Fort Dodge, lowa K.W. Trimble, Gen. Mgr. KVYS	KOKO		100	a	La Junta, Colo.	ì	_eonard_Wilson
KRE KRKO 250 3X a Berkeley, Celif. Everett, Wash. A Jamestown, N. Dak. KTOK Athrur Westlund, Mgr. Lee Mudgett Audgett KTOK EMN 250 a Temple, Texas Burton Bishop, Mgr. Structor, Ariz. Joseph Lee, Mgr. KWTD Dept. Burton Bishop, Mgr. KWTD Dept. Burton Bishop, Mgr. KW. Trimble, Gen. Mgr. KW. Trimble, G	KORN		250			·	ugene Roth, Mgr.
KTOK EMN 250 a Tolliple, Fexal Joseph Lee, Mgr. KTUC Joseph Lee, Mgr. KW. Joseph Lee, Mgr. KW. KW. Lee, Mgr. KW. KW. KW. Lee, Mgr. KW. KW. KW. Lee, Mgr. KW. KW. Mgr.	KRE			a	Berkeley, Calif.		Arthur Westlund, Mgr.
KTOK EMN 250 a Tolliple, Fexal Joseph Lee, Mgr. KTUC Joseph Lee, Mgr. KW. Joseph Lee, Mgr. KW. KW. Lee, Mgr. KW. KW. KW. Lee, Mgr. KW. KW. KW. Lee, Mgr. KW. KW. Mgr.		3.	250		Jamestown, N. Dak.	į,	ee Mudgett
KVFD G 250 a Walla Walla, Wash. H. E. Studebaker, Mgr. KVFB 250 a Fort Dodge, lowa H. E. Studebaker, Mgr. KVRS 250 a Great Bend, Kans. KKNAS. KWYO 250 a Rock Springs. Wvo. Ken Nielson, Mgr. KWYO 250 a Cheyenne, Wyo. H. W. Siebert, Mgr. KYAN P 250 a Sheridan, Wvo. H. W. Siebert, Mgr. KYAN P 250 a Sheridan, Wvo. H. W. Siebert, Mgr. WAFW 250 a Albany, N. Y. Harold Smith, Mgr. WARM 250 a Atlanta, Ga. W. A. WATW 100 a Ashland, Wis.	KTFM		250	a	Temple, Texas	Ė	Burton Bishop, Mgr.
KVFD G 250 a Walla Walla, Wash. H. E. Studebaker, Mgr. KVFB 250 a Fort Dodge, lowa H. E. Studebaker, Mgr. KVRS 250 a Great Bend, Kans. KKNAS. KWYO 250 a Rock Springs. Wvo. Ken Nielson, Mgr. KWYO 250 a Cheyenne, Wyo. H. W. Siebert, Mgr. KYAN P 250 a Sheridan, Wvo. H. W. Siebert, Mgr. KYAN P 250 a Sheridan, Wvo. H. W. Siebert, Mgr. WAFW 250 a Albany, N. Y. Harold Smith, Mgr. WARM 250 a Atlanta, Ga. W. A. WATW 100 a Ashland, Wis.	KTSW	EMN	250	a	Okiahoma City, Okia. Emporia Kans:		Joseph Lee, Mgr.
KVGB 250 a Great Bend, Kans. Krys Xock Springs. Wyo. Ken Nielson, Mgr. KWLK 250 a Longview, Wash. Ken Nielson, Mgr. Ken Nielson, Mgr. KWYO 250 a Longview, Wash. H. W. Siebert, Mgr. KYAN P 250 a Cheyenne, Wyo. H. W. Siebert, Mgr. KYAN P 250 a Albany, N. Y. Harold Smith, Mgr. WARM 250 a Dohan, Ala. Julian Smith, Mgr. WATW 250 a Atlanta, Ga. W. Va. WATW 100 a Sashland, Wis. Scranton, Pa. WBIK N 250 a Clarksburg, W. Va. WBTH 250 a Buffelo, N. Y. Roy Albertson WBTH 100 (.25) a Danville, Va. Scranton, Pa. WCBM 250 a Buffelo, N. Y. Roy Albertson WCBM 250 a Baltimore, Md. Birney Imes WCDS 250 a Baltimore, Md. Birney Imes WCDS 250 a Columbia, S. C. Lewis Hiland, Ch. Eng	KIUC	CE	250	a	Tucson, Ariz.	F	Frank Howe, Mgr.
KVGB 250 a Great Bend, Kans. Krys Xock Springs. Wyo. Ken Nielson, Mgr. KWLK 250 a Longview, Wash. Ken Nielson, Mgr. Ken Nielson, Mgr. KWYO 250 a Longview, Wash. H. W. Siebert, Mgr. KYAN P 250 a Cheyenne, Wyo. H. W. Siebert, Mgr. KYAN P 250 a Albany, N. Y. Harold Smith, Mgr. WARM 250 a Dohan, Ala. Julian Smith, Mgr. WATW 250 a Atlanta, Ga. W. Va. WATW 100 a Sashland, Wis. Scranton, Pa. WBIK N 250 a Clarksburg, W. Va. WBTH 250 a Buffelo, N. Y. Roy Albertson WBTH 100 (.25) a Danville, Va. Scranton, Pa. WCBM 250 a Buffelo, N. Y. Roy Albertson WCBM 250 a Baltimore, Md. Birney Imes WCDS 250 a Baltimore, Md. Birney Imes WCDS 250 a Columbia, S. C. Lewis Hiland, Ch. Eng	KVFD		250	a	Walla Walla, Wash.	ŀ	H. E. Studebaker, Mgr.
WBNY 2 250 a Buffalo, N. Y. WBTH Roy Albertson WBTH 250 z Willamson, W. Va. WBTM 100 (.25) a Danville, Va. WCBI 250 a Baltimore, Md. WCNC 250 z Elizabeth City, N. C. Lewis Hiland, Ch. Eng. WCOS 250 a Columbia, S. C. Lewis Hiland, Ch. Eng. WDA\$ 250 a Philadelphia, Pa. Harold Davis, Prog. Dir. WDA\$ 250 a Champaign, Ill. WEOA C 250 a Evansville, Ind. WFOR 100 a Hattlesburg, Miss. WFTL 250 a Goldsboro, N. C. WGBR R 250 a Goldsboro, N. C. WGRC M 250 a Remphis, Tenn. WHBQ 100 a Memphis, Tenn. WHBQ 250 a Calumet, Mich. WHLB C 250 a Virginia, Minn. Vernon B	KVGB		250	a	Great Bend, Kans.		
WBNY 2 250 a Buffalo, N. Y. WBTH Roy Albertson WBTH 250 z Willamson, W. Va. WBTM 100 (.25) a Danville, Va. WCBI 250 a Baltimore, Md. WCNC 250 z Elizabeth City, N. C. Lewis Hiland, Ch. Eng. WCOS 250 a Columbia, S. C. Lewis Hiland, Ch. Eng. WDA\$ 250 a Philadelphia, Pa. Harold Davis, Prog. Dir. WDA\$ 250 a Champaign, Ill. WEOA C 250 a Evansville, Ind. WFOR 100 a Hattlesburg, Miss. WFTL 250 a Goldsboro, N. C. WGBR R 250 a Goldsboro, N. C. WGRC M 250 a Remphis, Tenn. WHBQ 100 a Memphis, Tenn. WHBQ 250 a Calumet, Mich. WHLB C 250 a Virginia, Minn. Vernon B	KVRS KWI K		250 250	8	Rock Springs, Wyo.	F	Cen Nielson, Mgr.
WBNY 2 250 a Buffalo, N. Y. WBTH Roy Albertson WBTH 250 z Willamson, W. Va. WBTM 100 (.25) a Danville, Va. WCBI 250 a Baltimore, Md. WCNC 250 z Elizabeth City, N. C. Lewis Hiland, Ch. Eng. WCOS 250 a Columbia, S. C. Lewis Hiland, Ch. Eng. WDA\$ 250 a Philadelphia, Pa. Harold Davis, Prog. Dir. WDA\$ 250 a Champaign, Ill. WEOA C 250 a Evansville, Ind. WFOR 100 a Hattlesburg, Miss. WFTL 250 a Goldsboro, N. C. WGBR R 250 a Goldsboro, N. C. WGRC M 250 a Remphis, Tenn. WHBQ 100 a Memphis, Tenn. WHBQ 250 a Calumet, Mich. WHLB C 250 a Virginia, Minn. Vernon B	KWYO		250	a	Sheridan, Wyo.	1	H. W. Siebert, Mar.
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WFOR 100 a Hattlesburg, Miss. WFTL 250 a Ft. Lauderdale, Fla. Tom M. Bryan WGBR 250 a Fort Wayne, Ind. WGRC M 250 à New Albany, Ind. Jack Gardner, Ch. Eng. WHBQ 100 a Memphis, Tenn. WHDF 250 a Calumet, Mich. WHLB 250 a Virginia, Minn. Vernon Baumgartner WHLS 250 a Port Huron, Mich. Angus Pfaff, Mgr. WHUB 250 a Cookeville, Tenn. M. L. Medley WHYN P 250 z Holyoke, Mass. Hampden-Hampshire Corp.	WCBM		250	a	Baltimore, Md.		
WFOR 100 a Hattlesburg, Miss. WFTL 250 a Ft. Lauderdale, Fla. Tom M. Bryan WGBR 250 a Fort Wayne, Ind. WGRC M 250 à New Albany, Ind. Jack Gardner, Ch. Eng. WHBQ 100 a Memphis, Tenn. WHDF 250 a Calumet, Mich. WHLB 250 a Virginia, Minn. Vernon Baumgartner WHLS 250 a Port Huron, Mich. Angus Pfaff, Mgr. WHUB 250 a Cookeville, Tenn. M. L. Medley WHYN P 250 z Holyoke, Mass. Hampden-Hampshire Corp.	wcos		250 250	z a	Elizabeth City, N. C. Columbia, S. C.	L	ewis Hiland, Ch. Eng.
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WHDF 250 a Calumer, Mich	WFOR		100		Hattlesburg, Miss.	- 1	•••
WHDF 250 a Calumer, Mich	WFTL		250	а	Ft. Lauderdale, Fla.	Ť	om M. Bryan
WHDF 250 a Calumer, Mich	WGL	N	250		Fort Wayne, Ind.		•••
WHDF 250 a Calumer, Mich	WGRC	M	250	à	New Albany, Ind.	j	ack Gardner, Ch. Eng.
WHLS 250 a Port Huron, Mich. Angus Pfaff, Mgr. WHUB 250 a Cookeville, Tenn. M. L. Medley WHYN P 250 z Holyoke, Mass. Hampden-Hampshire Corp.	WHDF		250		Calumet, Mich.		•••
WHLS 250 a Port Huron, Mich. Angus Pfaff, Mgr. WHUB 250 a Cookeville, Tenn. M. L. Medley WHYN P 250 z Holyoke, Mass. Hampden-Hampshire Corp.	WHKY	1.72	250 250	a	Hickory, N. C.		
WHYN P 250 z Holyoke, Mass. Hampden-Hampshire Corp.			250		virginia, Minn. Port Huron, Mich	V	ernon Baumgartner
	WHUB		250	a	Cookeville, Tenn.	Ñ	A. L. Medley
				z	noiyoke, Mass.	Н	lampden-Hampshire Corp.

WMRN C 250 a Mansfield, Ohio Willing Fla. III. B. Greene, Ch. Eng. Richard Dunlea Frank R. Pidcock WMRD C 250 a Stacksonville, Fla. III. B. Greene, Ch. Eng. Richard Dunlea Frank R. Pidcock WMSL E 250 a Davenport, Iowa Spartamburg, S. C. WARY X. 100 a Davenport, Iowa Spartamburg, S. C. WARY X. 100 a Williamsport, Pa. J. Walliamsport, Pa. J. Walliamspor	WIBM B 250 WISE N 250 WJAC R 250 WJHO 100(.25) WKPT N 250 WLLH 5x 10-100 WLLH MS 250 WMAN 250	a Jackson, Mich. z Asheville, N. C. a Johnstown, Pa. a Opelika, Ala. a Kingsport, Tenn. a Lawrence, Mass. a Lowell, Mass.	W. H. Dunn, Prog. Dir. Harold H. Thomas Robert Donahue Robt. Wilds, Ch. Eng.
WORD C 230 a Busenporr, 108 c. Alter R. Richter Spartambur, 108 c. Alter R. Richter M. Alter R. Richter Spartambur, 108 c. Alter R. Richter M. Alter R. Richter Spartambur, 108 c. Alter R. Richter M. Alter R. Richter Spartambur, 108 c. Alter R. Richter M. Alter R. Richter R. Richter M. Alter R. Richter M. Alter R. Richter M. Alter R. Richter M. Richter R. Richter M. Richter R. Richter R. Richter R. R	WMFD 100 (.25)	a Jacksonville, Fla. a Wilmington, N. C. z Moultrie, Ga. a St. Paul, Minn. a Decatur, Ala.	Richard Dunlea Frank R. Pidcock
Type	WPAY X 100	a Davenport, Iowa a Spartanburg, S. C. a Portsmouth, Ohlo a Williamsport, Pa. a Augusta, Maine a Racine, Wis.	Maurice L. Myers J. Mitchell
Serial Color	WTSP 250 XECZ 100	a Wausau, Wis. a Ogdensburg, N. Y. z Buffalo, N. Y. z Traverse City, Mich. z St. Peterburg, Fia. z San Luis Potosi, S. L. P.	H. C. Bieda
MALA CX	XELZ 100		Carlos Gutierrez
CMJC 200	KERN BE 1000 KQV 1000 WALA CX 500(1) WING NX 250(.5) WKBH C 1000 WNBC B 1000	a Mobile, Ala. a Dayton, Ohio a La Crosse, Wis.	J. J. Laux, Mgr. W. O. Pape, Mgr. M. S. Gilkerson, Ass't. Eng.
RRLC Z 250			
CMAR 200 z Pinar del Rlo, Cuba	KRLC Z 250 WFCI P 1000	z Camaguey, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I.	W. L. Dean, Prog. Dir. S. C. Vinsonhaler, Mgr. Donald H. Wike, Mgr.
MARD 2 500 a Brooklyn, N. Y. Aron Kronenberg Bert Child, Prog. Dir.	WQDM AD 1000	f St. Albans, Vt. z Chihuahua, Chih.	• • • •
XEAJ 100 z Navojoa. Son XEAU A 250 z Tijuana, B. Cfa XEDE 100 z Torreon, Coah XEDS 250 z Mazatan. Sin. XEPP 150 z Orizaba, Ver. Ca XEPP XEPP 150 z Orizaba, Ver. Ca XEPP X	WQDM AD 1000 XEM 500)	• • • •
1410 kcs. (212.5 m.) CKFC 2 50 a Vancouver, B. C. CKMO 2 100 a Vancouver, B. C. CMBY 200 a Havana, Cuba CMCQ 200 a Havana, Cuba KFJM 500(1) a Grand Forks, N. Dak. KGNC N 1000(2.5) a Amarillo, Texas KMED N 1000 b Medford, Ore. Mrs. W. J. Virgin	WODM AD 1000 500 1400 kcs. (214.2 m. CMAR 200 KLO BEM 5000 KTUL C 5000 TGX WARD 2 5000	z Pinar del Rlo, Cuba z Santiago de Cuba a Ogden, Utah	Jaime Nadal Paul R. Heitmeyer W. C. Gillespie
CKFC 2 50 a Vancouver, B. C. CKMO 2 100 a Vancouver, B. C. CMBY 200 a Havana, Cuba CMCQ 200 a Havana, Cuba Andres Martinez KFJM 500(1) a Grand Forks, N. Dak. KGNC N 1000(2.5) a Amarillo, Texas KMED N 1000 b Madford, Ore. Mrs. W. J. Virgin	WODM AD 1000 500 1400 kcs. (214.2 m. CMAR 200 CMKR 200 KLU BEM 5000 KTUL C 5000 CMRD 2 500 WBBC 2 500 WIRE MR 5000 WLTH 2 500 WVFW 2 500 XEAJ 100 XEAU A 250 XEDE 100	z Pinar del Rlo, Cuba z Santiago de Cuba a Ogden, Utah a Tulsa, Okla. d Guatemala Clty, Guat. a Brooklyn, N. Y. a Indianapolis, Ind. a New York, N. Y.	Jaime Nadal Paul R. Heitmeyer W. C. Gillespie Aron Kronenberg Bert Child, Prog. Dir. Earl Lewis, Ch. Eng.
CMCQ 200 a Havana, Cuba Andres Martinez KFJM 500(1) a Grand Forks, N. Dak. Dalton Le Masurier, Mgr. KGNC N 1000(2.5) a Amarillo, Texas O. L. Taylor, Mgr. KMED N 1000 b Medford, Ore. Mrs. W. J. Virgin	WODM AD 1000 500 1400 kcs. (214.2 m. CMAR 200 CMKR 200 KLO BEM 5000 TGX 500 WBBC 2 500 WIRE MR 5000 WLTH 2 500 WVFW 2 500 WVFW 2 500 XEA 250 XEA	z Pinar del Rlo, Cuba z Santiago de Cuba a Ogden, Utah a Tulsa, Okla. d Guatemala Clty, Guat. a Brooklyn, N. Y. a Indianapolis, Ind. a New York, N. Y.	Jaime Nadal Paul R. Heitmeyer W. C. Gillespie Aron Kronenberg Bert Child, Prog. Dir. Earl Lewis, Ch. Eng.
	WODM AD 1000 500 1400 kcs. (214.2 m. CMAR 200 CMKR 200 CMK KTUL C 5000 CTGX WARD 2 500 WBBC 2 500 WIRE MR 5000 WLTH 2 500 WVFW 2 500 XEAJ 100 XEAJ 100 XEAU A 250 XEDS 250 XEPP 150	z Pinar del Rlo, Cuba z Santiago de Cuba a Ogden, Utah a Tulsa, Okla. d Guatemala Clty, Guat. a Brooklyn, N. Y. a Brooklyn, N. Y. a Indianapolis, Ind. a New York, N. Y. z Campeche, Cam. z Navoioa, Son. z Tijuana, B. Cfa. z Torreon, Coah. z Mazatan, Sin. z Orizaba, Ver. Ca.	Jaime Nadal Paul R. Heitmeyer W. C. Gillespie Aron Kronenberg Bert Child, Prog. Dir. Earl Lewis, Ch. Eng.

1420 kcs	. (211.1 m.)			
WHIS	500(1)	•	Bluefield, W. Va. Rockford, III.	Edw. L. Ketts
WSFA CI	500(1)	:	Montgomery Ala	
CBY I	F 100	a z	Toronto, Ont. Three Rivers, P. O North Battleford, Sask.	Leon Trepanier, Ch.Eng.
CHNR	100 100(. 25)	Z	North Battleford, Sask.	••••
CKLN	100	a	Kenora, Ont. Nelson, B. C.	Hume Lethbridge, Mgr.
CMJP	200 250 250 100	ā	Moron, Cuba San Antonio, Texas	Hume Lethbridge, Mgr. Cesar Canals Chas. Belfi, Prog. Dir. Geo. Russell, Prog. Dir.
KATE KBPS	250 100	å	Albert Lea, Minn. Portland, Ore.	Geo. Russell, Prog. Dir. Wm. Allingham, Mor.
KCMC M	250 100	a	Texarkana, Texas	Wm. Allingham, Mgr. W. T. Casper, Prog. Dir. Jack Wallace, Prog Dir.
KEUB / EA	A 250	8	Texarkana, Texas Denton, Texas Price, Utah	Sam G. Weiss Geo. Bairey, Mgr.
KFAM EN	100 (25)	z	St. Cloud, Minn. Cheyenne, Wyo.	
KFIZ E	P 250 P 250 P 250 A 250 B 100	a z	Price, Utah St. Cloud, Minn. Cheyenne, Wyo. Fond du Lac, Wis. San Diego, Calif. Las Vegas, Nev. Shawnee, Okla. Alamosa, Colo. Safford, Ariz. Lamar, Colo. La Grande, Ore.	Lynn B. Fairbanks, Mgr.
KFUN I	P 250	z	Las Vegas, Nev.	Las Vegas Brdcstg. Co., Inc. Ross Porter, Mgr.
KGFF EN	100	ā	Alamosa, Colo.	E. L. Allen
KGLU EN	N 250 3 1 00	a	Safford, Ariz. Lamar, Colo.	Sherrill Ellsworth, Mgr.
KLBM	. 250 100	z _. a	Marysville Calif	Sherrill Ellsworth, Mgr. Paul E. Walden, Ch. Eng. Leon Stauffer, Ch. Eng. Frank Hill, Mgr.
KORE . N	250	а	Eugene, Ore. Abilene, Texas	Frank Hill, Mgr. Max Bentley, Mgr.
KRBM EN	N 250 8 100 250 1 100 250 N 250 N 250	a	Bozeman, Mont.	Max benney, Mgr.
KRIC	. 250 . 100 . 250	z	Bozeman, Mont. Beaumont, Texas Midland, Texas San Francisco, Calif.	Thomas Belzel, Mgr.
KSAN	. 250	a f	San Francisco, Calif.	Thomas Belzel, Mgr. S. H. Paterson, Mgr. Dietrich Dirks, Mgr.
KVAK	100	8	Atchison, Kans.	
KWBG >	(100	8	Hutchinson, Kans.	C. Howarth and C. Berger W. B. Greenwald, Mgr. T. W. Symons, Jr. Mgr.
WACO CA	A 250	Ь	Portland, Ore. Waco, Texas	James W. Pate, Mgr.
WAGM	. 100 100	ā Z	Presque Isle, Maine Vincennes, Ind.	James W. Pate, Mgr. R. W. MacIntosh Mgr. Howard N. Greenlee, Mgr. R. G. Patterson, Mgr.
WAPO NXZ	100 100 250 250	a	Chattanooga, Tenn.	R. G. Patterson, Mgr. Edward Beisel, Prog. Dir.
WBML	250 250 250 250 250	z	Hazleton, Pa. Macona, La.	
WCHV	250	· 8	Charlottesville, Va.	R. L. Ashenfelter, Ch. Eng.
WEED	. 250 (100	à	Rocky Mount, N. C. Battle Creek, Mich.	Wm. Avera Wynne
WFMJ	(100 . 250 100 (.25)	a	Youngstown, Ohio Atlantic City, N. J.	Gov. E. D. Rivers
	. 250 . 250	Z	Macona, La. Springtield, III. Charlottesville, Va. Rocky Mount, N. C. Battle Creek, Mich. Youngstown, Ohio Atlantic City, N. J. Gastonia, N. C. Valdosta, Ga. Albany, Ga. Olean, N. Y. Cicero, III.	F. C. Todd, Mgr.
WGOV WGPC	100	a	Albany, Ga.	3
WHDL	250		Cicero, III.	
WHMA	250 250 250 250 250 250	8	Anniston, Ala. Wilmington, Del.	Edwin Mullinax
WIMS	250 250	a	Ironwood, Mich. Poughkeepsie, N. Y.	
WLAP A	A 250	8		Winston L. Clark, Mgr.
VAZI DAA		a	Suffolk, Va.	Jack Siegel
WMBC	. 250	a	Springfield, Mass. Detroit, Mich. Joplin, Mo.	E. H. Clark, Ch. Eng.
WMBS XX	4 250	a	Uniontown, Pa.	Chas. McClane, Eng.
WMSD :	N 250 X 2 5 0	8	Daytona Beach, Fla. Muscle Shoals City, Ala.	W. Wright Esch
WMVA F	100 (.25)	z	Martinsville, Va.	W. Montgomery Harison
WNAB	250 . 2 50	z	Augusta, Ga. Bridgeport, Conn.	Worldonery Harison
WNOE	250	8	New Orleans, La. Paducah, Ky. Parkersburg, W. Va.	****
WPAR C		a	rarkersburg, W. Va.	
1450 kcs	i. (209.7 m.)	1	`	

a Yorkton, Sask. z Palma Soriano, Cuba A. L. Garside, Mgr. Joaquin Venero Obregon

1000 200

KGNF WPRP WSLI WSPB WWDO KINY KSO WBNS WHEO WHP WMPS WOKO XERH	BMCCCCB	250 250 250 250 250 250 1000 1000 (5) 500(1) 1000 (5) 500 (1) 500 (1)	8 8	North Platts, Nebr. Ponce, Puerto Rico Jackson, Miss. Sarasota Fla Washington, D. C. Juneau, Alaska Des Moines, Iowa Columbus, Ohlo Rochester, N. Y. Harrisburg, Pa. Memphis, Tenn. Albany, N. Y. Mexico City, D. F.	J. B. Eaves, Eng. Julio M. Conesa G. G. Benson, Ch. Eng. Capital Brdcstg. Co. C. B. Arnold, Mgr. Edmund Linehan, Prog. Dir. R. S. Duncan, Ch. Eng. H. E. Smith
1440	kcs.	(208.2 m.)			
CKGB KDFN KELA KXYZ WBIG WCBA WMBI WSAN XEFI	c c	500 1000 1000 1000(5) 500 1000(5)	8 8 8 8 8 8 8 8 8 8	Timmins, Ont. Casper, Wyo. Centralia, Wash. Houston, Texas Greensboro, N. C. Allentown, Pa. Peoria, Ill. Allentown, Pa. Chihuahua. Chlh.	R. H. Thomson J. Elroy McCaw, Mgr. T. Frank Smith, Mgr. Edney Ridge F. A. Giles, Tech. Dir. Geo. G. Snyder Prog. Dir. Feliciano Lopez Islas
1450	kcs.	(206.8 m.)			
CFCT CHGS CMHA HRN KCMC KGCX KIEM KTBS TGQ WAGAF WHO! WSAR XEP XERK XEY	# MXZ NZ B C	500 500 200 500 1000(5) 1000 500(1) 1000 500(1) 1000(5) 500(1) 1000 100 100 100 100 100 100	af zbaaaaaaaaf zazz	Victoria. B. C. Summerside, P. E. I. Clenfuegos, Cuba Tegucigalpa, Hond. Kansas City, Mo. Wolf Point, Mont. Eureka, Callf. Shreveport, La. Quezaitenango, Guat. Atlanta, Ga. Cleveland, Ohlo Jersey City, N. J. Fall River, Mass. Magdalena, Son. Huarez Chih. Tepic, Nay. San Luis Rio Colonia,	R. T. Holman Jose R. Feminias Lee Roberts, Prog. Dir. Milton J. Severson, Mgr. Wm. B. Smullin Mgr. John McCormack, Mgr. Jess Swicegood R. M. Pierce, Ch. Eng. N, J. Brdcstg. Corp. Gilberto Gil
146	-	(205.4 m.)	z	Holquin, Cuba	Manuel J. De Gongora
KSTP WJSV	R	50 000	z	Holguin, Cuba St. Paul, Minn. Washington, D. C.	Stanley Hubbard, Mgr. Harry R. Crow; Clyde Hunt
147	0 kcs.	(204 m.)			~ _ /
CMC) HI8Q KGA WLAG WME	1475 BM	200 100 5000 5000 5000	z z a a	Havana, Cuba Trujillo, D. R. Spokane, Wash. Nashville, Tenn. Boston, Mass.	L. Sanchez Julio A. Garcia A. L. Smith, Mgr. J. T. Ward The Northern Corp.
148	0 kcs.	(202.6 m.)			
CMHI KOM WHIS WKB	A C	200 5000 5000 5000	8 2 8	Clenfuegos, Cuba Oklahoma City, Okla. Hammond, Ind. Buffalo, N. Y.	J. Garcia R. Haymond Ramsey Elmer Herkner
149	0 kcs.				•
CMK KFBK WCK XECH XEDE XEJR	BE Y C	1000 10000 50000 250 100	z a z z z	Santiago de Cuba Sacramento, Calif. Cincinnati, Ohio Toluca, Mex. Guavmas Son. Parral, Chih.	Mario Abril Dumois Marjorie Jamison C. H. Topmiller, Ch. Eng. Modeste Ortega
	0 kcs.				
KAW	м	100 100	a	Sault Ste. Marie, Ont. Gallup, N. Mex.	J. C. Whitby A. W. Mills

KBIX KBKR KBST KDAL KDB KDRO	EM	100 250 100 250 250 250 100 (.25)	a Muskogee, Okla. a Baker, Ore. a Big Spring, Texas a Duluth, Minn. a Santa Barbara, Callf. z Sedalia, Mo.	J. H. Speck, Mgr. Louis P. Thornton Mary V. Keneaster, Prog. Dir. Gilbert Fawcett, Prog. Dir. Earl Pollock, Mgr.
KEYS KGKY KNEL	<u>.</u>	250 100(.25) 250 250 250 250	Corpus Christi, Texas a Scottsbluff, Nebr.	G. L. Burns
KNOW KOTN KOVC KPAB KPLC KPLT KPQ	 	250 250 250 250 250 250 250 250	a Brady, Texas a Austin, Texas a Pine Bluff, Ark. a Valley City, N. Dak. a Laredo, Texas a Lake Charles, La. a Paris, Texas a Wenatchee, Wash.	B. J. Parrish, Mgr. Mark C. Crandall, Mgr. Mervel M. Valentine C. R. Porter, Mgr. J. Bert Mitchell, Mgr. Cole E. Wylie, Mgr. Justin B. Toles, Mgr. Dorrence D. Roderick C. J. Fern. Jr.
KRNR KROD KTOH KUTA KVOE KVWC KWEW KXO KYCA		100 (.25) 250 250 250 250 250 250 100 100	a Roseburg, Ore. a El Paso, Texas Lihue, Hawaii a Salt Lake City, Utah a Santa Ana, Calif. z Vernon, Texas a Hobbs, N. Mex. a El Centro, Calif. Prescott, Ariz.	Frank C. Carman, Mgr. Ernest L. Spencer, Mgr. Mrs. C. C. Minyard, Sec'y. W. E. Whitmore F. M. Bowles, Mgr.
KYSM WBOC WCNW WDAN WDNC	EN ···¿	250 250 100(.25) 250 250	a Mankato, Minn. 5 Salisburg, Md. brooklyn, N. Y. Danville, III. Durham, N. C.	H. Kimberly, Ch. Eng. Peninsula Brdcstg. Co. Arthur Faske Perry W. Esten, Ch. Eng.
WERC WGAL WGIL	MN ···	100 (.25) 250 250	z crie, Pa. a Lancaster Pa	Ernest Stanbiola Paul Kalbfleisch
WGKV WGTC WHBB		100 250 100	a Galesburg, III. z Charleston, W. Va. a Greenville, N. C. a Selma, Ala.	****
WJBK WKAT WKBB WKBV WKBZ	XZ N	250 250 250 250 100(.25) 250	a Detroit, Mich. a Miami Beach, Fla. a Dubuque, Iowa a Richmond, Ind. a Muskegon, Mich.	Winifred Powers Arthur P. Smith, Ch. Eng L. Carlson
WKNY WMJM		100 250 100 (.25) 100 (.25)	a Griffin, Ga. a Kingston, N. Y.	John R. McKenna Cordele Dispatch Pub. Co.
WMOG WMRC WMRN WNBF	P	250 250	a Cordele, Ga. a Brunswick, Ga. a Greenville, S. C. z Marion, Ohio a Binghamton, N. Y.	Textile Brdcstg. Co.
WNLC WOLF WOMI		250 .	a New London, Conn. a Syracuse, N. Y. a Owensboro, Ky.	Gerald J. Morey
WOPI WRDW WRGA	ć	250 250 250 250 250	a Bristol, Tenn, a Augusta, Ga.	
WSLS WSTP WSYB WTMC	, M	250 250 250 250	a Roanoke, Va. a Salisbury, N. C. a Rutland, Vt. z Ocala, Fla.	James R. Yost, Ch. Eng.
WTMV WWRL	G2	250 250	a E. St. Louis, III, a Woodside, N. Y.	F. S. Liggett, Ch. Eng.
WWSW XEQK	й.	250 400	a Pittsburgh, Pa. z Mexico City, D. F.	,
•16.*	P P	2 50 25 0	z Batavia, N. Y. z Corpus Christi, Tex.	Batavia Brdcstg. Corp. Nueces Brdcstg. Corp.
1510	kcs.	(198.6 m.)		^
CFRC CKCR CMCW CMOX	. 	100 100 200 200	a Kingston, Ont. a Waterloo, Ont. d Havana, Cuba a Havana, Cuba	H. H. Stewart, Ch. Fog G. Liddle A. Puente, Dir.
1520	kcs.	(197.3 m.)		
TGW	,	5000	e Guatemala City, Guat.	L. Schlesinger Carrera, Dir.

Prequency is given in kilocycles in second column. For power and network affiliations, refer to the list of North American stations by Frequencies.

	, rejet to the itst			equenties.
ALABAMA	Et Dorade KELD 1370	San Bernardine	New London WNLC 1500	Atlanta WAGA 1450
	Fort Smith	KFXM 1210	Waterbury	WATL 1370
Anniston	KFPW 1370	San Diego	WATR 1290	WMBI 1080
WHMA 1420	Hot Springs	KFSD 600	WBBY 1530	WGST 890
	KTHS 1060	KGB 1330	WDB1 1990	WSB 740
Birmingham	KWFC 1310	San Francisco		Augusta
WAPI 1140 WBRC 930	Jonesbore	KFRC 610 KGO 790	DELAWARE	WGAC 1210
WSGN 1310	KBTM 1200	KGO 790 KJBS 1070	Wilmington	WMWH 1420
Decatur	Little Rock	KPO 680	WDEL 1120	WRDW 1500
VMSL 1370	KARK 890	KSAN 1420	WILM 1420	Brunswick
Dothan	KGHI 1200	KSFO 660		WMOG 1500
WAGF 1370	KLRA 1390	KYA 1230	DISTRICT OF	Columbus
Gadsden	Pine Bluff		COLUMBIA	WRBL 1200
WJBY 1210	KOTN 1500	San Jose		Cordele
Huntsville	Siloam Springs	KQW 1010 San Luis Obispo	Washington	WMJM 1500
WBHP 1200	KUOA 1260		WINX 1310	Dalton WBLJ 1200
Mobile		KVEC 1200	WJSV 1460	Gainesville
WALA 1380		Santa Ana	WMAL 630	WGGA 1210
WMOB 1200	CALIFORNIA	KVOE 1500	WOL 1230	Griffia
Montgemery		Santa Barbara	WRC 950	WKEU 1500
WCOV 1210	Bakerfield	KBD 1500	WWDC 1420	Macon
WSFA 1410	KERN 1380	KTMS 1220	FLORIDA	WBML 1430
Opelika	KPMC 1550	Santa Rosa	FLORIDA	WMAZ 1180
WJHO 1370	Berkeley	KSRO 1310	Daytona Beach	Moultrie
Sei ma	KRE 1870	Stockton	WMFJ 1420	WMGA 1370
WHBB 1500	Beverly Hills	KGDM 1100	Ft. Lauderdale	Воте
Muscle Sheals	KMPC 710	KWG 1200	WFTL 1370	WRGA 1500
City	Chice	Visalia	Ft. Myers	Savannah
WMSD 1420	KHSL 1260	KTKC 890	WFTM 1210	WSAV 1310
Tuscalcosa	El Centro	Watsonville	Galnesville	WTOC 1260
WJRD 1200	KXO 1506	KHUB 1310	WRUF 830	Thomasville
	Eureka	COLORADO	Jacksonville	WPAX 1210
	KIEM 1450	COLORADO	WJAX 900	v aldosta
ALASKA	Fresno	Alamesa	WJHP 1290 WMBR 1370	WIAA 1210 valdosta WGOV 1420
	KARM 1310	KGIW 1420	WMBR 1370 Lakeland	W ayul usa
Anehorage	KMJ 580	Colorado Springs	WLAK 1310	WAYX 1200
KFQD 780	Glendate	KVOR 1270	Miami	West Point
-	K1EV 850		WIOD 610	WDAK 1310
Fairbanks	Long Beach	Cenver KFEL 920	WQAM 560	HAWAII
KFAR 610	KFOX 1250	KFEL 920 KLZ 560	Miami Beach	
Juneau	KGER 1360	KMYR 1310	WKAT 1500	Hile
KINY 1430	Los Angeles	KOA 820	Ocala	KHBC 1200
Ketchikan	KECA 780	KPOF 880	WTMC 1500	Honolulu
KGBU 900	KFAC 1300	KVOD 630	Ortando	KGMB 1320
	KF1 640		WDBO 580	KGU 750
	KFSG 1120	Durango	WLOF 1200	Lihue
ARIZONA	KFVD 1000	KIUP 1370	Panama City	KTOH 1508
	KFWB 950	Grand Junction	WDLP 1200	IDAHO
Globs	KGFJ 1200	KXFJ 1200	Pensacola	IDAHO
KWJB 1210	KHJ 900	Greeley	WCOA 1840	Bolse
Jerome 1210	KMTR 570	KFKA 880	St. Augustine	KIDO 1350
KCRJ 1310	KNX 1050	La Junta	WFOY 1210	Idaho Falls
Lowell	KRKD 1120	КОКО 1370	St. Petersburg	K1D 1320
KSUN 1200	Marysville	Lamar	WSUN 620	Lewiston
Phoenix	KMYC 1420	KIDW 1420	WTSP 1370	KRLC 1390
KOY 550		Pueblo	Sarasoto	Nampa
KPHO 1200	Merced	KGHF 1320	WSPB 1420	KFXD 1200
KTAR 620	KYOS 1040	Sterling	Tallahassee	Pocatello
Prescott	Modeste	KGEK 1200	WTAL 1310	KSEI 900
KYCA 1500	KTRB 740		Tampa 1000	Twin Falls
Safford	KDON 1210	CONNECTICUT	WDAE 1220	KTF1 1340
KGLU 1420	Dakland		WFLA 620	Wallace
Tueson	KLS 1280	Bridgeport	WKGA 940 West Paim	KWAL 142
KTUC 1870		W1CC 600	West Paim Beach	ILLINOIS
KVOA 1260	KLX 880	WNAB 1420		
Yuma	KROW 930	Hartford	WJNO 1200	Aurora
KYUM 1210	Pasadena	WDRC 1330	GEORGIA	WMRO 1250
	KPPC 1210	WTIC 1040	GEURUIA	Bloomington
	Redding	WTHT 1200	Albany	WJBC 120
ARKANSAS	KVCV 1200	New Britain	WALB 1230	Carthage
	Sacramento	WNBC 1380	WGPC 1420	WCAZ 1070
Blytheville	KFBK 1490	New Haven	Athons	Champaign WDWS 1370
			WGAU 1810	

Chicage WAAF 920	WSBT 1360 Terre Haute	KENTUCKY	MASSACHU- SETTS	Port Huron
	WBOW 1200		32113	WHLS 1370 Royal Oak
WBBM 770 WCBD 1080	Vincennes	Ashland	Boston	Royal Oak WEXL 1310
WCFL 970	WAOV 1420	WCMI 1310	WAAB 1410	Saginaw
WCRW 1210	West Lafayette	Bowling Green	WBZ 990	WHAL 950
WEDC 1210	WBAA 890	WBLJ 1310	WCOP 1120	WSAM 1200
WENR 870	WBAR 600	Hopkinsville	WEEI 590	Sault Ste.
WGES 1360		WHOP 1200	WHDH 830	Marle
WGN 720	IOWA	Lexington	WMEX 1470	WS00 1200
WJJD 1130		WLAP 1420	WNAC 1230	
WLS 870	Amea	Louisviile	WORL 920	Traverse City WTCM 1370
WMAQ 670	WOI 640	WAVE 940	Fail River	
WMBI 1080	Boone	WHAS 820	WSAB 1450	MINNESOTA
WSBC 1210	KFGQ 1370	WINN 1210	Greenfield	Albert Lea
Cloero	Cedar Rapids	Owensboro	WHAI 1210	KATE 1420
WHFC 1420	WMT 600	WOMI 1500	Holyoke	Duluth
Danville	Davenport	Padueah	WHYN 1370 Hyannis	KDAL 1500
WDAN 1500	WOC 1370	WPAD 1420	WOCB 1210	WEBC 1290
Decatur	Decorah KWLC 1270		Lawrence	Fergus Falls
WSOY 1310		LOUISIANA		
East St. Louis	Des Molnes	LUUISIANA	WLAW 680	KGDE 1200 Hibbing
WTMV 1500	KRNT 1320	Alexandria	WLLH 1370	WMFG 1210
Galesburg	KSO 1430		Lowell 1970	
WGIL 1500	WHO 1000	KALB 1210	WLLH 1370	Mankato
Harrisburg	Dubuque	Baton Rouge	New Bedford	KYSM 1500
WEBQ 1210	KDTH 1340	WJBO 1120	WNLH 1310	Minneapolis
44 1712-40	WKBB 1500	Lafayette	Pittsfield	WCCO 816
Herrin WIPF 1310	Fort Dodge	KVOL 1310	WBRK 1310	WDGY 1180
WJPF 1310	KVFD 1370	Lake Charles	Salem	WLB 760
	lowa City	KPLC 1500	WESX 1200	WLOL 1300
11 CDG	WSUI 880	Monroe	Springfield	WTCN 1250
Peorla WMBD 1440	Marshalltown	KMLB 1200	WBZA 990	Moorhead
	KFJB 1200	New Orleans	WMAS 1420	KVOX 1310
Quincy 900	Mason City	WDSU 1250	WSPR 1140	Northfield
	KGLO 1210	WJBW 1200	Worcester	WCAL 766
Rockford	OTTUMWA	WNOE 1420	WORC 1280	Rochester
WROK 1410	KBIZ 1210	WSMB 1320	WTAG 580	KROC 1310
Rock Island	Shonandoah	WWL 850		St. Cloud
WHBF 1240	KFNF 890		MICHIGAN	KFAM 1420
Springfield	KMA 930	Shreveport		St. Paul
WCBS 1420	Sioux City	KRMD 1210	Battle Creek	KSTP 1460
WTAX 1210	KSCJ 1330	KTBS 1450	WELL 1420	WMIN 1370
Tuscola	KTRI 1420	KWKH 1100	Bay City	Virginia
WDZ 1020			WBCM 1410	WHLB 1370
Urbana .		MAINE	Calumet	Willmar
WILL 580	KANSAS	mante.	WHDF 1370	KWLM 1310
		Augusta	Detroit	Winona
	Atchison	WRDO 1370	WJBK 1500	KWNO 1200
INDIANA	KVAK 1420	Bangor	WJR 750	22.112.0
	Coffeyville	WABI 1200	WMBC 1420	MISSISSIPPI
1	KGGF 1010	WLBZ 620	WWJ 920	
Anderson	Dodge City		WXYZ 1240	Columbus WCBI 1370
WHBU 1210	KGNO 1340	Lewiston WCOU 1210	East Lansing	
Eikhart	Emporia		WKAR 850	Greenville WJPR 1310
WTRC 1310	KTSW 1370	Portland WCSH 940	Flint	
Evansville	Garden City		WFDF 1310	Greenwood
WEOA 1370	KIUL 1210		Grand Rapids	WGRM 3210
WGBF 880	Great Bend	Presque Isle WAGM 1420	WASH 1270	WGCM 1210
Fort Wayne	KVGB 1370	WAGE 1120	WGRB 1200	Hattlesburg
WGL 1370	Hutchinson		WLAV 1310	WFOR 1370
WOWO 1160	KWBG 1420	MARYLAND	WOOD 1270	Jackson
Gary	Kansas City		Ironwood	WJDX 1270
WIND 560	KCKN 1310	Dalate		WSLI 1420
Hammend	Lawrence	Baitimore	WJBS 1420	Laurel
WHIP 1480	KCKU 1220	WBAL 700	Jackson 1970	WAML 1310
WJOB 1200	WREN 1220	WBAL 1060 WCAO 600	WIBM 1370	McComb
indianapolts	Manhattan		Kalamazoo	WSKB 1200
WFBM 1230	KSAC 580	WCBM 1370	WKZO 590	Meridian 1200
WIBC 1050	Pittsburg	WFBR 1270	Lansing	
WIRE 1400	KOAM 790	WFBR 1270	WJ1M 1210	
Muncle	Salina	Cumberland	Lapeer	Vicksburg WGBC 1360
WLBC 1310	KSAL 1120	WTBO 800	WMPC 1200	WQBC 1360
New Albany	Topeka	Frederick	Marquette	MISSOURI
WGRC 1370	WIBW 680	WFMD 900	WDMJ 1310	MISSOURI
	Wichita	Hagerstown	Muskegon	Cape Girardeau
Richmond WKBV 1500	KANS 1210	WJEJ 1210	WKBZ 1500	KFVS 1370
	KFBI 1050	Salisbury	Pontlae	Clayton
		WBOC 1500	WCAR 1100	KFUO 830
WFAM 1200	KFH 1300		110414 1100	LL CO BUL

N	ORTH AMERICAN	B. C. STATION	S BY LOCATION	
Columbia - 1	New	Ithaca	Greenville	Mansfield
KFRU 630	HAMPSHIRE	WHCTI 850	WGTC 1500	WMAN 1370
Jefferson City	Laconia	WJTN 1210	Hickory	WMRN 1500
KWOS 1310	WLNH 1310	Kingsten	WHKY 1370 High Point	Portsmouth
Joplin	Manchester	WKNY 1500	WMFR 1200	WPAY 1370
WMBH 1420	WFEA 1340	Newburgh	Kinston	Sringfield
Kansas City KCMO 1450	WMUR 610	WGNY 1220	WFTC 1200	WIZE 1319
KITE 1530	Portsmouth WHEB 740	New York	Raieigh	Steubenville WSTV 1310
KMBC 950		WARC 860 WBNX 1350	WPTF 680	Tallmadge
WDAF 610	NEW JERSEY	WBNX 1350 WEAF 660	WRAL 1210	WADC 1320 Toledo
WHB 860	Asbury Park	WEVD 1300	Roanoke	
Poplar Bluff	WCAP 1280	WHN 1010	Rapids WCBT 1200	WSPD 1340 WTOL 1200
KWOC 1310	Atlantic City	WINS 1180	Rocky Mount	Youngstown
St. Joseph	WBAB 1200	WJZ 760	WEED 1420	WFMJ 1420
KFEQ 680	WFPG 1420 Bridgeton	WLTH 1400	Salisbury	WKBN 570
KMOX 1090	WSNJ 1210	WMCA 570 WNEW 1250	WSTP 1500	Zanesville
KSD 550	Camden	WNEW 1250 WNYC 810	Wilmington	WHIZ 1210
KWK 1350	WCAM 1280	WOV 1100	WMFD 1370 Wilson	
KXOK 1250	Jersey City	WQXR 1550	WGTM 1310	OKLAHOMA
WEW 760	WAAT 940	Niagara Falls	Winston-Salem	-
WIL 1200	WHOM 1450 Newark	WHLD 1260	WAIR 1250	Ada
Sedalla KDRO 1500	WHBI 1250	Ondensburg	WSJS 1310	KADA 1200
KDRO 1500 Springfield	WOR 710	WSLB 1370 Olean	- '	Ardmore
KGBX 1230	Paterson	WHDL 1420	NORTH	KVSO 1210
KWTO 560	WPAT 900 Red Bank	Plattsburg	DAKOTA	Elk City
	WBRB 1210	WMFF 1310		KASA 1210 Enid
MONTANA	Trenton	Poughkeepsle	Blsmarck	KCRC 1360
Billings	WTNJ 1230	WKIP 1420	KFYR 550	Muskogee
KGHL 780	Zarephath	Rochester WHAM 1150	Devlis Lake KDLR 1210	KBIX 1506
Bozeman KRBM 1420	WAWZ 1350	WHEC 1430	Fargo	Norman
KRBM 1420	NEW MEXICO	WSAY 1210	WDAY 940	WNAD 1010
KGIR 1340	Albuquerque	Salina	Grand Forks	Oklahoma City KOCY 1319
Great Falls	KGGM 1230	NACE 620 Saranao Lake	KFJM 1410	KOCY 1319 KOMA 1480
KFBB 1280	KOB 1180	WNBZ 1290	Jamestown KRMC 1370	KTOK 1370
Helena	Carlsbad KLAH 1210	Schenectady	KRMC 1370 Mandan	WKY 900
KPFA 1210	Clovis	WGY 790	KGCU 1240	Okmulges
KGEZ 1310	KICA 1370	Syracuse	Minot	KHBG 1210
Miles City	Gallup	WFBL 1360	KLPM 1360	Ponca City WBBZ 1200
KRJF 1310	KAWM 1500	WOLF 1500 WSYR 570	Valley City	Shawnee
Missoula KGVO 1260	Hobbs	Troy	KOVC 1500	KGFF 1420
KGVO 1260 Wolf Point	ROSWell 1500	WHAZ 1300		Tulsa
KGCX 1450	KGFL 1270	WTRY 950	0110	KOME 1210
NGCZ 1100	Santa Fe	Utica	Akron	KTUL 1400
NEBRASKA	KVSF 1310	WIBX 1200	WAKR 1530	KVOO 1140
Fremont	NEW YORK	Watertown WATN 1210	WJW 1210	205201
KORN 1370		WWNY 1270	Ashtabula	OREGON
Grand Island	Albany WABY 1370	White Piains	WICA 940	Astoria
KMMJ 740	WOKO 1430	WFAS 1210 Woodside	Canton WHBC 1200	KAST 1200
Hastings KHAS 1200	Auburn	WWRL 1500	WHBC 1200 Cincinnati	Baker KRKR 1500
Kearney 1200	WMBO 1210		WCKY 1490	KBKR 1500 Bend
KGFW 1210	Binghamton	NORTH	WCPO 1200	KBND 1310
Lincoln	WNBF 1500 Brooklyn	CAROLINA	WKRC 550	Corvallis
KFAB 770	WARD 1400	Ashauttla	WLW 700	KOAC 580
KFOR 1210	WBBC 1400	Asheviile WISE 1370	WSAI 1380	Eugene
Norfolk WJAG 1060	WBBR 1300	WWNC 570	W8XO 700	KORE 1420 Grants Pass
North Platte	WCNW 1500	Charlotte	WCLE 610	KUIN 1310
KGNF 1480	WVFW 1400	WBT 1020	WGAR 1450	Klamath Falls
Omaha	Buffaio WBEN 900	WSOC 1210	WHK 1390	KFJI 1210
KOIL 1200	WBNY 1370	Durham WDNC 1500	WTAM 1070	La Grande
KOWH 660 WOW 590	WEBR 1310	Etizabeth City	Columbus	KLBM 1420
Scottsbiuff	WGR 550	WCNC 1370	WBNS 1430	Marshfield KOOS 1200
KGKY 1500	WKBW 1480	Fayetteville	WCOL 1200	Medford
NEVADA	WSVS 1370	WFNC 1340	WHKC 640 WOSU 570	KMED 1410
	WCAD 1220	Gastonia WGNC 1420	Dayton	Portland
KENO 1370	Eimira	Goldsboro	WHIO 1260	KALE 1200
KEUN 1420	WENY 1200	WGBR 1370	WING 1380	KBPS 1420
Reno	Freeport	Greensbore	Lima	KEX 1160
KOH 630	WGBB 1210	WBIG 1440	WLOK 1210	KGW 690

KOIN 940	PUERTO RICO	Kingsport	8an Antonio	WRNL I
KWJJ 1040	***	WKPT 1370	KABC 1420	WRVA 1
KXL 1420	Mayaguez WPRA 789	Knoxville	RMAC 1370	Roanoke
Roseburg	Ponce	WBIR 1210	KONO 1370	WDRJ 1
KRNR 1500	WPAB 1340	WNOX 1010	KTSA 550	WSLS 1
Salem	WPRP 1420	WROL 1210	WOAI 1190	Suffolk
KSLM 1300	San Juan	Memphis	Sherman	WLPM 1
The Dalles	WKAQ 1240	WHBQ 1370	KRRV 880	***************************************
KODL 1200	WNEL 1290	WMC 780	Sweetwater	
		WMPS 1430	KXOX 1210	WASHINGTO
December 1	DUODE IN AND	WREC 600	Temple	Ab
Pennsylvania	RHODE ISLAND	Nashviile	KTEM 1370	Aberdeen
Attantan	Pawtucket	WLAC 1470	Texarkana	KXRO 1
Aflentown	WFCI 1390	WSIV 1210	KCMC 1420	Bellingham
WCBA 1440	Providence	WSM 650	_Vernon	KVOS 12
WSAN 1440	WEAN 780		KVWC 1500	Centralia
Altoona WFBG 1310	WJAR 890	TEXAS	Victoria	KELA 1
	WPRO 630	Abliene	KVIC 1310	Everett
Du Bois		KRBC 1420	Waco	KRKO 18
VCED 1200	SOUTH		WACO 1420	Longview
Easton	CAROLINA	Amarillo KFDA 1200	Waslaco	KWLK 1
VEST 1200		KGNC 1410	KRGV 1260	Olympia
Erie	Anderson	Austin	Wichita Falls	KGY 1
VERC 1500	WAIN 1200	KNOW 1500	KWFT 620	Pullman
VLEU 1420	Charleston	Beaumont		KWSC 12
Glenside	WCSC 1360	KFDM 560	UTAH	Seattle
TIBG 970	WTMA 1210	KRIC 1420		KEVR 18
Greenburg VIIJB 620	Columbia	Big Spring	Codar City	KIRO 1
	WCOS 1270	KBST 1500	KSUB 1310	KJR 1
Grove City VSAJ 1310	WIS 500	Brady	Logan	KOL 12
Harrisburg 1310	Florence	KNEL 1500	KVNU 1200	KOMO 1
	WOLS 1200	Brownwood	Ogden	KRSC 11
VHP 1430 VKBO 1200	Greenville	KBWD 1350	KLO 1400	KTW 12
VKBO 1200 Hazeiton	WFBC 1300	College Station	Price	KXA 7
	WMRC 1500	WTAW 1120	KEUB 1420	Spokane
VAZT. 1420	Spartanburg	Corpus Christi	Provo	KF10 11
Johnstown VJAC 1870	WORD 1370	KEYS 1500	KOVO 1210	KFPY 8
Lancaster	WSPA 920	KRIS 1320	Sait Lake City	KGA 14
	Sumter	Dallas	KDYL 1290	KHQ 5
	WF1G 1310	KRLD 1040	KSL 1130	Tacoma
New Castle VKST 1250		WFAA 800	KUTA 1500	KMO 13
		WBR 1280		KVI 5
New Kensington	SOUTH	Denton	VERMONT	Vaneeuver
VKPA 1120	DAKOTA	KDNT 1420	VENHONI	KVAN 8
Philadelphia		Dublin	Buriington	Walls Walls
XYW 1020	Aberdeen	KFPL 1310	WCAX 1200	KUJ 18
VCAU 1170	KABR 1300	El Paso	Rutland	Wenatehee
VDAS 1370	Brookings	KROD 1500	WSYB 1500	KPQ 15
VFIL 560	KFDY 780	KTSM 1350	St. Albans	Yakima
VHAT 1310	Pierre	Fort Worth	WQDM 1390	KIT 12
VIP 610	KGFX 630	KFJZ 1240	Springfield	
VPEN 920	Rapid City	KGKO 870	WNBX 1260	
TEL 1310	KOBH 1370	WHAP 800	Waterbury	WEST
Pittsburgh	WCAT 1200	Galveston	WDEV 550	VIRGINIA
DKA 980	Sloux Falls	KLUF 1370	220	TINGINIA
QV 1380	KELO 1200	Houston	VIRGINIA	Beckley
CAE 1220	KS00 1110	KPRC 920	VINUINIA	WJLS 12
JAS 1290	Vermillion	KTRH 1290	Charlottesville	Bluefield
WSW 1500	KUSD 890	KXYZ 1440	WCHV 1420	WHIS 14
Reading	Watertown	Kilgore	Danville 1420	Charleston
EEU 830	KWAT 1210	KOCA 1210		WCHS 5
RAW 1310	Yankton	Laredo	WBTM 1370	WGKV 15
Scranton 1970	WNAX 570	KPAB 1500	Fredericksburg	Clarksburg
ARM 1370		Longview	WFVA 1260	WBLK 18
GBI 880	TENNESSEE	KFRO 1340	Harrisonburg	Fairment
QAN 880 Sharon	TENNESSEE	Lubbook	WSVA 550	WMMN 8
	Bristol	KFYO 1310	Lynchburg WLVA 1200	Huntington
	WOP1 1500	KRLII 1420		WSAZ 11
Sunbury KOK 1210	Chattanooga	Pampa 1920	Martinsville WMVA 1420	Logan II
	WAPO 1420		Newport News	WLOG 12
Unlontown	WDEF 1370		WGH 1310	
MBS 1420	WDOD 1280	Paris	Norfolk	Morgantown
Wilkes-Barre BAX 1210	Cookavilla	KPLT 1500	WTAR 780	WAJR 12
		Pecos	Petersburg	Parkersburg
TRRE 1310		KIUN 1370		WPAR 14
Williamsport	Jackson	Port Arthur	WPID 1210	Welch
RAK 1370 York	WTJS 1310	KPAC 1220	Richmond	WBRW 18
	Johnson City	San Angelo	WBBL 1210	Wheeling
ORK 1320	WJHL 1200	KGKL 1370	WMBG 1350	WWVA 11

Williamson	BRITISH .	North Bay	North Battleford	CWBH 1000
WBTH 1370	COLUMBIA '	CFCH 930	CHNB 1420 Prince Albert	CMBL 720 CMBQ 1150
WISCONSIN	Chilliwack	Ottawa CKO 8830	CBBI 1210	CMBS 1250
Appleton	CHWK. 780	CKCO 1010	Regina CJRM 950	CMBX 1180 CMBY 1410
WHBY 1200	Kamioops CFJC 880	Owen Sound	CJRM 950 CKCK 1010	CMBZ 1010
Ashland WATW 1370	Kelowna	CFOS 1370	Saskatoon	CMC 1350 CMCA 1350
Eau Claire	CKOV 630	CFLC 930	CKQC 600	CMCB 1250
WEAU 1050	Nelson 1490:	St. Catharines	Watrous CBK 540	CMCD 636 CMCF 810
Fond du Lao KFIZ 1420	Prince Rupert	CKTB 1200	Yorkton	CMCF 810 CMCG 1080
Green Bay	CFPR 580	Sault Ste. Marie	CJGX 1430	CMCH 1050
WTAQ 1330	Trail	CJIC 1500		CMCJ 1550 CMCK 970
Janesville WGT O Teor	CJAT 910 Vancouver	Stratford	COSTA RICA	CMCM 850
WCLO 1200 LaCrosse	CBR 1100	CJCS 1210 Sudbury	Alajuela	CMCO 1210
WKBH 1880	CJOR 600	CKSO 780	TISCV 575 San Jose	CMCQ 1410 CMCU 1110
Madison	CKMO 1410 CKWX 950	Timmins	TIAFB 900	CMCR. 1550
WHA 940 WIBA 1280	Victoria	CKGB 1440	TIEMC 860	CMCW 1510 CMCY 590
Manitowoc	CFCT 1450	Toronto CBL 840	TIEP 830	CMK 750
WOMT 1210		CBY 1420	TIFA 1000 TIGH 690	CMOX 1510
WMAM 570	MANITOBA	CFRB 690	TIGH 600	CMQ 690 CMW 550
Milwaukee	Brandon	CKCL 580	TIGPH2 1225	CMX 880
WEMP 1310	CKX 1120	Waterloo CKCR 1510	TIHO 1030 TILJ 775	CMZ 920
WISN 1120 WTMJ 620	Film Flon CFAR 1270	Windsor	TILS 880	Holguin
Poynette	Winnipeg	CKLW 1030 Wingham	TINBC 1070	CMKF 1400 CMKO 1280
WIRU 1210	CIRC 630	CKNX 1200	TING 750	CMKO 1280 CMKV 570
WBJN 1370	CKY 910		TIOS 940 TIPG 625	Jovellanes
Rice Lake	NEW .	PRINCE ED-	TIRCC 1200	CMGN 760
WJMC 1210	NEW BRUNSWICK	WARD ISLAND	TIRS 920	Manzanilio
Sheboygan WHDL 1300			TIXD 800	CMKE 1810
Stevens Point	Campbellton CKNB 1210	Charlottetown CFCY 630	CUBA	CMKM 1080
WLBL 900	Fredericton	CHCK 1310		Matanzas
Superior WDSM 1200	CFNB 550	Summerside	Banes CMKX 1190	CMGF 1120 CMGH 1190
Wausau	Monoton CKCW 1270	CHGS 1450	Bayame 1190	
WSAU 1370	Sackviile		CMKL 950	Moren CMJP 1420
Wisconsin Rapids	CBA 1050	QUEBEC	Calbarten CMHD 1270	Nuevitas
WFHR 1310	St. John CHSJ 1120	01141	Camaguey	CMJL 1330
	01113	Chleoutimi CBJ 1120	CMJA 860	Palma Soriano CMKZ 1480
WYOMING	NOVA SCOTIA	Hull	CMJC 1390 CMJE 1230	Pinar del Rio
Casper	Ctean Bey	CKCH 1210	CMJF 930	CMAB 1240
KDFN 1440	Glace Bay VAS 685	Montreal CBF 910	CMJK 1020	CMAC 1030
Cheyenne KFBC 1420	Hatifax	CBM 960	CMJN 610 CMJW 1070	CMAN 540 CMAR 1400
KYAN 1370	CHNS 230	CFCF 600	CMJX 900	Placetas
Rock Springs KVBS 1370	CHIC 1290 Sydney	CHLP 1120 CKAC 730	Cardenas CMGE 1370	CMHP 1100
Sheridan	CJCB 1240	New Cartisie	Clego de Avila	Puerto Padre CMKB 1350
KWYO 1370	Yarmouth CJLS 1310	CHNC 610	CMJH 1360	Sagua ia
	Cars 1910	Quebeo CHBC 530	CMJI 1130 CMJM 870	Grande
BAHAMAS	ONTARIO	CKCV 1310	CMJO 1260	CMHA 1090
Nassau	Brantford	Rimouski	Clenfuegos	Sancti Spiritus CMHB 1240
ZNS 790	CKPC 930	CJBR 1030 Rouyn	CMHJ 1160	Santa Clara
	Chatham CKCO 630	CKRN 1370	CMHM 1450 CMHO 1020	CMHI 830 CMHN 760
CANADA	Cobalt	St. Anne de	CMHX 1480	CMHQ 1320
ALBERTA	CKMC 1210	la Pocatiere CHKG 1200	Cruces CMHK 1210	CMHW 950 Santiage
Calgary	Fort William CKPR 580	Sherbrooke	Guanabacoa	CMKC 1350
CFAC 930 CFCN 1020	Hamilton	CHLT 1210 Three Rivers	CMCX 1050	CMKD 910
CJCJ 690	CHML 1010 CKOC 1120	CHLN 1420	Guantanamo CMKH 1110	CMKG 1000 CMKN 640
Edmonton	Kenora	Val d'Or	CMKJ 760 CMKS 860	CMKQ 1490
CFRN 960 CJCA 730	CKCA 1420	CKVD 1200	Guines	CMKR 1400 CMKW 1050
CJCA 730 CKULA 580	Kingston CFRC 1510	BASKATON	CMRT 1580	CMKW 1050 CMKY 1140
Grande Prairie	Kirkland Lake	SASKATCH- EWAN	Havana CMBC 780	Trinidad
CFGP 1310	CJKL 560 London		CMBD 1290	CMHT 920
CIOC 1370	CFPL 730	Moose Jaw CHAB 1200	CMBF 1290 CMBG 1180	Victoria Tunas CMKU 730
2010	OFID 180		1 CMDG 1100	, SMILE 100

REPUBL		CAMPE	CHE	XEW	990	OAXAC	A	XECA	1230
DOMINIC	AN	Campeci	he	XEXX	1170	XEOA	1240	XEFW	131
Cludad Tr	ulillo	XEA	1400	DURAN	00	Oaxaca	1	XES Victoria	99
HIG	900-	-		-	uo	XEXH	1150	XEBJ	134
HIN	1090	CHIHU	AHUA	Durango		PUEBL	A	AEGJ	194
HIX	900	Chihuah		XEBP	1150				
HIT	1050	XEBU	1240	XEE	1210	Puebla	1000	VERA CI	RUZ
HIZ	1370	XEBW	1340			XEHR	1230	Cordoba	
H18Q	1470	XEFL	1440	GUANAJ	UATO	SAN L	20	XEAG	131
		XEM	1390	frapuato		POTOS		XECW	124
L SALVA	DOR	Juan		XEBO	1330		31	Jalapa	
L SALVA	DON	XEF	1450	XEFM	1160	San Lui	8	XEXB	127
San Salv	ador	XEFV	1210	Leon		XECZ	1370	Minatitia	n
rss	640	XEJ	1020	XEFM	1160			XEDW	115
		XEP	1160	XEKL	1240	SINAL	UA .	Orizaba	
		Parr		Silao		Los Mod		XEPP	140
GUATEMA	LA	XEAT	1210	XEWE	720	XEOX	1230	Veracri	12
Guatemala	City	XEUR Sabinas	1490			Mazatian		XETF	122
rkw	1520	XEBX	640	JALIS	CO	XEBL	1220	XEU	101
CX -	1400	Saltii		Guadatal	ara	XEDS	1400		
rGI	1310	XEAS	1160	XED	1100	SONOF		YUCAT	AN
Quetzaltena	ngo	XEKS	1240	XEHK	1130		1.4	Merida	
rgq	1450	Torreon		XELW	1340	Caranea	4040	XEFC	134
		XEDE	1400	Guzman		XEFQ	1010	XEME	124
HONDUR	AS	XETB	1310	XEBA	1030	Guavmas XEDR	1490	XEX	63
		Villa A				Hermosili		Ara	00
Tegucigalp		$\mathbf{x}\mathbf{E}\mathbf{D}\mathbf{H}$	1340	MEXIC	20	XEBH	930	ZACATE	CAR
IRN	14456	XERA	840	Texcoco		Magdaler			
		DISTR	UTO	XEXE	1270	XEDI	1450	Zacateoas	
MEXIC	ο.	FEDE		Toluca	1210	Navolos		XELK	123
Aquascalle	ntes			XECH	1490	XEAL	1400	MIQUEL	ON
KEAD	1240	Mexico		Auch		XEDL	1240		
KEBI	1000	XEAI	1250 1020	MICHOA	CAN	Nogales		St. Plerr	60
		XEB			-	XFAF	1000	FQN	60
BAJA		XEBS	1340 819	Morella XEBC	1240	Ohregon			
CALIFOR	NIA	XEBZ XEDA	1220	XEBC	1370	XEAP	1340	NEWFOU	
		XEDF	080	ALI	1010	San Li	uis	LAND	
Mexicali	750	XEFO	940	NAYAF	RIT	XEY	1450	St. John	
KEAA KEAO	660	XEJF	1130			TAMAUL	IPAS	VOAC	106
KECL	1110	XEKR	1280	Tepic	1450			VOAR	95
Tiluana	1110	XEL	1150	XERK	1450	Matamore		VOCM	104
KEAC	980	XELZ	1370	NUEVO	LEON	XEAM	750	VONF	64
KEAU	1400	XEN	780			Nuevo 1	_aredo 1080	VOWB	70
KEBG	820	XEQ	780	Monterre		XEBK	1210	PANAN	1 Δ
KEC	1150	XEQK	. 1500	XEFB	870	XEDF XEFE	910		
KELO	670	XERC	830	XEG	1230	XENT	990	Colon	
KEMO	860	XERH	1430	XEH	740 690	Reynosa		XEAW	96
KEON	750	XESM	1270	XET		Potosi		нок	64
XERB	1090	XEK	1000	XEX	1310			VOGY	84

1530	kcs.	(196 m.))			
CMCJ CMCR KITE WBRY WAKR	CMX BP	200 200 1000 1000 1000	a a a z	Havana, Cuba Kansas City, Mo. Waterbury, Conn. Akron, Ohio		Pete Houck, Eng. S. E. Warner, Ch. Eng.
1550	kcs.	(193.4 m	n.Y	<i>′</i>		
KPMC WQXR	×	1000 1000	8	Bakersfield, Calif. New York, N. Y.		L. A. Schamblin, Mgr. Russell Valentine, Ch. Eng.
1580	kcs.	(189.8 m	n.)			
CMRT		200	z	Guiņes, Cuba		Raul Torres Pardal
1600	kcs.	(187.4 m	1.)			
CMBH		5000	e	Havana, Cuba	/	Alberto Alvarez Ferrera

NORTH AMERICAN B. C. STATIONS BY CALL LETTERS

	Tre	quencies			-				ecking	·	
CBA	1050	CHGB	1200	CKCK	1010	CMBD	1290	CMGN	760	CMKC	1250
CBF	910	CHGS	1450	CKCL	580	CMBF	1290	CMHA	1090	CMKD	910
CBJ	1120	CHLN	1420	сксо	1010	CMBG	1180	СМНВ	1240	CMKE	1310
СВК	540	CHLP	1120	CKCR	1510	СМВН	1600	CMHD	1270	CMKF	1460
CBL	840	CHLT	1210	СКСУ	1310	CMBL	720	СМНІ	830	CMKG	1000
СВМ	960	CHML	1010	сксж	1370	CMBQ	1150	СМНЈ	1160	СМКН	1110
СВО	880	CHNB	1420	CKGB	1440	CMBS	1250	смнк	1210	СМКЈ	760
CBR	1100	CHNC	610	CKIC	1010	СМВХ	1180	СМНМ	1450	CMKL	950
CBV	950	CHNS	930	CKLN	1420	CMBY	1410	CMHN	760	СМКМ	1080
CBY	1420	CHRC	580	CKLW	1030	CMBZ	1010	СМНО	1020	CMKN	640
CFAC	930	CHSJ	1120	CKMC	1210	CMC	1350	СМНР	1100	СМКО	1280
CFAR	1370	CHWK	780	СКМО	1410	CMCA	1350	CMHQ	1320	ÆMKQ	1490
CFCF	600	CJAT	910	СКИВ	1210	СМВС	1250	СМНТ	920	CMKR	1400
CFCH	930	CJBR	103C	CKNX	1200	CMCD	630	смн	950	CMKS	860
CFCN	1030	CJCA	730	скос	1120	CMCF	810	смнх	1480	CMKU	730
CFCO	630	CJCB	1240	скоч	630	CMCG	1080	CMJA	860	CMKY	570
CFCT	1450	CICI	690	СКРС	930	CMCJ	1550	CWJC	1390	CMKW	1050
CFCY	630	CJCS	1210	CKPR	580	СМСН	1050	CMJE	1230	смкх	1190
CFGP	1310	CJGX	1430	CKRN	1370	CMCK	970	CMJF	930	CMKY	1140
CFJC	880	CJHC	1290	скѕо	780	CMCL	730	СМЈН	1360	CMKZ	1430
CFLC	930	CJIC	1500	СКТВ	1200	СМСМ	850	CMJI	1130	CMOA	1210
CFNB	550	CJKL	560	CKUA	580	СМСО	1210	смЈК	1020	СМОХ	1510
CFOS	1370	CJLS	1310	CKVD	1200	CMCQ	1410	CMJL	1330	CMQ	690
CFPL	730	CJOC	1370	CKWX	950	CMCR	1550	CMJM	870	CMRT	1580
CFPR	580	CJOR	600	СКХ	1120	CMCU	1110	СМЛИ	610	CMW	550
CFQC	600	CJRC	630	CKY	910	CMCW	1510	CWIO	1260	СМХ	880
CFRB	690	CJRM	950	CMAB	1240	CMCX	1050	СМЈР	1420	CMZ	920
CFRC	1510	CKAC	730	1	1030		590	CMJW	1070	FQN	609
CFRN	960	CKBI	1210	CMAN	540	CMGE	1370	CMJX	900	HIG	900
CHAB	1200	CKCA	1420	CMAR	1400	CMGF	1120	CMK	750	HIN	1090
- IND	1310	- CINOM			, 100		1190	СМКВ	1350	HIT	1050

ніх	800	KDON	1210	KFJM	1410	KGDE	1200	КНЈ	900	KMLB	1200
HIZ	1370	KDRO	1500	KDLR	1210	KGDM	1100	KHQ	590	KMMJ	740
HI8Q	1470	KDTH	1340	KDNT	1420	KGEK	1200	KHSL	1260	KMO	1330
нок	640	KDYL	1290	KFJZ	1240	KGER	1360	KHUB	1310	кмох	1090
HRN	1450	KECA	780	KFKA	880	KGZE	1310	KICA	1370	KMPC	710
KABC	1420	KELA	1440	KFKU	1220	KGFF	1420	KID	1320	KMTR	570
KABR	1390	KELD	1370	KFNF	890	KGFJ	1200	KIDO	1350	KMYC	1420
KADA	1200	KELO	1200	KFOR	1210	KGFL	1370	KIDW	1420	KMYR	1310
KALB	1210	KENO	1370	KFOX	1250	KGFW	1310	KIEM	1450	KNEL	1500
KALE	1300	KERN	1380	KFPL	1310	KGFX	630	KIEV	850	KNOW	1500
KANS	1210	KEUB	1420	KFPW	1370	KGGF	1010	KINY	1450	KNX	1050
KARK	890	KEVR	1370	KFPY	890	KGGM	1230	KIRO	710	KOA	830
KARM	1310	KEX	1160	KFQD	780	KGHF	1320	KIT	1250	KOAC	550
KASA	1210	KEYS	1500	KFRC	610	KGHI	1200	KITE	1530	KOAM	790
KAST	1200	KFAB	770	KFRO	1340	KGHL	780	KIUL	1210	КОВ	1180
KATE	1420	KFAC	1300	KFRU	630	KGIR	1340	KIUN	1370	КОВН	1370
KAWM	1500	KFAM	1420	KFSD	600	KGIW	1420	KIUP	1370	KOCA	1210
KBIX	1500	KFAR	610	KFSG	1120	KGKL	1370	KJBS	1070	KOCY	1310
KBIZ	1210	KFBB	1 280	KFUN	1420	KGKO	570	KJR	970	кон	630
KBKR	1500	KFBC	1420	KFUO	830	KGKY	1500	KLAH	1210	KOIL	1260
KBND	1310	KFBI	1050	KFVD	1000	KGLO	1210	KLBM	1420	KOIN	940
KBPS	1429	KFBK	1490	KFVS	1370	KGLU	1420	KLCN	1290	коко	1370
KBST	1500	KFDA	1200	KFWB	950	KGMB	1320	KLO	1,400	KOL	1270
KBTM	1200	KFDM	560	KFXD	1200	KGNC	1410	KLPM	1360	KOMA	1480
KBWD	1350	KFDY	780	KFXJ	1200	KGNF	1430	KLRA	1390	KOME	1310
KCKN	1310	KFEL	920	KFXM	1210	KGNO	1340	KLS	1280	комо	920
KCMC	1420	KFEQ	680	KFYO	1310	KGO	790	KLUF	1370	KONB	1500
KCMO	1450	KFGQ	1370	KFYR	550	KGU	750	KLX	880	KONO	1370
KCRC	1360	KFH	1300	KGA	1470	KGVO	1260	KLZ	560	KOOS	1200
KCRJ	1310	KFI	640	KGB	1330	KGW	620	KMA	930	KORE	1420
KDAL	1500	KFIO	1120	KGBU	900	KGY	1210	KMAC	1370	KORN	1370
KDB	1500	KFIX	1420	KGBX	1230	KHAS	1200	KMBC	950	KOTN	1500
KDFN	1440	KFJB	1200	KGCU	1240	КНВС	1200	KMED	1410	KOVC	1500
KDKA	980	KFJI	1210	KGCX	1450	KHBG	1210	KMJ	580	KOVO	1210
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KOWH	660	KROC	1310	KTSM	1350	KWEW	1500	TGI	1310	WADC	1520
KOY	550	KROD	1500	KTSW	1370	KWFC	1310	TIAFB	900	WAGA	1450
KPAB	1500	KROW	930	KTUC	1370	KWFT	620	TIEMC	860	WAGE	620
KPAC	1220	KROY	1210	KTUL	1400	KWG	1200	TIEP	830	WAGF	1370
KPDN	1310	KRRV	880	KTW	1220	KWJB	1210	TIFA	1000	WAGM	1420
KPFA	1210	KRSC	1120	KUIN	1310	KM11	1040	TIGH	690	WAIM	1200
KPFT	1210	KSAC	580	KUJ	1370	KWK	1350	TIGPH	605	WAIR	1250
КРНО	1200	KSAL	1120	KUOA	1260	кжкн	1100	TIGPH2	1225	WAJR	1200
KPLC	1500	KSAN	1420	KUSD	890	KWLC	1270	TIHO	1030	WAKR	1530
KPLT	1500	KSCJ	1550	KUTA	1500	KWLK	1370	TILJ	775	WALA	1380
KPMC	1550	KSD	550	KVAK	1420	KWLM	1310	TILS	880	WALB	1230
KPO	680	KSEI	900	KVAN	880	KWNO	1200	TINBC	1070	WAML	1310
KPOF	880	KFSO	560	KVCV	1200	кжос	1310	TING	750	WAOV	1420
KPPC	1210	KSL	1130	KVEC	1200	KWOS	1310	TIOS	940	WAPI	1140
KPQ	1500	KSLM	1360	KVFD	1370	KWSC	1220	TIPG	625	WAPO	1420
KPRC	920	кѕо	1430	KVGB	1370	KWTO	560	TIRCC	1200	WARD	1400
KQV	1380	KSOO	1110	ΚVI	570	KWYO	1370	TIRS	920	WARM	1370
KQW	1010	KSRO	1310	KVIC	1310	KXA	760	TIXD	800	WASH	1270
KRBC	1420	KSTP	1460	KVNU	1200	KXL	1420	TIANRH	725	WATL	1370
KRBM	1420	KSUB	1310	KVOA	1260	кхо	1500	TISCY	575	WATH	1210
KRE	1370	KSUN	1200	KVOD	630	кхок	1250	VAS	685	WATR	1290
KRGY	1260	KTAR	620	KVOE	1500	кхох	1210	VOCM	1040	WATW	1370
KRIC	1420	KTBS	1450	KVOL	1310	KXRO	1310	VONF	640	WAVE	940
KRIS	1330	KTEM	1370	KVOO	1140	KXYZ	1440	VOGY	840	WAWZ	1350
KRJF	1310	KTFI	1240	KVOR	1270	KYA	1230	VOAC	1065	WAYX	1200
KRKD	1120	ктнѕ	1060	KVOS	1200	KYAN	1370	VOAR	950	WAZL	1420
KRKO	1370	KTKC	890	KVOX	1310	KYCA	1500	VOWR	700	WBAA	890
KRLC	1390	KTMS	1220	KVRS	1370	KYOS	1040	WAAB	1410	WBAB	1200
KRLD	1040	ктон	1500	KVSF	1310	KYSM	1500	WAAF	920	WBAL	760
KRLH	1420	кток	370	KVSO	1210	KYUM	1210	WAAT	940	WBAL	1060
KRMC	1370	KTRB	740	KVWC	1500	KYW	1020	WABC	860	WBAP	800
KRMD	1310	KTRH	1290	KWAL	1420	TGQ	1450	WABI	1200	WBAX	1210
KRNR	1500	KTRI	1420	KWAT	1210	TGW	1520	WABY	1370	WBBC	1400
KRNT	1320	KTSA	550	KWBG	1420	TGX	400	WACO	1420	WBBL	1210
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WBBM	770	WCAT	1200	WDAF	610	WENY	1200	WGAL	1500	WHAZ	1300
WBBR	1300	WCAU	1170	WDAK	1310	WEOA	1370	WGAN	560	WHB	860
WBBZ	1200	WCAX	1200	WDAN	1500	WERC	1500	WGAR	1450	WHBB	1500
WBCM	1410	WCAZ	1070	WDAS	1370	WEST	1200	WGAU	1310	WHBC	1200
WBEN	900	WCBA	1440	WDAY	940	WEŠX	1200	WGBB	1210	WHBF	1240
WBHP	1200	WCBD	1080	WDBJ	930	WEVD	1310	WGBF	630	WHBI	1250
WBIG	1440	WCBI	1370	WDBO	580	WEW	760	WGBI	880	WHBL	1300
WBIR	1210	WCBM	1370	WDEF	1370	WEXL	1310	WGBR	1370	WHBQ	1370
WBLJ	1200	WCBS	1420	WDEL	1120	WFAA	800	WGCM	1210	WHBU	1210
WBLK	1370	WCBT	1200	WDEV	550	WFAM	1200	WGES	1360	WHBY	1200
WBML	1420	wcco	810	WDGY	1180	WFAS	1210	WGGA	1210	WHCU	850
WBNS	1430	WCED	1200	WDLP	1200	WFBC	1300	WGH	1310	WHDF	1370
WBNX	1350	WCFL	970	WDMJ	1310	WFBG	1310	WGIL	1500	WHDH	830
WBNY	1370	WCHS	580	WDNC	1500	WFBL	1360	WGKV	1500	WHDL	1420
WBOC	1500	WCHV	1420	WDOD	1280	WFBM	1230	WGL	1370	WHEB	740
WBOW	1200	WCKY	1490	WDRC	1330	WFBR	1270	WGN	720	WHEC	1430
WBRB	1219	WCLE	610	WDSM	1200	WFCI	1390	WGNC	1420	WHFC	1420
WBRC	930	WCLO	1200	WDSU	1250	WFDF	1310	WGNY	1229	WHIO	1260
WBRE	1310	WCLS	1310	WDWS	1370	WFEA	1340	WGOV	1420	WHIP	1480
WBRK	1310	WCMI	1310	WDZ	1020	WFAR	1310	WGPC	1420	WHIS	1410
WBRW	1310	WCNC	1370	WEAF	660	WFIG	1310	WGR	550	WHIZ	1210
WBRY	1530	WCNW	1500	WEAN	780	WFIL	560	WGRB	1200	WHJB	620
WBT	1080	WCOA	1340	WEAU	1050	WFLA	620	WGRC	1370	WHK	1390
WBTH	1370	wcoc	880	WEBC	1290	WFMD	900	WGRM	1210	WHKC	640
WBTM	1370	WCOL	1200	WEBQ	1219	WFMJ	1420	WGST	890	WHKY	1370
WBZ	990	WDOP	1120	WEBR	1310	WFNC	1340	WGTC	1500	WHLB	1370
WBZA	990	wcos	1370	WEDC	1210	WFOR	1370	WGTM	1310	WHLD	1260
WCAD	1220	WCOU	1210	WEED	1420	WFOY	1210	WGY	790	WHLS	1370
WCAE	1220	wcov	1210	WEEL	590	WFPG	1420	WHA	940	WHMA	1420
WCAL	760	WCPO	1200	WEEU	830	WFTC	1200	WHAL	950	WHN	1010
WCAM	1280	WCRW	1210	WELI	930	WFTL	1370	WHAI	1210	WHO	1000
WCAO	600	wcsc	1360	WELL	1420	WFTM	1210	WHAM	1150	WHOM	1450
WCAP	1280	WCSH	940	WEMP	1310	WFVA	1,260	WHAS	820	WHOP	1200
WCAR	1100	WDAE	1220	WENR	870	WGAC	1210	WHAT	1310	WHP	1430
		-									

			700								
WHUB:	1370	WJBY	1210	WKIP	1420	WMAM	570	WMWH	1420	wov	1100
MHYN	1370	WJBW	1200	WKNY	1500	MAMW	1370	WMVA	1420	wow	590
WIBA	1280	MJDX	1270	WMAQ	670	WMAZ	1180	WNAB	1420	wowo	1160
WIBC	1050	M1E1	1,210	WMAS	420	WMBC	1420	WNAC	1230	WPAB	1340
WIBG	970	WJHL	1200	WKOK	1210	WMBD	1440	WNAD	1010	WPAD	1420
WIBM	1370	WJHO	1370	WKPA	1120	WMBG	350	WNAX	570	WPAR	1420
WIBU	1210	WJHP	1290	WKPT	1370	WMBH	1420	WNBC	1380	WPAT	900
WIBW	580	WJIM	1210	WKRC	550	WMBI	1080	WNBF	1500	WPAX	1210
WIBX	1200	MIID	1130	WKST	1250	WMBO	1310	WNBH	1310	WPAY	1370
WICA	940	WILS	1210	WKY	900	WMBR	1370	WNBX	1260	WPEN	920
WICC	600	MIMC	1210	WKZO	590	WMB\$	1420	WNBZ	1290	WPIC	780
WIL	1200	WJMS	1420	WLAC	1470	WMC	780	WNEL	1290	WPID	1210
WILL	580	MINO	1200	WLAK	1310	WMCA	570	WNEW	1250	WPRA	780
WILM	1420	WJOB	1200	WLAP	1420	WMEX	1470	WNLC	1500	WPRO	630
WIND	560	WJPF	1310	WLAV	1310	WMFD	1370	WNOE	1420	WPRP	1420
WING	1380	WJPR	1310	WLAW	680	WMFF	1310	WNOX	1010	WPTF	680
WINN	1210	WJR	750	WLB	760	WMFG	1210	WNYC	810	WQAM	560
WINS	1180	WJRD	1200	WLBC	1310	WMFJ	1420	WOAI	1190	WQAN	880
WINX	1310	WJSV	1460	WLBJ	1310	WMFR	1200	WOC	3370	WQBC	1360
WIOD	619	MTLW	1210	WLBL	900	WMGA	1370	WOCB	1210	WQDM	1390
WIP	610	WIW	1210	WLBZ	620	WMIN	1370	WOI	640	WQXR	1550
WIRE	1400	WJZ	760	WLEU	1420	WMJM	1500	WOKO	1430	WRAK	1370
WIS	560	WKAQ	1240	WLLH	1370	MMMN	890	WOL	1230	WRAL	1210
WISE	1370	WKAR	850	WLNH	1310	WMOB	1200	WOLF	1500	WRAW	1310
WISH	1120	WKAT	1500	WLOF	1200	WMOG	1500	WOLS	1200	WRBL	1200
WIZE	1310	WKBB	1500	WLOG	1200	WMPC	1200	WOMI	1500	WRC	950
WJAC	1370	WKBH	1380	WLOK	1210	WMPS	1430	WOMT	1210	WRDO	1370
WJAG	1060	WKBN	570	WLOL	1300	WMRC	1500	WOPI	1500	WRDW	1500
WJAR	890	WKBO	1200	WLPM	1420	WMRN	1500	WOR	710	WREC	600
WJAS	1290	WKBV	1500	WLS	870	WMRO	1250	WORC	1280	WREN	1220
WJAX	900	WKBW	1480	WLTH	1400	WMSD	1420	WORD	1370	WRGA	1500
WJBC	1200	WKBZ	1500	WLVA	1200	WMSL	1370	WORK	1320	WRJN	1370
WJBK	1500	MKED.	.1500	WLW	700	WMT	600	WORL	920	WRNL	880
WJBO	1120	w/KGA	940	WMAL	630	WMUR	610	wosu	570	WROK	1410
		1		1		1		,			

WRR	1280	WSPD	1340	WTOL	1200	XEBA	1080	XEDW	1150	XEMO	860
WRUF	830	WSPR	1140	WTRC	1310	XEBC	1240	XEE	1210	XEMU	580
WRYA	1110	WSTP	1500	WTRY	950	XEBG	820	XEF	1450	XEBX	1280
WSAI	1330	WSTV	1310	WTSP	1370	XEBH	930	XEFB	870	XEN	780
WSAJ	1310	WSUI	880	WVFW	1400	XEBI	1000	XEFC	1340	XENT	990
WSAM	1200	WSUN	620	WWDC	1420	XEBJ	1340	XEFE	910	XEOA	750
WSAN	1440	WSVA	550	WWJ	920	XEBK	1080	XEFI	1440	XEON	750
WSAR	1450	WSVS	1370	WWL	850	XEBL	1220	XEFM	1160	XEOX	1230
WSAU	1370	W\$YB	1500	WWNC	570	XEBO	1330	XEFO	940	XEP	1160
WSAV	1310	WSYR	570	WWNY	1270	XEBP	1150	XEFG	1010	XEPN	740
WSAY	1210	WTAD	900	WWRL	1500	XEBS	1340	XEFV	1210	XEPP	1400
WSAZ	1190	WTAG	580	wwsw	1500	XEBU	1240	XEFW	1310	XEQ	730
WSB	740	WTAL	1310	WWVA	1160	XEBW	1340	XEG	1230	XEQK	1500
WSBC	1210	MATW	1070	WXYZ	1240	XEBX	640	XEH	740	XERA	840
WSBT	1360	WTAQ	1330	W8XO	700	XEBZ	810	XEHK	1230	XERB	1090
WSFA	1410	WTAR	780	XEA	1400	XEC	1150	XEHR	1230	XERC	830
WSGN	1310	WTAW	1120	XEAA	750	XECA	1230	XEI	1370	XERH	1430
WSIX	1210	WTAX	1210	XEAC	980	XECH	1490	XEJ	1020	XERK	1450
WSJS	1310	WTBO	800	XEAD	1240	XECL	1110	XEJP	1130	XES	990
WSKB	1200	WTCM	1370	XEAF	1000	XECW	1240	XEJR	1490	XESM	1270
WSLB	1370	WTCH	1250	XEAG	1310	XECZ	1370	XEK	1000	XET	690
WSLI	1420	WTEL	1310	XEAL	1250	XED	1160	XEKL	1240	XETB	1310
WSLS	1500	WTHT	1200	XEAJ	1400	XEDA	1220	XEKR	1280	XEU	1010
WSM	650	WTIC	1040	XEAM	750	XEDE	1400	XEKS	1240	XEW	890
WSMB	1320	WTJS	1310	XEAO	660	XEDF	810	XEL	1150	XEWE	720
WSNJ	1210	WTMA	1210	XEAP	1340	XEDH	1340	XELK	1230	XEX	1310
WSOC	1210	WTMC	1500	XEAS	1160	XEDJ	1450	XELO	670	XEXB	1270
WSOO	1200	UMTW	620	XEAT	1210	XEDL	1240	XELW	1340	XEXE	1270
WSOY	1310	WTMV	1500	XEAU	1400	XEDP	1080	XELZ	1370	XEXH	1150
WSPA	920	WTNJ	1280	XEAW	960	XEDR	1490	XEM	1390	XEXX	1170
WSPB	1420	WTOC	1260	XEB	1030	XEDS	1400	XEME	1240	XEY	1450

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RADEXING . .

(Continued from page 10)

on the time—though it may sound a bit unusual! (T. E. Smith, Orlando, Fla.)

T. P. Topics

Japan: A station on 870 kcs. heard from 5-5:30 a.m. with a weak signal. It faded completely several times and was unable to identify anything but the oriental language. (Edward Laudansky, Dorchester, Mass.)

New Zealand: 1YA in Auckland was heard on the morning of January 26th wit hgood signals. (George

Wetherill.)

Thanks to every Radexer helping compile this month's news and get going on those RADEX Contest veries! It will be appreciated if you will report on one side of a sheet of paper only and kindly enclose stamp if you require an answer to your letter. Otherwise it will be acknowledged in this column.

Quick Index

The 1940 issues of RADEX may be purchased for the regular price of 25c each. A quick index of features which have appeared in RADEX this year follows:

Jan.-Feb. High Frequency Broadcasting Stations; Radio Stations from 4320 to 5750 kcs; North American Broadcasting Stations with Week-day time on the air.

Mar.-Apr. International Prefixes; Radio Stations from 5858 to 8580 kcs.; North American Broadcasting Stations with mailing addresses.

May-June Turner Dial Discusses Servicing; Venezuela Stations; Peruvian Stations; La Paz, Bolivia Stations; Colombian Stations; Frequency Checks; Radio Stations from 8600 to 15270 kcs.; North American Broadcasting Stations with names of verification signers.

Julg-Aug. Radio Stations from 15280 to 39360 kcs.; Frequency Modulation Channels.

Sept.-Oct. The Radex Contest: QSA and R Codes; This Hobby Called DXing; The Spanish Alphabet; International Prefixes; Radio Stations from 39380 to 138960 kcs.; Television Stations; Frequency Modulated Stations.

Nov.-Dec. Proposed Reallocations and their Effect; Commencing a new complete list of the World's Radio Stations, frequencies 1600 to 2490; this list includes the police stations of North America.

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