

MARCH · APRIL, 1941

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in canada **30** c





This is a full 12 inch globe. beautifully made, and as up-todate as the Worlds Fair! The new streamlined semi-meridian is made of hammered-metal, and the base is a Duncan Phyfe of walnut finished wood.

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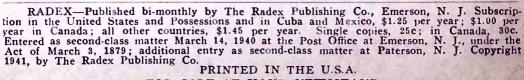
RADEX Emerson, New Jersey

ILLUMINATED

The illumination from within this 10 1/2 inch "Lumatex" Globe makes it easy to read day and night. Printed in nine colors, the map is as up to date as today's newspaper. The base is of wood, in walnut finish, and the ball is very durable. "Globe Facts" booklet sent with each Globe.

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WORLD GLOBE

FOR SALE AT YOUR NEWSSTAND



SEVENTEENTH YEAR

MARCH 1, 1941

NO. 142

Page Taylor, Editor B. Francis Dashiell, Technical Editor Owen P. Callin, Amateur Editor

Radexing with the Radexers

Contestants in the big RADEX championship prize contest seem to have been very active during the past couple of months. Let's glance at what some of our Radexers are doing in the contest. In this division (broadcast band) Peter C. Landry of Montreal seems to head the group with 651 points. Harold Hutton of Rome, N. Y. has 415 points, Weston Richards of Zion, Ill. has 340, Chester Stedman of Westerly, R. I. has 243, and Norman Mc Guire of Stamford, Conn. pulls up in fifth place with 241. Many others follow in close succession, and it begins to look as if there will be a lot of competition as soon as the requested veries begin to come in.

A bomb burst in the midst of the Supremacy listings this month! This, in the form of a letter 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:

SUPREME SUPREM.	
the total number of static	ons verified:
Thomas—Ohio	
Becker-Ohio	1350
Botzum-Penna	1210
Forestieri-N. Y.	1028
Horton-Mass.	981
BEGINNER'S SUPRE	MACY: To-
tal number of stations	

By RAY La ROCQUE

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

OLD TIMER'S SUPREMACY:

For the oldest dated v	erifications:
Podall-Vt	Nov. 1916
Barnhart—Pa	Feb. 1923
Allen-Calif	Dec. 1923
Thomas—Ohio	
Jordon-Penna	Aug. 1924

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

Reichardt-Mass	5
Botzum-Penna	2
Forestieri-N. Y1	9
Burnham-Mass	7
Lippincott-Me.	9
Barnes-Ill.	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:

the state state state	
Reichardt-Mass1	58
Botzum-Penna.	33
Lippincott-Me	29
Forestieri-N. Y.	23
Burnham-Mass.	14

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

Reichardt-Mass	.84
Tarr-Wash.	50
Botzum-Penna.	.25
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 RA-DEX 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. J.
- 5.—Robert Mc Connell, 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 Weston 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, KWTO, WSYR, WEEI, WKZO*, WCAO. WICC, WROL, WPRO, CFRB, WOR, CKAC, WEAN, KOAM*, CKSO. CBL. WKAR. WWL, WBEN, WWJ. WLS. WSPA*, WDBJ. WAAT, WTRY* WRC, WBZ, KNOX. WHN. CKLW, WTIC, WBAL. WTAM, WCOP*, WSAZ, WSAM, WNAC, WFBR, WSAI, WSPD. WFBL, WHIS. WBNS. WING WOOD. WBIG, WJSV, and KITE.

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

On at 7:00 a.m. are: WTMJ. KOWH*, WCCO, WCSH, WEAU, WMBI, WIBC*. CHLP. WIID. WOWO, WCAE, WNBX, KLCN, 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."

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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."

PORT CREDIT, ONTARIO -"Port Credit, as Fraser Hendrick: 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. WHOM, until 2:00 p.m: WSB, KITE, WDGY, WSPR, WLAC, WBIG, WCSH, WILTH. WLAW, 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

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then. I have reports out to CB11 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 then one morning, but none lasted long enough for a good report."

ST. LOUIS, MISSOURI—Arthu J. Kimble, 4643 Page Blvd: "I hav been hearing two Spanish speakin stations on the broadcast band, bu have been unable to log them be cause all announcements have bee in Spanish. Could you tell me if a any time these stations announce i English. They come in on 690 kc and 730 kcs." (The 690 kcs. statio is CMQ in Havana which occasiona ly announcees in English on the quar ter hour—RL).

TERRA ALTA, W. VA. — Jc Jones: "The receiver here is an SX 24 HALLICRAFTERS with a Guth man U-42 preselector. The broadca: band has been rather noisy so fa this season. Here is a list of all nigh broadcasting stations: WWSW WJBK, KXYZ, KSAN, KFAC, KL. WNEW, WOL, WEDC, KRKI KJBS, KWJJ, KFVD, WIP an WMCA."

ROCHESTER, PENNA. — A. (Schleiter: "I started a new log of st tions on October 20th and have 3(stations in just 41 days—a very pour record. I have had double that in or month."

PORT RICHMOND, N. Y.-Pet A. Clarius: "This is my first repo of the season to RADEX. New st tions logged are: KRKD, WPI WBRW, WHUB, WHK WKPT, WGTC, WFPG. WBML. WKI KYAN. WAOV. KXOK, WLO WLOG, KPHO, WMJM, WSO WINN, WIPR. WST KMJ. WTMC. WFHR, WJHO, WCN WLBJ, KFXJ, WMOG. KENG WKNE, XEU, WJOB. WBL KUOA, WTAG, WPAB and WAR WFPG is now verifying with a ver attractive card and they ask that a reports be sent to the "Steel Pie in care of Blair Throm, chief eng neer."

HARTFORD, CONN.—Leon Prague: "Having just joined the RA-DEX 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 replies."

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 daylight 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 RA-DEX 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 deleted? (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.)

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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 re letters on it. . . WKIP operate 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 pioneer broadcast station and operates daily from 7 a.m. to midnigh . . WSAJ operates from 6 a.m. ur til 2 a.m. daily. On Sundays the come on the air at 8 a.m. (Elwin I Gleason, Moosic, Penna.)

WLAP is going to change frequer cy and power. WSOY took 1 months to verify. . . . KOTN he changed from 100-250 watts. (Vernor Lee Gibbs, Lexington, Ky.)

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

WJAX have finished remodelin their studios and expect to increas their day and night power to 5 ky When completed their fidelity wi not be equaled by any station east of Louisiana and South of Carolina, e: cept for WSB! (Ed Medric, Brood lyn, N. Y.)

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

WROL is now on 620 kcs. . WJHL is now on 880 kcs. . . WSP begins broadcasting at 6:00 a.m. an signs at 5:00 p.m. (William Wal man, Asheville, N. C.)

WSPR is now testing on 1240 ke . . WINX, Washington's newe broadcasts a full hour of news fro 12-1 a.m. nightly. . . . (Bob Gilchris New York, N. Y.)

WOLF in Syracuse was very please ed with the report I gave them cocerning their daytime signal strenghere in Rochester. They verified h letter stating that they would like other reports from other DX friend of mine. The stamps I enclosed we returned! (Roy Woollacott, Rocheter, N. Y.)

KEUB's card is in red and blag ... WAYX is in black with call le ters in green. KFXJ's card shows

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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.)

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 will be 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 settlements throughout the Rocky Mountains along the two Canadian Railway lines. Later it is planned to have these stations in Northern Ontario, north of Lake Superior. (Geor-Wetherill, Jr., Upper Darby, ge 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-Strathroy, 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

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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.)

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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 kcs. in Mexico City has a program from 12:30-1 a.m. consisting of American dance tunes. . . XEMO on 860 kcs. can be heard most mornings until 3 a.m. . . (Charles 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., YV5RQ on 882 kcs., YV5RE on 1110 kcs., YV4RI on 1450 kcs.

Frequency Changes: YV1RD from 1153 to 1150 kcs., YV3RE from 1475 kcs. to 1470 kcs., and YV5RB from 1200 to 790 kcs.

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

Location Changes: YV5RL—"Radio Tropical" on 1160 kcs. 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

"Radio Nationale Fran-France: caise" 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 form-"Radio Lyons" with increased er 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 respectively. (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 fundamenials 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 veneer 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, work. however. have 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 m illions 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

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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 "carrer 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 transmit-

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ting 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 and are called "skywaves." The former give the best daytime reception. At 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 550 "kilocycles" (one kilocycle to 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 Thus, "kiloan electric vibration. cycle" 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 home receiving by the 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 "band". This band was broadcast 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) al-so 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)

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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 radio. 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).

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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

Τ. 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 be XEIP?" He also mentions 2YC is on 860 k/c and wonders how they could have interferred with 40S 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,

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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 RA-DEX 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 AN-GELES.—"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 yerisigners: KYAN-L. Peach: KNOW- James E. Lewis, Chief Engineer; and KSUB-Sherman T. Wright, Mgr.

BILL PETTY, WHEELER OAHU, HAWAII .- "I've FIELD. purchased a new HALLIiust boy. CRAFTERS SX28 receiver: 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., SACRAMEN-TO, CALIF. — "KENO 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.

FRED A. ANDERSON, FORT 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. 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.

KEN WHITE, 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, KVOD, KFKA, KFXD, KUTA, 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, and 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

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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 TUNCIL, 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).

Page Eighteen

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. (Bishop). VLR on 9580 k/c, Melbourne, 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 VLR. be sent to "Dept. of Information", 375 Collins St., Melbourne, Cl, Australia. Veries will be sent to all reporting reception correctly. Jewell). VLO on 9541 k/c is on the air only 3:40-4:15 a.m., broadcasting from Sydney. (Anderson). VLJ7, from 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, Cal-gary, 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).

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. (Tuncil).

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.)

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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 evenings. (Hiss). COCO on 8700 k/c 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 B6.

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/ powered at 5000 watts, are on almos daily from 10-10:30 p.m. and 12:30p.m. They announce as 'Ici Radi Brazzaville", Viva General de Graull and France Liber." Their address i Service de la Presse et de Informa tions de Government General, Brazza ville, French 9quatorial Africa. (Cain)

Germany

DJE, 17760 k/c, was heard at 12:1 a.m. with an English program. (Petty Hawaai). DXB, 9610 k/c, and DJI 15200 k/c, put in very good signal here. (Tuncil).

Greece

SVJ, 9825 k/c, is the only statio from this country reported heard i New eZaland. Powered at 20.00 watts, it was heard at 6a.m. with very weak signel. (NZDXC).

Guadeloupe

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

Guatemalá

TGWB on 6480 k/c is heard nightl with fair signals. Marimba music i heard from 8-8:30 p.m. on Monday: Thursdays, and aSturdays. QSL re ceived in three weeks signed by th English announcer, Roberto Jordon (Jewell, Tuncil). TGQA, "The Voic of Quezaltenango", 6190 k/c, verifie with a nice card after exactly a year' time. (RF).

Hawaii

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

Honduras

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

India

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

Italy

2R43, 9630 k/c, comes in with R signals during the daytime, and ver

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

Japan

JZI, 9535 k/c, heard 9-10:30 p.m. and 5:30-6:30 a.m. with strong signals. IZI. 11800 k/c, heard in parallel on transmissions. (Jewell) IZI both 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. (Benedíct)

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 with English at 10 p.m. closing 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

HP51, 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),

Peru

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., Es-colta, 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 HBI, 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 Thailand

HSP6 is on the air daily exce Monday from 5-7 a.m. and HS6PJ on Mondays from 5-7 a.m. The power is 10 kilowatts. An old st tion, HS8PJ, 9510 k/c, has been r, placed by HSP5, 11715 k/c. HS61 is on 19020 k/c, with transmitter Saladoeng, Bangkok, Thailand. M. veri from HSP5 stated mine was th first report from Reno. (Cain)

Turkey

TAP, 9465 k/c, Ankara, heard wi R8 signal 11:30-11:45 a.m. with ma and female announcers giving nev broadcast in English. (Hooker, Cair

Union of South Africa

ZRL at Capetown verified promp ly with a very cordial letter and a attractive SABC card, with printin in green on a yellow backgroun Their frequency was listed as 960 k/c, though they seem to be heat about 9615 k/c. They announce th only stations now using English an the two low-powered Durban tran miters, ZTD on 4878 k/c, and ZR on 6147.5 k/c, both powered at 51 watts. The power of ZRL is 500 watts. They said they do not get : many reports as formerly from th United States on ZRL since the started broadcasting only in Afrik; ans. (RF)

United States

WiRUW, 11730 k/c, heard on Fr day nights until 10:30 p.m. testing fc the West Coast with WRU1, 6040 k/ KGEI, 9670 k/c, hopeless unt WRCA signs off at 10 p.m. (Cusher N. Z.) WNBI heard all day on 1189 k/c. (Petty-Hawaii) WLWO cam booming in on 15250 k/c, 10-11 a.m using 75000 watts power. WGE. transmits daily on 6190 k/c from 7:30 8:30 p.m. (RF)

Uruguay

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

Venezuela

Good signals are heard in the 6 meter band at 7 p.m. Reports are of to YV5RO, YV5RH, YV5RM YV3RX. (Sushen-N. Z.) YV5RE

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4920 k/c, YV5RK, 5000 k/c, YV5RO, 4940 k/c, YV5RT, 4980 k/c, YV6RT, 4900 k/c are all deleted. New Blogans 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 shortwave 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 shortwave 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

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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	CONTRACTOR OF THE SALE
RX	. Official News Item	A CONTRACT OF
R636	Norman I Maguire	Albuquerque, N. M
R834	G R Jewell Jr	. San Diego, Calif
R881	Clarence Loo Mustos	. San Diego, Calit
R1043	William S Detter	Brady, Montana
	Tod E Materia	Wheeler Field, Hawaii
	Robert Dre	Miles City, Montana
R1213		Goshen, Indiana
R1815		Sacramento, Calif.
R1815		Bakersfield, Calif.
R1829, Nev2 R1849	Russell Cain	Reno, Nevada
R1049	. A. G. Hooker	Liberty Sask
N1005	. D. L. Bishop	Liberty Sask
R1905		Salinas Calif
R1900		Mill Valley Calif
K1919	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.
1 1 1 1 1 1 1	Charles Benedict	Altadena. Calif.
A PERSONAL PROPERTY AND	Tom Brandon	Edmonton, Alta.
YOU BENEFIT	Alan I. Breen	Dunedin, N. Z.
FIVE WAYS	R. A. Butts	Easton, Wash.
FIVE WAIS	R. V. Caldwell	Neskowin, Oregon
SEE PAGE 96	R. D. Doolittle	Glendale, Calif.
	Lional Jacoba	D I C HIC
a a standard and a	Harry C. Powell	Pasadena, Calif
<u></u>	T. P. Vasilopoulos	West Los Angeles, Calif
	Ken White	Oakland Calif
and the second of the second		Carland, Calli,



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



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

The Radex Publishing Co., Emerson, New Jersey

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The Radex Contest

Radex Contest Prizes

All Wave Contest

Hallicrafters Skyrider Defiant **Receiver**, SX24

2nd Prize, \$30 in cash **3rd Prize.** I 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 Band Contest

Philco Strap-around Portable 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

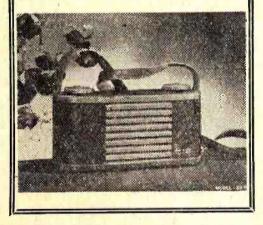
A tabulation of the Contest coupons received to date shows a close race in two divisions of the Radex Contests. The leaders in the Broadcast and the All-Wave Divisions are closely bunched together, but the first place occupants in the Shortwave and Amateur Divisions are running away from the pack. But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

For The Broadcast Band Champion

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 per-ormance, with the power and fine tone of a radio many times its size. The aerial is contained in the shoulder strap. It is ex-tremely 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 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 chap 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.

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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.

tions 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.

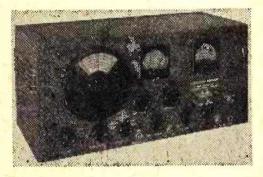
Points will be computed by multiplying your total number of verifications by the number of countries represented. If you have 700 verifications from 20 different countries, your score would be 700 times 20, or 14,000.

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 CHAMPION 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 the All Wave Champion.

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 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 division. 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

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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, Guatemala City, 1310 kcs.

March 9, 1:45-2:00 a.m., TG2, Guatemala 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

NEW

ECHOPHONE

Commercial

Only \$19.95

Think of an outstanding communications receiver for this exceptionally low price! TUNES FROM 545 kcs. to 30,500 kcs. 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 headphone: through phone circuit transformers and undis torted power output 6/10 watts.

through phone circuit transformers and under torted power output 6/10 watts. Receiver is housed in a metal cabinet nicely fin ished in satin black lacquer. Size is $7\frac{1}{2}$ " high to 10%" wide x 7%" deep. Shipping weight 12 lbs

Write for Free Literature

Price Complete With Tubes is Only \$19.9

Order from RADEX

12 Locust Ave. Emerson, N. J.

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High Grequency Globe Trotting By RAY LA ROCQUE

Report-O-Meter

Norman H. Kane	100%
Edward Laudansky	67%
Malcolm Horlick	36%
Al Renfro, Jr	31%
Walter E. Welsh	31%

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

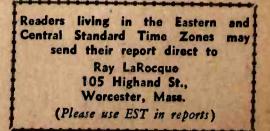
A. M. Hankins of Latrobe, Penna. wants to know if Radio Eiran in Eire is still on the air, and what their actual schedule is. . . For whose who are waiting for "Radio Guadeloupe" to verify, Art Hankins pens the encouraging note that he received his after waiting 1 year and 10 months! . . . Stations heard 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/othe 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



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 atfer carefully checking my receiver I had lost a little interest in DX!'

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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 veri card 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 Spring, Texas: "Although I have 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

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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 occupy.

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, Toronto, 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 KQXY 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.

W1XOJ was regularly heard this Summer while at Yarmouth, Me. Signals were fair. At the same spot the signals of W1XTG were faintly audjble. (Dissell-Conn.)

W1XPW here in Hartford, have shifted from 43400 kcs. to 44100 kcs., 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 programs (Dissel-Conn.)

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

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(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. (Renfro-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:

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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 I has VLQ on 9615 kcs.; Trans. II has VLQ on 9615 kcs.; Trans. III has VLQ-5 on 9680 kcs.; Trans. IV has VLW-2 on 9650 kcs. and VLQ-7 on 11880 kcs; Trans. V has VLQ-5 on 9680 kcs.; Trans. VI has VLW-5 on 6180 kcs., and VLQ on 9615 kcs.; Trans. VII had VLQ-2 on 11870 kcs.; Trans. VII 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. (Simonian-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. (Kape-Penna., also Laudansky-Mass., Stracener-La., and Hankins-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 ni the 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 Belgian National Anthem is heard. (Laudan'sky-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 kcs. is on daily from 8 a.m. to midnight with English news at10 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. (Mc-Connell-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. (Horlick-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 Guyaquil 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

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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

E. Welch of Lynn,	Mass.
6010-OLR2A	11840-DXW
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
6115—OLR2C	15200-DJB
6160—DXA	15230-DXT
6170-DXQ	.5230-OLR5A
6175—DXH	15275-Crakow
6190—DXG	15280-DJJQ
6195—DXI	15320-OLR58
7240—DXJ	15320-DXU
7270—DXM	15340-DJR
7290—DJI	17760-DJE
9504—OLR3B	17780-Dwow
9525—Lodz	17815—DJG
9525—SP-31	17825-DXC
9525—DXY	17830-OLR6A
9540—DJN	17830-DXV
9550—OLR3A	17845-DJH
9560—DJA	21450-DJS -
9570—SR-1	21565-DJJ
9570—DXZ .	21565-OLR7B
9610-DXB	2164.0-DJK

9650-DJW	21640-OLR7C
9670-OLR3B	21660-DXD
9675-DJX	21670-DXK
11740-Kattowitz	21690-DXF
11740—SP-25	21720-DXE
11745-DJF	21730-DXL
11760-OLR48	21740-DXN
11760-DXR	25850-DJT
11770-DJD	25950-DJU
11795-DJO	26450-DJV
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 kcs. (formerly Oslo) was hooked up in synchronization with DIL from 8-8:15 a.m. for a relay to CBS in New York. (Kane-Pa.)

Great Britain

GRZ on 21640 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. (Repfro-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., GSI on 21530 kcs., and GSV on 17810 (Horlick-Ohio, Hankins-Pa., kcs. Stracener-La., Horlick-Ohio, Renfro-

Guatemala

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 9:30-10 p.m.; "The English from 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 TGWA on 15170 kcs. operates with 10:20 p.m. with the American Hour directed to this country. (Renfro-

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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.

JVW 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 Page Thirty-eight 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. O.)

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, a m d 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 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.)

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 Portuguese. (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. Q.)

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 Montévideo 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.)

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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. (McConnell, 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-JJne 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, Okla. 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, Ohio. 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. Al 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, R. I. Lloyd Rees, Ridgewood, N. J. Al Renfro, Johnson City, Tenn. Don Renalds, Newburgh, N. Y. J. Ribinski, 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, Lacevville, 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. WMIM 2:50-3:05 a.m. WTMA 2:55-3:10 a.m. WLBJ 3:00-3:30 a.m. WCBI 3:00-3:15 a.m. 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.

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1st Monday WAOV 2:00-2:30 a.m. KFGQ 2:30-3:00 a.m. 1st Sunday WESX 4:00-4:15 a.m. 7th day of Month 3:00-3:30 a.m. KVGB 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. KROC 1:00-2:00 a.m. 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, and Zembla, Spitzbergen Novava 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.

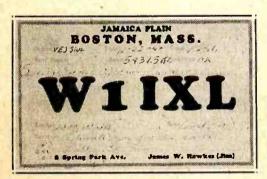
AFRICA: Includes none of the Mediterranean Islands. In the Atlantic Ocean, it includes the Madeiras, the Canaries, the Cape Verdes, Ascension and St. Helena. In the Indian Ocean, Madagascar, the Seychelles, Reunion, Mauritius, and Rodriquez. Africa's eastern boundary goes through the Suez Canal, the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

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Ham Hounding

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 20meter 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.

By OWEN CALLIN

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.

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 ol' cash money.



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 Defense 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. Mc-Cargar 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.

J2[B_must have a new QRA since Phil Bates' card addressed to the Callbook QRA of J21B 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, Rte. 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 YN11P. Harold Schubert has veries from: H13N, H15X, YV1AQ, HP1A, YV4AE and also YN11P. He says that YS1MS and KF6JEG have not verified.

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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, PY2IT, 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—HK1AK is a new Colombian heard on 40-meter fone. He gave his QRA as Box 919, Barranquilla.

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.

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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 come 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. Got 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 anytime 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 2½ 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 7½-watt transmiter using 45's in Class C. He then moved to Corbin and put together a ten-watt rig which contacted him 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, Salisbury, 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. He's 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,

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then he doesn't need to send postage.

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 CWI 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: W3IFI (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 Shawnee Flour Mills in color; W7HIA QSLs 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 W1IXL, 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 Ribin-> ski, 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.

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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. EST)

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

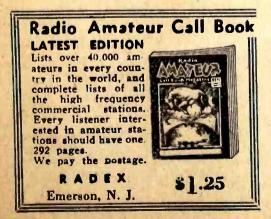
This list is intended as an easy, quick and complete reference for dial twirlers. Here's how to use it. Jot your dial setting under the kilocycle reading as you log each station. For more details and complete schedules of many of these stations see "Shortwaves in Review" if you live in the Eastern or Central Standard Time zones, or "On the West Coast" if you live in the Mountain or Pacific Standard Time zones. To use this qucik 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.

- 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. Weekdaysn.
- 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.

⁶⁰⁹⁰ ZNS Nassau, Bahamas. D-man.

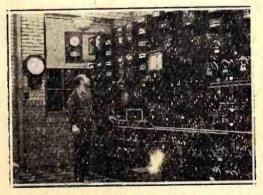
- 10540 DZD Berlin, Germany. D-an.
 10950 FIQA Tananarive, Madagascar. Sat-a.
 11380 Paramaribo, Surinam. D-a.
 11418 XGRV Chungking, China. D-en.
 11680 EAQ Madrid, Spain. D-a.
 11720 CJRX Winnipeg, Man. D-n.
 11725 JWV3 Tokyo, Japan. D-m.
 11740 CB1174 Santiago, Chile. D-n.
 11740 DXC2 Oslo, Norway. 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. D-n.
 - 15160 JLU3 Tokyo, Japan. D-m.
 - 15170 TGWA Guatemala City, Guat. D-a.
 - 15200 DJB Berlin, Germany. D-m.
 - 15200 XGOX Chungking, China. 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 DXing 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.









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.

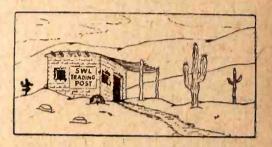
A "regional channel" is one in which several radio stations can operate with individual station power not inexcess of 5 kilowatts. A "local channel" is one in which several stations may operate with individual power not in excess of 250 watts.

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 channel, uses 250, 500, 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 subjejct 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.

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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 Blvd., Milwaukee, Wis. (Correspond with DXers interested in hams).

W. H. Herman, 6221/2 E. 99th St., Cleveland, Ohio. (SWL Cards).

Rudolph C. Zak, 2509 E. 89th St., Cleveland, Ohio. (Trade radio parts, your choice, for auto radiator 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 DXers interested in Pacific Coast, Cuban and TP stations-BCB Band).

Eldon Shipman, 621 Vine St., Fulton, 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., Indianapolis, Ind. (SWL Cards).

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

Oscar Williams, Shady Ave., Clarion, 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. (SWIL Cards).

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

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

E. Springfield, Mass., W1XSN. 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.

Page Fifty-three

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

43500 kcs.

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

43700 kcs.

WIXSO, 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.

Page Fifty-four

45300 kcs.

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., (Cliffside 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

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	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 (or Propagating the Gospel Among the Heathen.
2774	KALZ	Т	25	Grub Creek, T. A. E. C. Kraiger.
	KANK		10	Point Baker, I. A. A. R. Druegel.
15 3	KANM	Ť	10	Bethel T A. Society of the United Brethren
	KAQM		3	for Propagating the Gospel Among the Heathen.
	KASI		20	Allakaket, T. A. Samon Dubin. Hughes, T. A. Linious McGee.
	KASK		40	Hughes, T. A. Linious McGee.
	KILY	•••	50	Excursion Inlet, T. A. Northern Radio Co., 1422 Jos. Vance Bldg. Seattle, Wash.
	1174 716	FA	40	Madison, Wis, Aeronautical Radio, Inc.
2996	WAZM CY30	FA FA		Charlie Lake, B. C. United Air Transport, Ltd.
2998	WXE			Madison, Wis. Aeronautical Radio, Inc. Charlie Lake, B. C. United Air Transport, Ltd. Anchorage, T. A. Madison, Wis. Aeronautical Radio, Inc.
3005	WAZM	FA	40	Ft. Jefferson Nat'l Mon., Fla. Nat'l. Park Ser-
		-	3	vice.
2010	KAQM	TB	10000	Tandiong Priok, Java, N.E.I.
3040 3045	YDA VBV6	č		Calgary, Alta. Dominion Gov't. Wichita, Kans. Aeronautical Radio. Inc.
3062	KGTD	FA		Wichita, Kans. Aeronautical Radio, Inc.
	KGTR KST	FA		Salt Lake City, Utah. Same as KGTD. Roberston, Mo. Same as KGTD.
	KST	FA		
	KSV	FA FA		Amarillo, Tex. Same as KGTD. Albuquerque, N. Mex. Same as KGTD. Pittsburgh, Pa. Same as KGTD.
	KSV WAEC	PA		Albuquerque, N. Mex. Same as KGID.
	WAEO	FA		Chicago III Same as KGTD.
	WHG	FA		Chicago, Ill. Same as KGTD. Columbus, Ohio. Same as KGTD.
2072 5	WHM KGUP	FA FA		Indianapolis Ind. Same as NULD.
3072.5 3082	HRD	FA	14	Phoenix Ariz, Aeronautical Radio, file.
3032.5	KAAT	FA		Toncontin, Honduras, Pan American Airways
	KAAU	FA		Wake Island. Pan American Ways. Launch "Panair II-P." Same as KAAT. Launch "Panair XP." Same as KAAT.
	KABN KABO	FA FA	10	Launch "Panair XI-P." Same as KAAT.
	KABU	FA		Launch "Panair XP." Same as KAAT.
1000	KABV	FA		Refueling and Service Barge at Sand Island.
		TA		Same 30 KAAI
100	KAFO KAFW	FA FA		Pearl City, Oahu, T. H. Same as KAAT. Launch "Panair VI-P." Same as KAAT.
Sec. 2	KANB	FA		Launch "Panair VI.P." Same as KAAT.
				Sand Island, Midway Island Group. Same as
				Pago Pago, Tutuila. Same as KAAT.
Sec. Sec.	KAPP KASC	FA FA		Sumay, Guam. Same as KAAT.
1.1	KASW	FA	. 20	Launch "Panair X-P." Same as KAAT.
	KAXN	FA		Sumay, Guam. Same as KAAT. Launch "Panair X-P." Same as KAAT. Launch "Panair XIII-P." Same as KAAT. NC-14947. Lt. Col. G. R. Hutchinson, Balti-
1. S.	KHAGH	A	50	more Md
	KINL	FA		
	KIOA	FA	20	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.
	KNBF	FA		Mokapu Peninsula. Uanu, 1. H. Same as KAAT.
	KTIC	FA FA	20	Seaplane Tender "Sea Gull," New York City.
	KTIS	FA	20	
1	VEZ	FA		Burwash Landing, Y. T. Dominion Gov't. Grand Falls, Newfoundland, Nfld, Airport,
State .	VOAC	FA	Jane .	Grand Falls, Newfoundland, Nfld, Airport,
	TTACT	FA		Squadron Leader H. A. L. Pattison. Launch "Panair III-A." Same as KAAT.
3035	WASL KBBO	F		Bozeman, Mont.
3033	KBDĞ	F	2	Livingston, Mont.
3088				Phoenix, Ariz. Aeronautical Radio, Inc. Albany, N. Y. Same as KGUP. Hood Bay, T. A. Hood Bay Canning Co.
	WSDM	FA	50	Hood Bay, T. A. Hood Bay Canning Co.
3092	.5 KAGI KAGN	Ϋ́Τ	30	Portable in Alaska. Alaska Actoliauticas de Com
A	KAGO	T	10	Daly T A. Pacific American Fisheries, Inc.
	KAIP KAIX	UI T	18	Holy Cross, T. A. Catholic Society of Alaska.
	KAKL	C-TT C-TT CTT TT		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. Partable in Alaska. Same as KAGN.
	KBNL KEXO	T	50	Iron Crek, T. A. Southwestern Herring Co.
	KEXO	Ţ	50 50	Portable in Alaska. Same as KAGN.
	KEXP KGM			Ketchikan, T. A. Same as KGM.
	KIAO			Rose Inlet, T. A. Same as KGM.
CON IN	KIAP			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. Port Althrop, T. A. Same as KGM.
Ser and	KIAV			Port Althrop, I. A. Same as a Brity-five
			Went Bull	rijifiwe

www.americanradiohistory.com

	KIAW			and the second
	KIAX			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. Daly, T. A. Same as KAJP. Luckyshot, T. A. Jack M. Karteman. Squaw Harbor, T. A. Same as KAJP. Iron Creek, T. A. Same as KBNI
	KIAY			Ketchikan, T. A. Sames KGM.
	KIAZ KIBA			Kake, T. A. Same as KGM.
	KIBI	ĊŤ		Kake, T. A. Same as KGM.
1 Mar 1	KIIP	ŤC	30	Luckyshot, T A Jack M Kantana
	KIJH	C		Squaw Harbor, T. A. Same as KAIP
	KIOH KIU	СН		Iron Creek, T. A. Same as KBNL. Iron Creek, T. A. Same as KBNL. Seattle Work, You are as KBNL.
	KKAA	Т	50 25	Seattle Work X. Same as KBNL.
	KKAB	Ť	25	Seattle, Wash, Yellow Band Gold Mines, Inc.
	KLB KLC			Seattle, Wash. Yellow Band Gold Mines, Inc. 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. Rose Inlet, T. A. Same as KGM. Uganik Bay, T. A. San Juan Fishing & Packing Co., Seattle, Wash. Warren, T. A. Pacific American Fisheries, Inc.
	KLE			Rose Inlet T A Same as KGM.
	KLY	СН		Uganik Bay, T. A. Sam Juan Fishing & Daching
				Co., Seattle, Wash.
2002	TATO			Warren, T. A. Pacific American Fisheries, Inc.
3093	KAJO KALG			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 Douglas
	KALH		100	Port Moller, T. A. Same as KAJO.
	KALH		100	King Cove, T. A. Same as KATO
	KALJ KAMG	•••	20	Stuyshok, T. A. Vance Hitt.
	KANR		20	Mountain Village H. Whitcher.
	KAQL		25	Shepard. Norval Douglas
3095	KBAE	F KBAG, F F F F F F F F F F F F		The second s
				Seward, T. A. (In Chugach Forest). U. S. Dept. of Agriculture, Forest Service.
	KBAF,	KBAG,	KBAH,	Same as Anove
	KBCC GBCM	<u>भ</u> म		Mt. Shasta, Calif.
	KBCN	F		Salmon, Idaho. (Salmon Forest). Salmon, Idaho. (Salmon Forest).
	KBDD KBDE	F		Elko, Nev. (Humboldt Forest)
	KBEN	7 Ŧ	- R	Elko, Nev. (Humboldt Forest). Seward, Alaska.
	KBEZ	F		Mt Shasta Calif
	KBFH WWLL	F		Leavenworth, Wash. Duluth, Minn. (Superior Forest). Escanaba, Mich. (Unper Mich Forest).
	WWLM	F		Escanaba, Mich. (Upper Mich. Forest).
3105				(opper mien, rotest).
3.103				Allocated as an algorith it's a second
				cuonau fas an aircraft calling and working fre-
		Sugar Sa	n inne	Allocated as an aircraft calling and working fre- quency for use by non-scheduled aircraft in the Western Hemisphere only
		N.S.S.	r, 1	Western Hemisphere only. Only airplanes which are believed to be of interest to Deers are listed
	KHAGH			Western Hemisphere only. Only airplanes which are believed to be of inteerst to DXers are listed
an an	KHAGH	A	50	Western Hemisphere only. Only airplanes which are believed to be of inteerst to DXers are listed on these airplane frequncies. NC-14947. Lt. Col. G. R. Hutchinson, Balti- more. Md
3120	KHCIY	A A	50 100	Western Hemisphere only. Only airplanes which are believed to be of inteerst to DXers are listed on these airplane frequncies. NC-14947. Lt. Col. G. R. Hutchinson, Balti- more, Md NC-18997. American Export Airlines
3120 3147.5	KHCIY KHCIY KRBD	A A A	50 100 100	Western Hemisphere only. Only airplanes which are believed to be of inteerst to DXers are listed on these airplane frequncies. NC-14947. Lt. Col. G. R. Hutchinson, Balti- more, Md NC-18997. American Export Airlines.
	KHCIY KHCIY KRBD	A A FÁ	50 100	Western Hemisphere only. Only airplanes which are believed to be of inteerst to DXers are listed on these airplane frequncies. NC-14947. Lt. Col. G. R. Hutchinson, Balti- more, Md NC-18997. American Export Airlines. NC-18997. American Export Airlines. Red Bluff, Calif. Aeronautical Radio, Inc. Burbank, Calif. Aeronautical Radio, Inc.
3147.5	KHCIY KHCIY KRBD KEU KFM	A A FA FA	50 100 100 400	Western Hemisphere only. Only airplanes which are believed to be of inteerst to DXers are listed on these airplane frequncies. NC-14947. Lt. Col. G. R. Hutchinson, Balti- more, Md 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 ac WEII
3147.5	KHCIY KHCIY KRBD KEU KFM KFO KGE	A A FÁ	50 100 100 400 	Western Hemisphere only. Only airplanes which are believed to be of inteerst to DXers are listed on these airplane frequncies. NC-14947. Lt. Col. G. R. Hutchinson, Balti- more, Md 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 ac WEII
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	11.11.1		1.2.1	
<i>F</i>	KNJN	G,		Mt. McKinley Nat'l. Park, Alaska. Same as
1.1.2	WSEH	G		KNJN.
			••••	Houghton, Mich. (Isle Royal N. P.) Same as KNJN.
	WSEI	G		Mott Island, Mich. Isle Royal N. P.) Same as
3265	KAKR			KNJN.
	KALY	С	25	Candle, T. A. Candle Community Radio Ass'n.
	KBBE	F		Egavik, T. A. R. B. Julian. Grangeville, Idaho. (Nezperce Forest).
	KBBF KBBH	Ŧ	• • • • •	Oronno, Idano, (Llearwater Forest)
	KBBI KBBIT	F		Oronno, Idaho. (Clearwater Forest)
	KBBU	F		Pierce, Idaho. (Clearwater Forest). Orofino, Idaho. (Clearwater Forest).
	KBCU KBDP	<u>नेजन्त्र</u> न		LIK CITY, Idaho. (Nezherce Forest)
	KBDT	F		Grangeville, Idaho. (Nezperce Forest). Descanso, Cailf. (Cleveland Forest).
	KBFC KIBZ	F	1111	Cascade Locks, Ore. (Mt. Hood Forest).
	KILQ KLA		100	Waterfall, T. A. Nakat Packing Corp.
	WWLY	F	• • • •	Waterfall, T. A. Same as KIP7
3270 3280	CZ7N CIA	FA T		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. O. Conding Air of the Salmon Co.
10	2	1000		Barriefield, Ont. Dept. of Nat'l Defense Do
101 C 13	CIPS VEW	CCFT		Calgary, Alta. Same as CIA.
3295 3300	WWLX CY3J	F		Lalgary, Alta Same as CTA
	CZ5Y			Luquillo, Puerto Rico. Anyox, B. C. Consolidated Mining & Smelt- ing Co.
	CZ7H	C-T T		Anyox, B. C. Same as CV11
3320 3322.5	YDH4 KRBD	FA	30 400	Cedar Creek, B. C. Same as CY3J.
3350	K7XFQ	FA SE	150	Red Bluff, Calif. Aeronautical Radio Inc.
	K7XFR	SE	150	Anyox, B. C. Same as CY3J. Cedar Creek, B. C. Same as CY3J. Bandoeng, Java, N. E. J. Red Bluff, Calif. Aeronautical Radio, Inc. Anchorage, T. A. Alaska Aeronautical & Com- munication Commission
	K7XFS	SE	150	Ketchikan, T. A. Same as above.
	K7XFU K7XGG K7XGH	SE	150	Juneau, T. A. Same as above.
	K7XGI	SE	150 150	Juncau, T. A. Same as above. Juncau, T. A. Same as above. Cordova, 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.
3372.5	WAOE WAOS	FA FA		Ralston, T. A. Same as above.
	WAQU	FA		Grand Rapids, Mich. Same as WAOF
.) - t - i	WAOU WAOV WAOW	FA FA	1111	Detroit, Mich. Same as WAOE.
	WARC WAUA	FA FA		Milwaukee, Wis. Same as WAQE. Pittsburgh, Pa. Same as WAQE. Chicago, Ill. Same as WAQE. Norfolk, Va. Same as WAQE. Saginaw, Mich. Same as WAQE. Sault Ste. Marie, Mich. Same as WAQE. Traverse City. Mich. Same as WAQE.
	WBSC WBSS	FA.	11.1	Norfolk, Va. Same as WAOE.
	WBTC	FA FA		Saginaw, Mich. Same as WAQE.
	WPAL WPXB	FA FA		Traverse City, Mich. Same as WAQE. Cleveland, Ohio. Same as WAQE. Buffalo, N. Y. Same as WAQE. New Cumberland Pa Same as WAQE.
	WPXH WPXL	FA		Buffalo, N. Y. Same as WAOF
	WPXM	FA FA	1111	
t,	WPXW	FA FA		Lansing, Mich. Same as WAOE. Muskegon, Mich. Same as WAOE.
2224	WPYB	FAF		Flint, Mich. Same as WAQE.
3386	KBAA	F	••••	Williamsport, Pa. Same as WAQE. Flint, Mich. Same as WAQE. Baltimore, Md. Same as WAQE. Portland, Ore. (Radio Laboratory). U. S. Dept. of Agriculture Forest Services
	KBCG	F	1 - 100	Wast and the of a dicat bervice.
3400	K7XFQ	and a subsect	150	Yreka, Calif. (Klamath Forest). Same as KBAA.
5400		SE	150	Anchorage, T. A. Alaska Aeronautical and Com- munications Commission.
	K7XFR K7XFS	SE	150 150	Ketchikan, T. A. Same as above.
	K7XFU K7XGG	SE	150 150	Juneau, T. A. Same as above.
	K7XGG K7XGH	SEE	150	Gravina' Island, T. A. Same as above.
Rece fre	K7XGI YV5RW	SEB	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. Caracas, Venezulea. "Radio Turmieto," Cesar Banuls.
			4.39 3	PD 111
3410	ксво	LH	50	Tillamock Rock Light, Ore. U. S. Lighthouse Service.
Pitter 1	KNKG	F	1	Ash Mt Sequoia Nat'l. Park, Calif. Death Valley, Calif.
	KNLP	F	· · · ·	Portland, Maine
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	WPB	F		Poe Reef, Mich.
		LH		Catlinsburg, Tenn. Great Smoky Nat'l. Park.
	WRJ WSEO	G		Dry Tortugas, Fla.
	WST	LH		Maniton Island, Mich.
	WWAL	Lii		Passage Island, Mich.
	WWAM	LH		Rock of Ages, Mich.
14 T U.	WWG	1.11		Cheboygan, Mich.
	ŴŴĦJ	LH		Tender "Lyric."
		LH		Marquette, Mich.
	WWM			
	WWXC	LH		Lighthouse Ship "Canal."
1	W-Z	LH		Key West, Fla.
100011		SEM	50	General Grant N. P., Calif. U. S. Nat'l. Park
46371/2	KAMB	SEM	50	Serv., Dept. of Interior.
		111111		
	KNJP	G		Grand Teton N. P., Wyo. Same as KNJO.
1	KNJQ	G		Sequoia Nat'l. Park, Calif. Same as KNJO.
	and a second second			Death Valley Nat'l Mon. Calif. Same as KNIO.
	KNJJR	GG	• ye • • •	Mt. Rainier N. P., Wash. Same as KNJO. Olympic N. P., Wash. Same as KNJO. Great Smoky Mts. N. P. Same as KNJO.
	KNJS KNIU	G		Olympic N. P. Wash, Same as KNIO.
6	WSEF	GG	· • • •	Great Smoky Mts N P Same as KNIO
			1.2.	
3420	WWCR	LH		Cape Henry Lighthouse.
	WWDP	LH		Hender "Hollyhock."
3427.5	KBEX	F		Del Rosa, Calif.
	KBFB	F		San Bernardino, Calif.
3430	CY2Q	SP		Remarket P. O. Canaral Airways Itd
	CY4Ã CY6S	FA	••••	Palde Mit D C Minister of Londe for B C
		F		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.
	CZC	SP	• • • •	Armstrong, Ont. Ont. Dept. of Lands and
	CZ4B	F	• • • •	Afmstrong, Ont. Ont. Dept. of Lands and
				Forests.
				Beaunad Opt Same of C74B
	CZ5C	F		Basswood, Ont. Same as CZ4B. Alert Bay, B. C. Same as CY2Q. Fort Worht, Texas. Aeronautical Radio. Inc.
	CZ7A	SP		Alert Day, B. C. Same as C12Q.
3432.5	KGTF	FA		Fort wornt, Texas. Acronautical Radio, The
	KGUA	FA		El Paso, Texas. Same as KGTF.
	KGUG KGUL	FA		Big Spring, Texas. Same as KGTF.
		FA		Abilene, Texas. Same as KGTF. Douglas, Ariz. Same as KGTF.
	KGUN	FA		Douglas, Ariz. Same as NGIT.
	KGUR	FA		Glendale, Calif. Same as KGTF. Detroit, Mich. Same as KGTF.
	WAEI	FA		Detroit, Mich. Same as KOIT.
				D. I.I. C VCTE
	WAEP	FA		Portable Same as NULL
	WAEP WAES	FA FA		Suracuse N V Same as KGTF.
	WAEP WAES WAET	FA FA FA		Suracuse N V Same as KGTF.
	WAEP WAES WAET WAEV	FA FA FA FA		Suracuse N V Same as KGTF.
	WAEP WAES WAET WAEV WAPD	FA FA FA FA FA	·····	Suracuse N V Same as KGTF.
	WAEP WAES WAET WAEV WAPD WAQG	FA FA FA FA FA FA	····· ····	Portable. 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. L. Same as KGTF.
	WAEP WAES WAET WAEV WAPD WAOG WARQ	FA FA FA FA FA FA FA	···· ···· ····	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Portable. Same as KGTF.
	WAEP WAES WAET WAEV WAPD WAQG WARO WAWB	FA FA FA FA FA FA FA FA	····· ···· ····	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Portable. Same as KGTF.
	WAEP WAES WAET WAEV WAPD WAQG WARO WARO WARD	FA FA FA FA FA FA FA FA	·····	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Portable. Same as KGTF.
	WAEP WAES WAEV WAPD WAQG WARO WARO WAWB WMER WNEG	FA FA FA FA FA FA FA FA FA	····· ···· ····	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Portable. Same as KGTF.
	WAEP WAES WAEV WAEV WAPD WAQG WARO WARO WAWB WMER WNEG WNEH	FA FA FA FA FA FA FA FA FA	·····	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Bristol, Tenn. Same as KGTF. Charleston, W. V. Same as KGTF. So. Washington, Va. Same as KGTF.
	WAEP WAES WAET WAEV WAPD WAOG WARO WARO WAWB WMER WNEG WNEH WSDG	FA FA FA FA FA FA FA FA FA FA	·····	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Bristol, Tenn. Same as KGTF. Charleston, W. V. Same as KGTF. So. Washington, Va. Same as KGTF.
	WAEP WAES WAEV WAEV WAPD WAPD WARO WARO WARO WARB WMER WNEG WNEG WNEH WSDG WSDI	FA FAA FAA FAA FAA FAA FAA FAA FA		Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Bristol, Tenn. Same as KGTF. Charleston, W. V. Same as KGTF. So. Washington, Va. Same as KGTF.
	WAEP WAES WAEV WAEV WAPD WARO WARO WARO WARO WARB WNER WNEG WNEH WSDG WSDI WSDI	FA FA FA FA FA FA FA FA FA FA FA		Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Bristol, Tenn. Same as KGTF. Charleston, W. V. Same as KGTF. So. Washington, Va. Same as KGTF.
	WAEP WAES WAEV WAEV WAPD WAQG WARO WARO WAWB WMER WNEG WNEG WNEH WSDG WSDI WSDJ WSDJ	FA FFA FFA FA FA FA FA FA FA FA FA		Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Charleston, W. V. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Albany, N. Y. Same as KGTF.
	WAEP WAES WAEV WAEV WAPD WAPD WARO WARO WARO WARO WNEG WNEG WNEG WNEG WSDI WSDI WSDI WSDJ WSDD	FAA FFAA FFAA FFAA FFAA FFA FFA FAA FA	50	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Portable. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Albany, N. Y. Same as KGTF. Buffalo, N. Y.
	WAEP WAES WAEV WAEV WAPD WARO WARO WARO WARO WARO WARO WARO WARO	FAA FFA FFA FFA FFA FAA FAA FAA FAA FAA	50	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Portable. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Albany, N. Y. Same as KGTF. Buffalo, N. Y.
	WAEP WAES WAEV WAEV WAPD WARO WARO WARO WARO WARO WARO WARO WARO	FAA FFA FFA FFA FFA FFA FAA FAA FAA FAA	·····	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Portable. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Albany, N. Y. Same as KGTF. Buffalo, N. Y.
2450	WAEP WAES WAEV WAPD WAQG WARO WARO WARO WARO WARO WARO WARO WARO	FAA FFA FFA FFA FFA FFA FFA FFA FAA FAA	····· ···· ···· ···· ···· ···· ···· ····	Portable. 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. Portable. Same as KGTF. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Charleston, W. V. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Indianapolis, Ind. Same as KGTF.
3450	WAEP WAES WAEV WAEV WAPD WARO WARO WARO WARO WARO WARO WARO WARO	FAA FFA FFA FFA FFA FFA FFA FFA FAA FAA	·····	Portable. 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. Portable. Same as KGTF. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Charleston, W. V. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Indianapolis, Ind. Same as KGTF.
	WAEP WAES WAEV WAEV WAPD WAQG WARO WARO WARO WARO WARO WARO WARO WARO	FAA FFA FFA FFA FFA FFA FFA FFA FFA FFA	50 	Portable. 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. Portable. Same as KGTF. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Charleston, W. V. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Indianapolis, Ind. Same as KGTF.
3450 3480	WAEP WAES WAEV WAEV WAPD WARO WARO WARO WARO WARO WARO WARO WARO	FAA FFA FFA FFA FFA FFA FFA FFA FAA FAA	·····	Portable. 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. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Portable. Same as KGTF. Charleston, W. V. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Albany, N. Y. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Berea, Ohio. Same as KGTF. Indianapolis. Ind. Barcelona, Venez. Gobierno Edo. Anzoategni Acarigua. Venez. "La Voz del Llano," Pau-
	WAEP WAES WAEV WAEV WAPD WAPD WARO WARO WARO WNEG WNEG WSDI WSDJ WSDJ WSDJ WSDJ WSDJ WSDD WSDD WSDD	FAA FFA FFAA FFAA FFAA FFAA FFA FFA FAA FFA FAA F FAA FAA FAA FAA FAA FAA FAA FAA FAA FAA FAA FAA FAA FAA FAA FAA FAA F FAA F FAA F FAA F FAA F FAA F FAA F FAA F FAA F FAA F F F F F A F F F A F F F A F F F A F F F A F F F A F F F A F F F A F	50 	Portable. 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. Canden, N. J. Same as KGTF. Portable. Same as KGTF. Bristol, Tenn. Same as KGTF. Charleston, W. V. Same as KGTF. Charleston, W. V. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Buffalo, N.Y. Port Columbus. Ohio. Same as KGTF. Buffalo, N.Y. Port Columbus. Ohio. Same as KGTF. Indianapolis, Ind. Same as KGTF. Indianapolis. Ind. Barcelona, Venez. Gobierno Edo. Anzoategui. Acarigua. Venez. "La Voz del Llano," Pau- sides Sigala.
3480	WAEP WAES WAEV WAPD WAQG WARO WARO WARO WARO WARO WARO WARO WARO	FAA FFA FFA FFAA FFAA FFAA FFAA FFAA F	50 200	Portable. 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. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Portable. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Indianapolis. Ind. Same as KGTF. Indianapolis. Ind. Barcelona, Venez. Gobierno Edo. Anzoategni. Acarigua. Venez. "La Voz del Llano," Pau- sides Sigala. Wellington. New Zealand.
3480 3488	WAEP WAES WAEV WAPD WAQG WARO WARO WARO WARO WARO WARO WARO WARO	FAA FFAA FFAA FFAA FFAA FFAA FFAA FFA FFA FFA FFA FFA FFA FFA FFA FFA FFA FFA FFA FFA FFA FFA FFA FFA FFAA FFFAA FFA	····· ····· ····· ····· ····· ····· ····	Portable. 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. Portable. Same as KGTF. Bristol. Tenn. Same as KGTF. Portable. Same as KGTF. Charleston, W. V. Same as KGTF. Charleston, W. V. Same as KGTF. Charleston, W. V. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Chicago, Ill. Same as KGTF. Elkins, W. V. Same as KGTF. Buffalo, N. Y. Port Columbus. Ohio. Same as KGTF. Berea, Ohio. Same as KGTF. Indianapolis. Ind. Barcelona, Venez. Gobierno Edo. Anzoategui Acarigua. Venez. "La Voz del Llano," Pau- sides Sigala. Wellington. New Zealand. Banceon. Burma.
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4055	K7XFQ	SE	150	Anchorage, T. A. Alaska Aeronautical and Com-
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4107	HCJB2	В	1000	Sixth Ave., New York City.
4122.5	KBLC	FĂ	50	Quito, Ecuador.
	KBRN	FA	3000	Corpus Christi, Texas. Aeronautical Radio.
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4135	KBAY	F		
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4170	w00	.	20000	NC-18997. American Export Airlines.
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4273	RV15		200000	Khabarovsky, U. S. S. R.
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4282.5	WAD	CHT		Ltd., 140 Montgomery St., San Francisco. Pt. Washington, Wis. Lorain County Radio
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4350	VEF CY5D	EGC		Aklavik, N. W. T. Same as CIA.
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	CZ4T	т		Cape Dorset, Baffin Land, N. W. T. Same as
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4422 1/2	WIOXKG	E2	75	Zealand, Ltd. Tow Boat "Alex Mackensie," Radiomarine Corp.
4436	VDO	Т	400	Vancouver, B. C. North-West Telephone Co.,
4465	CFA2	С		768 Seymour St. Drummondville, P. Q. Can. Marconi Co., Box
4490	CZ2T	т		1690, Montreal, P. Q. Cedar Bay, P. Q. Consolidated Chibougamau
4495	CZ2B	т		Bridge Biver B C North-West Telephone Co.
4500	ČĨĂ	Ť		Barriefield, Ont. Dept. of Nat'l. Defense, Do- minion Gov't.
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4505	CFW CZP	T		Claydon Bay, B. C. Canadian Fishing Co., Life.
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4512	ZFS	Ť		Nassau, Bahamas, Sup't. of Telegraphs, Central Bay St.
4550	WDN	С		Rocky Point, N. Y. RCA Frequency Bureau. 30 Rockefeller Plaza, N.Y.C.
4560	CPO4	CR		LaPaz, Bolivia.
4600	HC2ET KBAI	F		Guayaquil, Ecuador. Ketchikan, T. A. U. S. Department of Agricul-
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	KBFM	F	* * * * *	Petersburg, T. A. Same as KBAL
	KBFO	F		Juneau, T. A. Same as KBAL
	KMYA KMYB	F		Patrol Boat "Ranger 10." Same as KBAL.
4617	KYZA	G	****	Patrol
	KYZD	g		Charles Call Cause on VV7A
-	KYZC KYZF	Ğ		Del Rio, Texas, Same as KYZA. El Centro, Calif. Same as KYZA. Alpine, Texas. Same as KYZA. Turcon Aris. Same as KYZA.
	KYZE KYZC	G		
	KYZK	Ğ		McAllen Texas Same as KY/A.
	KYZI	Ğ		Lynden, Wash. Same as KYZA.
	WWMA WWMB	G		Detroit, Mich. Same as KYZA. Buffalo, N. Y. Same as KZA.
	WWMD	იიი იიაიიიიიი		Derby Line, Vt. Same as KY7A.
	WWMO WWMP	GG		Derby Line, Vt. Same as KYZA. Ogdensburg, N. Y. Same as KYZA. Rousses Point, N. Y. Same as KYZA.
3815	KNIO_	G	50	Anabaim Calif Same as KAMB.
4650	KODZ KAZV	FA FA	100	
	KBOF		02	Rainy Pass District, T. A. Star Air Lines, Inc., Rhon River Emergency Field.
4707	KFRA	FAC	100 200	Flat, T. A. Star Air Lines. Candle, T. A. Same as KFRA.
	KFRD	FĂ C	100	Amapala, Honduras, Gobierno de Tonduras,
4710 4730	KCTF	FA		Amapala, Honduras. Gobierno de Tonduras. Roatan, Honduras. Gobierno de Honduras. Fort Worth, Tex. Aeronautical Radio, Inc.
	KGUA	FA		Tueson, Ariz. Same as KGTF.
	KGIIP	FA FA FA		Disentin Aria Same as Kirl F.
	KGUT	FA		Glendale, Calif. Same as KGTF. Robertson. Mo. Same as KGTF. Oklahoma City. Okla. Same as KGTF.
	KIOO	FA		Tulas Ilkis Same as Strif.
	WARO	FA		
	WSDC	FA		Newark N. I. Same as KGTF. Lonisville, Ky. Same as KGTF. Chicago, Ill. Same as KGTF.
	WSDF	FA		Chicago, Ill. Same as KGTF.
No. No.				

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	WSDH WSDK WSDP	FA FA	1 - 1 - 1 - 1 - 1	Nashville, Tenn. Same as KGTF. Cincinnati, Ohio, Same as KGTF
4740	WSDQ	FA FA		Cincinnati, Ohio. Same as KGTF. Cincinnati, Ohio. Same as KGTF. Memphis, Tenn. Same as KGTF. Port Columbus, Ohio. Same as KGTF. Berea, Ohio. Same as KGTF. Brownsville, Tex. Aeronautical Radio, Inc. Memphis, Tenn. Same as KBRN. Charlotte, N. C. Same as KBRN. Tampa, Fia. Same as KBRN.
+/+0	KBRN WAHY	FA FA		Berea, Ohio. Same as KGTF.
	WSDI WOET	FA FA		Memphis, Tenn. Same as KBRN.
47421	WSIM	FA	400	Charlotte, N. C. Same as KBRN. Tampa, Fla. Same as KBRN
	KBRN	FA FA	50 3000	Corpus Christi Tan Assessed to Day
1. 1990	WAHY WARS	FA FA	1000	
	WEEG	FA		Memphis, Tenn. Same as KYBC. Muscle Shoals, Ala. Same as KBLC. Greensboro, N. C. Same as KBLC. Jacksonville, Fla. Same as KBLC. Washington, D. C. Same as KBLC. Beaumont. Tex. Same as KBLC. Newark, N. J. Same as KBLC. Greenville, S. C. Same as KBLC. Charlotte, N. C. Same as KBLC. Philadelphia, Pa. Same as KBLC. Tampa. Fla. Same as KBLC.
	WEEK	FA FA		Jacksonville, Fla. Same as KBLC. Washington D.C. Same as KBLC.
	WEEL WEEP	FA FA	50	Beaumont. Tex. Same as KBLC.
	WGSA WOET	FA FA	50	Greenville, S. C. Same as KBLC.
	WPAE	FA	1000	Charlotte, N. C. Same as KBLC. Philadelphia, Pa. Same as KBLC
4745	WSJM KBRN	FA FA	400 3000	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. Tampa, Fla. Same as KBRN. Ocean Gate, N. J. Bousquet, P. O. General Airways Itd
1014	WAHY WOET	FA FA	1000	Memphis, Tenn. Same as KBRN.
4753	WSIM WOO	FAT	400	Tampa, Fla. Same as KBRN.
4755	CY4A CY6E	FA	20000	Ocean Gate, N. J. Bousquet P. O. Canaral Alimour Tell
4770	YV1RT	FAB		Beavertail Lake, Man. Arrow Airways Itd
4775	CJD	F		Campbell River, B. C. Minister of Lands for
10.5	CY2Q CZC	C		Atlin, B. C., B. C. Provincial Police
	CZ4B	P F		Bratorne, B. C. Same as CY2Q.
	CZ5C	F		Forests.
	CZ7A H17GAB	PB		Basswood, Ont. Same as CZ4B. Alert Bay, B. C. Same as CY2Q.
4780	YV1RO	В	750	Ducaramanga, Colombia
4785	CZC CY2Q	P		Triujillo, Venezuela. Bralorne, B. C., B. C. Provincial Police
	CZ7A HTIABB	P P P P P B B		Atlin, B. C. Same as CZC. Alert Bay, B. C. Same as CZC.
4790 4795	YV5RY	B	600	Barranguilla, olombia.
	HI3CAF HI66FAI	B	750 501	Caracas, Venezuela. Bogota, Colombia.
4797 1/2	KHRH KSFM	RB RB	100	Ibague, Colombia. NC-19904. Howard R. Hughes, N. Y. C. New York City, NRC Las 20 Back 60.
	K6XAK WNBM	GE	1500	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. Cray, Podia, Co.
	W4XID W6XCS	RB E1	50	New York City. NBC, Inc.
	W6XXT	GE GE	50 5000	San Francisco Calif Gaulung Eng Co
	W6XOW W7XBA	GE	1000	Portable. Press Wireless, Ltd.
	W7EFZ	E1 /	15 60	Portable. Northern Radio Co. Seattle. Wash. Radio Labs., Inc. Portable. W. V. Univ. Dept. of Physics. Portable. Same as W8XUK. Elgin. Ill. Time signals
N	W8XIJK WEXUL	GE	10 10	Portable. W. V. Univ. Dept. of Physics.
	W9XAM W10XTJ	Time GE		Elgin, Ill. Time signals.
4800	WCBN	RB	25	Portable. Harvey Radio Labs. Inc. New York City. CBS, Inc., 485 Madison Ave.
4805 V.	HI6FAB	B B T B	· 501	maracibo, veneznela.
4810	CYC YDE2	T	100	Manizales, Colombia. Amos, P. Q. Canadian Nat'l. Railway, Solo, Java, N.E.I. NIROM.
4815	YV-RU	R		Maracalho Venezuela
4280	HI2BAB GDW	R B T	600	Cucuta, Colombia. Rugby, Gt. Britain G.P.O., Armour House, St.
¥	VVIRN	в		Martin's Le Grand, London ECI. Barquisimeto, Venezuela.
4825	YV3RN CY6P	FA		Unanning, Man, Wings, Ltd.
1	CZ3B HI5EAD	FAB	720	Berens River, Man. Wings, Ltd. Calif. Colombia.
4830 4835	YVSRH	B B B B T T F	525	Caracas, Venezuela.
4840	HTIABE CY2L CY2O CY2O CY2T	Ť		Cartagena, Colombia. Baie Comeau, P. Q. Ont. Paper Co., Ltd.
He charles	CY2T	F		Chutes aux Outardes, P. O. Same as CY2L. Berens River, Man. Man. Dept. of Mines &
1	CY3E	т	Contra a	Resources.
	VUC2 YV4RX	B	10000	Clarne City, P. O. Gulf Pulp & Paper Co. Calcutta, India. All-India Radio.
Pres Ci .		a la		Maracay, Venezuela.
Page Sixt	y-1wo	C. Sura		and the second se

4845	HIJCAD	B	720	Bogota, Colombia.
4850	YVIRZ	B		Trujillo, Venezuela,
4855	VBV6	ĉ		Calgary, Atla.
	CZET	FA		Chiboygama, P. Q. Dominion Skyways, Ltd.
4860	CZ5K			Mud Lake, Ont. Same as CZ5K.
	CZ5L	FA		Mud Lake, Ont. Same as CLSR.
	CZ5M	FA		Rouyn, P. Q. Same as CZ5K.
	CZ9U	FA		St. Felicien, P. Q. Same as CZ5K.
	TGY	C		Guatemala City, Guat.
	VOWM	FA		Northwest River, Dabrador. Newfoundland Sky-
				ways, Ltd.
	YV1RL	В	300	Maracaibo, Venezuela.
1205		B	751	Santa Marta, Colombia.
4365	HJ2BAJ	T		Vancouver, B. C. North-West Telephone Co.,
	VDO -	-	400	
			-	768 Seymour St.
4870	CIA	Т		Barriefield, Ont. Dept. of Nat'l. Defense, Do-
				minion Gov't.
1	VSW	C B B		Calgary, Atla.
	YV2RN	B		San Cristobal, Venezuela.
4875	HI6FAH	B	600	Armenia, Colombia.
4878	ZTD	Ē		Durban, Union of S. Africa.
4880	VDQ	Ť		Cedar Bay, P. Q. Telephone Centre du Lae
4000	A DĂ			St. Jean.
21	VIIDO	В	10000	Bombay, India.
	YUB2	P P		Ciudad Bolivar, Venezuela.
	YV6RU	B		
4885	HJ4DAP	B	501	Medellin, Colombia.
4890	HRK	C	200	Tegucigalpa, Honduras. Gobierno de Hond.
	YV-RX	C B B B B		Tegucigalpa, Honduras. Gobierno de Hond. Maracaibo, Venezuela.
4895	HJ3C. H	В	720	Bogota, Colombia,
4900	YVORT	B		Giudad Bolivar, Benezuela.
4910	YV-RY	B		Coro, Venezuela.
4917 1/2	WAZM	FA	40	Madison, Wis. Aeronautical Radio, Inc.
4920	VUM2	B	1000	Madras, India.
4920	VOME		1000	Caracas, Venezuela.
40.20	WWADD	В		Valencia, Venezuela.
4930	YV4RP			Phoenix, Ariz. Aeronautical Radio, Inc.
4837 1/2	KGUP	FA		Thoenix, Ariz. Actonautical Ratio, The
	WSDM	FA	date	Albany, N. Y. Same as KGUP.
4940	YV5RO	B		Caracas, Venezuela.
4947 1/2	KGUP	FA		Phoenix, Ariz. Aeronautical Radio, Inc.
	WSDM	FA		Albany, N. Y. Same as NGUP.
4950	YV4RO	В		Valencia, Venezuela,
4952 1/2	KGUP	FA		Phoenix, Ariz, Aeronautical Radio, Inc.
110-14	WSDM	FA		Albany, N. Y. Same as KGUP.
4960	VUD2	B	10000	Delhi, India.
4,00	YV5RS	B		Caracas. Venezuela.
4967 1/2	KGUP	FÃ		Phoenix, Ariz. Aeronautical Radio, Inc.
4907 72	KHAGH	Â	50	NC-14947. Lt. Col. G. H. Hutchinson, Bauti-
	KIIAOA	Λ	50	more Md
	WCDW	E A		more, Md. Albany, N. Y. Same as KGUP.
	WSDM	FA	1000	Ducha CA Daitain
4975	GBC	T	5000	Rugby, Gt. Britain.
	YV-RJ	B		Coro, Venezuela.
4980	YV5RT	B B B		Caracas, Venezuela.
4990	YV3RX	B		Barquisimeto, Venezuela.
5000	TFL	C		Reykjavik, Iceland.
	-			

Explanation of the Third Column Symbols:

A-Aircraft.	EM-Emergency.
B-Broadcast.	SEM-Special emergency.
C-Commercial Telegraph.	MF-Marine fire.
	MR-Marine Relay.
F—Forestry.	PR-Press relay.
G-Government.	RB-Relay broadcast.
P-Police.	FAC—Facsimile.
S-Ship.	TV-Television video.
T-Radio Telephone.	
FA-Aeronautical (ground).	TA-Television audio.
FMB - Frequency modulated broadcasting	NCE-Non-commercial educational.
	CC-Coastal Telegraph.
station.	CH-Coastal harbor.
GLO-Geophysical.	CHC-oastal harbor telegraph.
RC-Circular radiobeacon.	MT-oastal harbor telephone.
RD-Directional radiobeacon.	
RG-Direction finding station.	El
LH-Lighthouse.	F2
RR-Radio range station.	E E1 E2 E3
MP-Municipal 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, Ky. (2 units-12 w).

NORTH AMERICAN BROADCASTING STATIONS BY FREQUENCIES WITH VERIFICATION SIGNERS KEY TO SYMBOLS

KEY TO SYMBOLS Frequencies are given in kilocycles per second, and wavelengths in meters. Night power is shown in vatts 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.	200 warrs. Ex	act frequencies, when not m	ultiples of ten are shown in the
Se	cond Col	umn Symbols	-ORHC-Cadena Azul (Cut	oan a-b-c-Small letters show sta-
BSI	tatus in c	Blue" Network.	INELWORK)	tions using same trans-
CC	olumbia 1	Vetwork	P-Has Construction Per	mit mitter.
D-D.	avtime o	nlv.	only.	1-2-3—Figures denote stations
E-M	inor Netvanadian N	Work.	Q-Station not in use. R-National "Red" Networ	sharing time. P-Reported but not officially
GSc	becified F	lours	5-Synchronized	confirmed.
H—A	ssigned ar	nother frequency	Sx-Indicates a "Booster"	or Fourth Column Symbols
	-using 1	this one under uthorization.	amplifier, or satellit	e)
J—As	signed lo	wer power that	station working with larger station. The ma	D-Verifies only occasionally.
u	ising this	s power under	station is indicated by) d-Verifies for government
K-Li	pecial Ai	uthorization. or facsimile.	X—Has Permit to chan	de postal card.
LLii	mited tim	ne.	Y-Has Permit to change	e-Verifies free. Io- f-Verifies for 10 cents.
M	utual Ne	twork	cation.	g-Card for postage: veri
N-N	Blue" No	Red" and	Z-Has Permit to change fr	e- stamp for 10c.
			quency.	z-No information available.
540 k	cs. (5	52.2 m.)	A CONTRACTOR OF THE R	THE REPORT OF THE PARTY OF THE
CBK	• F	50000	Watrous Sask	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CMAN	0		Pinar del Rio, Cuba	
550 k	cs (5)	45.1 m.)		
CFNB CMW	F	1000		Strand and Learning Black
KFYR	N	1000(5)		W D Cittle DV A
KOAC	(1000		W. R. Griffin, DX Ann'cr, Luke L. Roberts, Mgr.
KOY	CR	1000	Phoenix, Ariz.	
KTSA	ĉ	1000(5)		Geo. Burbach, Mgr.
WDEV	D	1000		G. W. Johnson, Mgr. Melvin Stickles, Ch. Eng.
WGR	CM	1000(5)	Buffalo, N. Y.	I. R. Lounsberry, Gen. Mar
WKRC WSVA	DX	1000(5)	Cincinnati, Ohio	Vera Tyson
and they be			Harrisonburg, Va.	Wendell Siler Prog. Dir.
560 k	cs. (5:	35.4 m.)		
CJKL	F	1000	Kirkland Lake, Ont.	
KFDM	N	1000 a	Beaumont, Texas	Bernice Anderson, Sec'y.
KLZ KSFO	c	5000 a 1000(5) a	Denver, Colo.	G.W. Meyer Mor
KWTO	Ď	1000(5) a 5000 a		Philip G. Lasky, Mgr. Rlaph D. Foster, Mgr.
WFIL	BM	1000		Roger W. Clipp, Gen. Mgr.
	CHXZ	LOOGIES	a Portland, Me.	
WIND	CX NX	1000(5) a 1000(5) a		Kenneth Shirk, Ch. Eng. Floyd Rodgers, Prog. Dir.
WQAM	C	1000 8		Norman MacKay, Prog. Dir.
570 4	153			Horman Mackay, Prog. Dir.
	cs. (52			
CMKV	0	2500	Holguin, Cuba	
KGKO	N	1000(5) a 1000 a		Harold V. Hough, Mgr.
KVI	ċ	5000 a	Los Angeles, Calif. Tacoma, Wash.	Kenneth Tinkham, Mgr. J. W. Wallace, Ch. Eng.
TISCV	575	100 z	Alajeula, Costa Rica	Carlos Vidache A.
WKBN WMAM	CI	500(1)	Youngstown, Ohio	A. D. Hardy
WMCA	D	250 z 1000 a	Marinette, Wis. New York, N. Y.	F. Hapton
WNAX	Ċ	1000(5) #	Yankton, S. Dak	Clifton Todd, Ch. Eng
WOSU	GI	1000 a	Columbus Obio	A. Hammerschmidt, Ch. Eng.
WSYR	B	1000 -8	Syracuse, N. Y.	Armand G. Belle Isle Chi. Fng
		1000	Asheville, N. C.	G. B. Hoskins Ch. Eng.
580 kc	s. (51	6.9 m.)		A REAL TO A REAL PROPERTY OF A
CFPR CHRC		50 .	Prince Rupert, B. C.	Felix E. Bats
CKCL	· · · · · · · · · · · · · · · · · · ·	100 a	Quebec, P. Q. Toronto, Ont.	···· / / / / / / / / / / / / / / / / /
CKPR	F	1000	Fort William, Ont.	
D	-7-	117 5157-1-	English and the second second	A PARTY AND A PARTY AND
PADP Six	IN-tour			

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CKUA	F.	500	b Edmonton, Alta.
KMJ	EN	5000	a Fresno, Calif.
KSAC	2	500(1)	a Manhattan, Kans. a Charleston, W. Va.
WCHS WDBO	1.	500(5)	a Charleston, W. Va. a Orlando, Fla.
WIBW		1000(5)	a Topeka, Kans.
WILL	D	5000	a Urbana, III.
WTAG	R	1000(5)	a Worcester, Mass.
XEMU		250	z Piedras Negras, Coah.
500 L		09 2 - 1	
590 k	cs. ()	08.2 m.)	
CMCY	0	20000	a Havana, Cuba
KHQ	ER	5000	a Spokane, Wash.
WEEI	Ç	5000	a Boston, Mass. a Kalamazoo, Mich.
WKZO	B	1000	a Omaha Nebr.
wow	R	5000	
600 k	(CS. (4	99.7 m.)	
CFCF	BF	500	a Montreal, P. Q.
CFOC	F	1000	a Saskatoon, Sask.
CJOR		1000	a Vancouver, B. C. a St. Pierre, Miquelon
FON	609	250	a St. Pierre, Miquelon
KFSD	BX	1000	a San Diego, Calif. a San Jose, Costa Rica
TIGPH	605	1000	a San Jose, Costa Rica
WCAO	BM	500(1)	a Baltimore, Md. f Bridgeport Conn.
WMT	BM	1000(5)	a Cedar Rapids, Iowa
WREC	C	1000(5)	a Memphis, Tenn.
610 H	ccs. (4	191.5 m.)	
CHNC	F	1000	a New Carlisle, P. Q.
CMJN	0	1000	a Camaguey, Cuba
KFAR		1000	z Fairbanks, Alaska
KPRC	M	5000	b San Francisco, Calif.
WCLE	DM	500	a Cleveland, Ohio
WDAF	R	5000	a Kansas City, Mo.
WIOD	NX	1000	a Miami, Fla. a Philadelphia, Pa.
WIP	· · · · ·		
			Z Manchester, N. I.
		1000 (5)	z Manchester, N. H.
		183.6 m.)	z Manchester, N. Tr.
620 1	ccs. (4	183.6 m.)	Portland, Ore.
	ccs. (4 R	1000 (5) 1000	a Portland, Ore.
620 KGW KTAR KWFT	Renx	1000 (5) 1000 250 (1)	a Portiand, Ore. a Phoenix, Ariz. z Wichita Falls, Tex.
620 KGW KTAR KWFT TIPG	ccs. (4 R ENX 625	1000 (5) 1000 250 (1) 5000	a Portiand, Ore. a Phoenix, Ariz. z Wichita Falls, Tex.
620 KGW KTAR KWFT TIPG WAGE	Renx	183.6 m.) 1000(5) 1000 250(1) 5000 1000	a Portland, Ore. a Phoenix, Ariz. z Wichita Falls, Tex. b San Jose Costa Rica z Salina, N. Y.
620 KGW KTAR KWFT TIPG WAGE WFLA	ccs. (4 R ENX 625 P	1000 (5) 1000 250 (1) 5000 1000 1000 (5)	a Portland, Ore. a Phoenix, Ariz. z Wichita Falls, Tex. b San Jose Costa Rica z Salina, N. Y. a Tampa, Fla.
620 KGW KTAR KWFT TIPG WAGE WFLA WHJB	CCS. (4 R ENX 625 P D	183.6 m.) 1000(5) 1000 250(1) 5000 1000	a Portland, Ore. 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
620 KGW KTAR KWFT TIPG WAGE WFLA	ccs. (4 R ENX 625 P	183.6 m.) 1000 (5) 1000 250 (1) 5000 1000 (5) 250 500 (1) 1000 (5)	a Portland, Ore. 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 a St. Petersburg, Fla.
620 KGW KTAR KWFT TIPG WAGE WFLA WHJB WLBZ	CCS. (2 R ENX 625 P MN	183.6 m.) 1000 (5) 1000 250 (1) 5000 1000 1000 (5) 250 (1)	 Portland, Ore. Phoenix, Ariz. Wichita Falls, Tex. San Jose Costa Rica Salina, N. Y. Tampa, Fla. Greensburg, Pa. Bangor, Maine
620 KGW KWFT TIPG WAGE WFLA WHJB WLBZ WSUN WTMJ	CCS. (4 ENX 625 P MN N	183.6 m.) 1000 (5) 1000 250 (1) 5000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1	a Portland, Ore. 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 a St. Petersburg, Fla.
620 KGW KTAR KWFT TIPG WAGE WFLA WHJB MLBZ WSUN WTMJ 630	ccs. (4 R ENX 625 P MN N kcs. (4	$\begin{array}{c} 183.6 \text{ m.})\\ 1000(5)\\ 250(1)\\ 5000\\ 1000\\ 1000(5)\\ 250\\ 500(1)\\ 1000(5)\\ 1000(5)\\ 1000(5)\\ 475.9 \text{ m.})\end{array}$	 Portland, Ore. Phoenix, Ariz. Wichita Falls, Tex. San Jose Costa Rica Salina, N. Y. Tampa, Fla. Greensburg, Pa. Bangor, Maine St. Petersburg, Fla. Milwaukee, Wis.
620 KGW KTAR KWFT TIPG WAGE WFLA WHJB WLBZ WSUN WTMJ 630 CFCO	ccs. (4 ENX 625 P MN N kcs. (4	483.6 m.) 1000 (5) 250 (1) 5000 1000 1000 (5) 250 500 (1) 1000 (5) 1000 (5) 1000 (5) 475.9 m.) 100	 Portland, Ore. Phoenix, Ariz. Wichita Falls, Tex. San Jose Costa Rica Salina, N. Y. Tampa, Fla. Greensburg, Pa. Bangor, Maine St. Petersburg, Fla. Milwaukee, Wis.
620 KGW KTAR KWFT TIPG WAGE WFLA WHJB WLBZ WSUN WTMJ 630 CFCO CFCY	ccs. (4 R ENX 625 P MN N Kcs. (4	483.6 m.) 1000 (5) 1000 250 (1) 5000 1000 (5) 250 1000 (5) 1000 (5)	 Portland, Ore. Phoenix, Ariz. Wichita Falls, Tex. San Jose Costa Rica Salina, N. Y. Tampa, Fla. Greensburg, Pa. Bangor, Maine St. Petersburg, Fla. Milwaukee, Wis.
620 KGW KTAR KWFT TIPG WAGE WFLA WHJB WLBZ WSUN WTMJ 630 CFCO CFCY CJRC	ccs. (4 ENX 625 P MN N kcs. (4	483.6 m.) 1000(5) 250(1) 5000 1000(5) 250(1) 1000(5) 500(1) 1000(5) 475.9 m.) 1000 1000 1000	a Portland, Ore. 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 a St. Petersburg, Fla. a Milwaukee, Wis. a Chatham, Ont. a Chatham, Ont. a Chatham, P. E. I. a Winnipeg, Man.
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	650 kcs.	(461.3 m.)		11.17.3.17.11.1.1
	TIGPH P WSM N	50000	z San Jose, C. R. Nashville, Tenn.	Gonzalo Pinto H. Harry Stone, Gen. Mgr.
	660 kcs.	(454.3 m.)		
	KOWH BD WEAF R XEAO	500 50000 250	a Omaha, Nebr. a New York, N. Y. a Mexicali, B. Cfa.	W. F. Myers, Mgr. Audience Mail Dept.
3		(447.5 m.)		1 de la constant
	XELO	50000 50000	b Chicago, III. a Tijuana, B. Cfa.	Audience Mail Dept.
	680 kcs.	(440.9 m.)		A State of the sta
	KFEQ R	500 (2.5)	a St. Joseph, Mo. a San Francisco, Calif.	J. Wesley Koch, Ch. Eng.
	VAS 685 WLAW DX WPTF NX	2000	f Glace Bay, N. S. a Lawrence, Mass.	Audience Mail Supervisor H. W. Brown
1	WPTF NX	5000 5000	a Raleigh, N. C. z Santiago de Cuba	Graham Poyner, Prog. Dir.
	690 kcs.	(434.5 m.)		
	CFRB C CJCJ F	10000	a Toronto, Ont. a Calgary, Alta.	H. Sedgwick, Man. Dir. R. H. Henderson, Ch. Eng.
	CMQ N TIGH	25000 1000	a Havana, Cuba b San Jose, Costa Rica	Gonzalo Garcia
	XET	5000	a Monterrey, N. L.	
	700 kcs.	(428.3 m.) 500		A PART AND AND AND
	WLW KN W8XO Exp	50000 500000	b St. John's, Nfld. a Cincinnati, Ohlo a Cincinnati, Ohlo	Wilfred Guenther, Mgr.
		(422.3 m.)	a Cincinnan, Onio	Wilfred Guenther, Mgr.
-	CMGH	200	a Matanzas, Cuba a Seattie, Wash.	
	KMPC CX	1000 (5)	a Beverly Hills, Calif. a Newark, N. J.	H. J. Quilliam, Mgr. L. A. Schambin, Mgr. J. R. Poppele, Ch. Eng.
1-	EP	5000	z Santa Clara, Cuba	a R. Poppele, Ch. Eng.
	720 kcs.	(416.4 m.) 5000	a Havana, Cuba	aline the state
	TI4NRH 725 WGN KM	750 50000	f Heredia, Costa Rica b Chicago, III.	Amando Cespedes Marin Quinn A. Ryan, Gen. Mgr.
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	A COLORADO AND A COLO	(410.7 m.)		Martin Shink
	CFPL F CJCA F CKAC C	100 1000 5000	a London, Ont. a Edmonton, Alta. a Montreal, P. Q.	L. J. Yorke, Ch. Eng. W. T. Cranston, Mgr.
	CMKU E	1000 50000	a Montreal, P. Q. a Victoria Tunas, Cuba a Mexico City, D. F.	Leonard Spencer. Ch. Eng. J. M. Marroqui :1
h	740 kcs. (P.V. B. Druge and	- money city, b. P.	an manoque (
1	KMMJ L	1000	a Grand Island, Nebr.	Randall Ryan, Mgr.
	KTRB D WHEB D	250 1000	a Modesto, Calif. a Portsmouth, N. H.	Don, R. Stevens
	WSB R XEH XEPN AQ	50000 250 50000	a Atlanta, Ga. a Monterrey, N. L. z Piedras Negras, Coah.	T. R. McTammany, Mgr. C. F. Dougherty, Ch. Eng. Consantine de Ternava
			Coan.	a Andatic Turne
	СМК	399.8 m.)	a Havana, Cuba	the states
	KGU LN TING	2500 375	a Honolulu, Hawaii z San Jose, Costa Rica	Marion A. Mulrony, Mgr. Narcisco Garcia
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Detroit, Mlch. Mexicali, B. Cfa. Matamoros, Tam. Tijuana, B. Cfa.
Jovellanos, Cuba Santa Clara, Cuba Guantanamo, Cuba Seattle, Wash.
Baltimore, Md. Northfield, Minn. St. Louis, Mo. New York, N. Y.
Minneapolis, Minn.
Lincoln, Nebr. San Jose, C. Rica Chicago, III.
Chilliwack, B. C. Sudbury, Ont. Havana, Cuba
Havana, Cuba Los Angeles, Calif. Brookings, S. Dak. Anchorage, Alaska
Providence, R. I. Memphis, Tenn.
Mayague, P. R. Norfolk, Va. Mexico City, D. F.
San Francisco, Calif.
Pittsburg, Kans. Schenectady, N. Y. Nassau, Bahamas
Trujillo, D. R. San Jose, Costa R. Fort Worth Taxas
Fort Worth, Texas Dallas, Texas Cumberland, Md.
Havana, Cuba Minneapolis, Minn.
New York, N. Y. Mexico City, D. F.
Louisville, Ky. Tijuana, B. Cfa.
Sente Clara, Cuba
Clayton, Mo. Denver, Colo. San Jose, C. Rica

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Oscar Gutierrez Hugh McCartney Ch. Eng. Issac Brimberg, Ch. Eng.

Lawrence Pohl Angel B. Fernandez

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T. E. Stepp Eduardo Pinto H. M. Leonard Savage, Eng. M. Bresnahan Joseph Weil, Ch. Eng. Carlos Dragome Narro

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860- 840 kcs. (356.9 m.)	
CBL F 50000	Toronto, Ont.	W. C. Little, Ch. Eng.
VOGY 400 XERA 250000	a St. John's, Nfld. a Villa Acuna, Coah.	Don Howard
870-850 kcs. (352.7 m.		
CMCM 2001	a Havana, Cuba	V. Montes
KIEV D 250 WHCU CD 1000	a Giendale, Calif. a Itaca, N. Y.	David H. Cannon True McLean, Ch. Eng.
WKAR D 5000 WWL C 50000	a E. Lansing, Mich. a New Orleans, La.	Norris Grover, Ch. Eng. J. D. Bloom, Ch. Eng.
880- 860 kcs. (348.6 m.)	
СМЈА 200 СМКЅ 200	a Camayuey, Cuba	Rafael Valdes
TIEMC 250 WABC C 50000	a Guantanamo, Cuba z San Jose, C. Rica	Rafael Hine Ch.
WHB DM 1000	 New York, N. Y. Kansas City, Mo. 	F. Donald Ickes M. H. Straight, Mgr.
XEMO 5000 890-870 kcs. (344.6 m.	a Tijuana, B. Cfa.	Fernando Federico Ferreira
CMJM 0 1000	a Ciego de Avila, Cuba.	
WENR Ba 50000 WLS Ba 50000	b Chicago, III. a Chicago, III.	T. I. Davis Ch. C.
XEFB 500	a Monterrey, N. L.	T. L. Rowe, Ch. Eng. Jesus Quintanilla
910-880 kcs. (340.7 m.		in the product of the second
CBO F 1000 CFJC F 1000	a Ottawa, Ont.	Lillian E. de Olloqui
CMX 10000	e Havana, Cuba	L. Irwine, Ch. Eng. Raoul Karman, Dir.
KFKA M2 1000 KLX 1000 KPOF 2 1000	a Greeley, Colo a Oakland, Calif.	P. D. Allen, Mar.
KRRV M 1000	a Denver, Colo. a Sherman, Texas	wesley O. Lomiin, Annc'r.
KVAN D 250 TILS 500	z Vancouver, Wash. b San Jose, C. Rica	Paul W. Spargo, Ch. Eng. Luis Saenz Mata
WCOC C 1000 WGBI CI 500(1)	f Scranton, Pa.	John B. Rogers, Ch. Eng. K. R. Cooke, Ch. Eng.
WQAN 1 500(1) WRNL B 1000	a Scranton, Pa. a Richmond, Va.	Walter R. Selden, Ch. Eng.
WSUI 1000(5)	a lowa City, lowa	Sylvanus Ebert, Ch. Eng.
920-890 kcs. (336.9 m.)	the second se	一天,以下,出现是外贸2,1
KARK NX 1000 KFNF 2 500(1)	a Little Rock, Ark. a Shenandoah, Iowa	Jack Lewis, Prog. Dir. Wm. MacDonald, Com. Mgr.
KFPY C 5000 KTKC M 1000	a Spokane, Wash. f Visalia, Callf.	Chas. P. Scott. Mar.
KTKC M 1000 KUSD 2 500 WBAA X 500(1) WGST C 1000(5) WJAR RX 1000(5)	a Vermillion, S. Dak. a W. Lafavette, Ind.	B. B. Brockett, Mgr. Ralph R. Townsley, Ch. Eng.
WGST C 1000(5) WJAR RX 1000(5)	a Atlanta, Ga. a Providence, R. I.	Ben Akerman, Ch, Eng. Thomas Prior, Ch. Eng.
WMMN CX 1000(5) XEW 100000	a Fairmont, W. Va. a Mexico City, D. F.	J. R. Heck, Ch. Eng.
930-900 kcs. (333.1 m.)		
CMJX 200	a Camaguey, Cuba	EDVERTIS NO.45
HIG 250 KGBU X 500	z Trujilio, D. R. a Ketchikan, Alaska	Andres Cordero Puello James A. Britton, Mgr.
KHJ MX 1000 (5) KSEI N 250(1)	a Los Angeles, Calif. a Pocatello, Idaho	R. A Eletcher Brog Di
TIAFB 600 WBEN RX 1000 (5)	z San Jose, C. Rica a Buffalo, N. Y.	Mavid Borzuna
WEND D 500 WIAX N 1000(5)	a Frederick, Md. a Jacksonville, Fla.	Ralph Kingsley, Ch. Eng. John A. Fels, Ch. Eng. Harry Cole, Mar
WLBL D 5000	a Oklahoma City, Okla. a Stevens Point, Wis.	Harry Cole, Mgr. Earl C. Hull, Ch. Eng. F. R. Calvert, Mgr.
WPAT DP 1000	z Paterson, N. J. Quincy, III.	Paul E. Miller, Ch. Eng.
940-910 kcs. (329.6 m.)	The second second	the section of , en. eng.
CBF FN 50000	a Montreal, P. Q.	Francis Gondraner, Mgr.
CJAT # 1000 CKY F 15000	a Trail, B. C. a Winnipeg, Man.	
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CMKD XEFE KENT		1000 250 50000
920 k		325.9 m.)
CMHT CMZ KFEL	 MX	200 5000 1000
KOMO KPRC TIRS	RX EXR 925	1000(5) 1000(5) 200
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KOIN	C	5000 500
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WDAY WHA WICA	NOD	1000 (5) 5000 1000
WKGA	P 	1000(5) 5000
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CJRM CKWX CMHW	F	1000 1000 200
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Camaguey, Cuba Shenandoah, Iowa Oakland, Callf. Birmingham, Ala. Roanoke, Va. New Haven, Conn. Hermosillo, Son. lowa

Portland, Ore. San Jose, C. Rica Jersey City, N. J. Louisville, Ky. Portland, Maine Fargo, N. Dak. Medison, Wis. Ashtabula, Obio Ashtabula, Ohlo Tampa, Fla. Mexico City, D. F.

Quebec, P. Q. Regina, Sask. Vancouver, B. C. Santa Clara, Cuba Bayamo, Cuba Los Angeles, Calif. Kansas City, Mo. St. John's, Nfid. Saginaw, Mich. Washington, D. C. Troy, N. Y.

Montreal, P. Q. Edmonton, Alta. Reynosa, Tam.

Havana, Cuba Seattle, Wash: Chicago, III. Glenside, Pa.

- Pittsburgh, Pa. Tijuana, B. Cfa.

Boston, Mass. Springfield, Mass.

Nuevo Laredo, Tam.

Francisco Meneau Rafael T. Carranza T. Yount, Mgr.

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

R. H. Thomson Vincente Salgado J. Rapp, Mgr. H. P. Drey, Mgr. James T. Milne, Mgr. Carlos Balderrama

B. J. Parrish, Mgr. Guillermo Castro S. Paul H. LaStayo, Mgr.

G. Fred Crandon, Ch. Eng. Julius Hetland, Ch. Eng.

C. A. Rowley

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Alberto Alvarez Ferrefa Harry Maizlish, Mgr. Arthur B. Church, Mgr. K. H. Berkeley

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Luis Casas R. Audience Mail Dept. Maynard Marquardt, Ch. Eng. -

A. E. Nelson Mgr. Jorge I. Revera

Dwight Myer, Ch. Eng. H. E. Randol, Mgr. T. Yount, Mgr.

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103	0	159.41			La trans a la la la
1000		(299.8 m	1.)	ALL DESCRIPTION OF	
CMKG		10000	z		Frid Bull III
TIFA WHO	 R	250 50000	z	San Jose, C. Rica	Frank Burke, Mgr. Francisco Ariel
XEAF		750	a	Nogales, Son.	Paul A. Loyat, Ch. Eng.
XEBI	* • •	250		Mexico City, D. F. Aguascalientes, Ags.	Fernando Sada Pedro C. Rivas
1010		(296.9 m			
CHML	F	100	./	Hamilton, Ont.	The second states and the
CKCK	F	1000		Regina, Sask.	
CMBZ KGGF	MZ	5000	а	Ottawa, Ont. Havana, Cuba	Dr. G. H. Geldert
KQW	M	5000		Coffeyville, Kans. San Jose, Callf.	Hugh J. Powell C. S. Harper, Mgr.
WNAD		1000		New York, N. Y. Norman, Okla.	T. M. Beaird, Prog. Dir.
XEFQ		1000(5) 500 500	8	Knoxville, Tenn. Cananea, Son.	Pedro L. Diaz
1050			8	Veracruz, Ver. C.	Fernando Pazos S.
1020	kcs.	(293.9 m	.)	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
СМНО		200	ZZ	Cienfuegos, Cuba Camaguey, Cuba	
WDZ	RX D	10000	b	Philadelphia, Pa. Tuscola, III.	Leslie W. Joy, Mgr. Mark C. Spies, Ch. Eng.
XEJ 1060	,	1000		Juarez, Chih.	Pedro Meneses, Jr.
1030		(291.1 m.	.)	STATISTICS OF	
CFCN	F	10000		Calgary, Aita. Rimouski, P. Q.	E. Marshall
CKLW	FM	5000	AZ	Windsor, Ont.	J. A. Brillant
CMAC	P	100 500	z	Santiago de Cuba Pinar Del Rio, Cuba San Jose, C. Rica	Claudio Aivarez Soriano
XEB		20000	-	Mexico City, D. F.	Guillermo Zuniga R.
1070		1200 2	517		
1040 KRLD	kcs.	(288.3 m. 50000		Dallas Tayan	
KWJJ	HL	500 250	1	Dallas, Texas Portland, Ore.	Given Boyd Art Morey, Ann'cr.
VÓCM	Ř	100	ž	Merced, Calif. St. John's, Nfld.	John W. Crews, Mgr.
WTIC	P	50000	ž	Hartford, Conn. Matanzas, Cuba	T. C. McCray
1080		(295 5 m	12		
1050 CBA	kcs.	(285.5 m. 50000		Sackville, N. B.	and the second
CMCH		200 200	а	Havana, Cuba	
CMKW		1000	z	Guanabacoa, Cuba Santiago de Cuba	A. L. Pichardo
KFBI	LXZ	5000 50000		Truillio, D. R. Wichita, Kans. Los Angeles, Calif.	Donald Thornburgh, Mgr. L. H. Bowman
KNX WEAU WIBC	L L L	1000 (5)		Eau Claire, Wis. Indianapolis, Ind.	····
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1060		(282.8 m.)	1 14	Hot Sptings Ask	
	HN 1065	10000	z	Hot Springs, Ark. St. John's, Nfld.	Mary F. Loyd, Sec'y.
WBAL	BMX	10000	-	Baltimore, Md. Norfolk, Nebr.	Geraid Cooks, Ch. Eng. Art Thomas, Mgr.
1070	kee	(280.2 m.)		Contraction of the	The second second
CWIM	kcs.	200 m.)	z	Camaguey, Cuba	M Courses Filing
KJBS TINBC	Ļ	500	a Z	San Francisco, Calif.	M. Caymares Silva Miriom Ford, Traffic Dept.
WCAZ	D -	100		San Jose, C. Rica Carthage, III. Cleveland, Ohio	Oscar Martinez N.
Page Se	venty	and the second	341		May Draxell

Page Seventy

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1110 1080 kcs.	(277.6 m.)		
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CMHA HIN KMOX C XERB	200 100 50000 50000	z Sagua la Grande, Cuba Trujillo, D. R. St. Louis, Mo. Tijuana, B. Cfa.	Abelardo Menocal J. M. Bonetti G. L. Tevis, Ch. Eng.
LIOO kcs. CBR F CMHP KGDM DM KWKH C WCAR DP WOV X	200 1000 50000 1000	A Vancouver, B. C. Placetas, Cuba Stockton, Calif. Shreveport, La. Pontiac, Mich. New York, N. Y.	A. H. Green, Mgr. John McCormack, Mgr. S. H. Alper
1110 kcs. CMCU CMKH KSOO LN WRVA CM XECL	1000	Havana, Cuba Guantanamo, Cuba Sloux Fells, S. Dak. Richmond, Ve. Mexicali, B. Cfa.	M. D. Roddenbury Alfonso A. Lacarra
1120 kcs. CBJ F CHLP F CKSJ F CKCC F CKCC F CKSG a KFIO D KFSG a KRKD a KSAL KRSC DG2 WCOP D WDEL R WISN C WJBO BX WKPA D WTAW G2X	1000 1000 200 1000 (.5) 1000 (.5) 1000 (.5) 1000 (.5) 1000 1000 1000 1000 250 (1) 250 (1) 250 (1)	Chicoutimi, P. Q. Montreal, P. Q. St. John, N. B. Hamilton, Ont. Brandon, Man. Matanzas, Cuba Spokane, Wash. Los Angeles, Calif. a Salina, Kans. a Seattle, Wash. z Austin, Texas Boston, Mass. Wilmington, Del. Milwaukee, Wis. Baton Rouge, La. a New Kensington, Pa. College Station, Texas	L. W. Bewick, Sec'y-Treas. Bernabe de la Torre Arthur L. Smith, Mgr. Ruth Pritchard Dr. Giles N. Knight, Mgr. C. R. Cooper
WTAW G2X 1130 kcs. CMJI ··· KSL C WJJD L XEJP ··· 1140 kcs.	50000	Clego de Avila, Cuba Salt Lake City, Utah Chicago, III. z Mexico City, D. F.	Gilberto Gesse Lopez E. G. Pack; Earl J. Glade J. L. Allabough Salvador Monterrubio R.
CMKY WAPI C WSBR LMZ 1150 kcs. CMBQ N WHAM N XEBP N XEDW N XEL N XEL N XEL N	25000 5000 (260.7 m.) 50000 2500 100 300 250	a Tulsa, Okla. a Birmingham, Ala. a Springfield, Mass. a Havana, Cuba a Rochester, N. Y. z Durango, Dgo. a Tiluana, B. Cfa. Minatitlan, Ver. C. Mexico City, D. F. z Oaxaca, Oax.	Wm. B. Way, Mgr. N. McFarland Hillis W. Holt John J. Long, Ch. Eng. Manuel Cano M. Luis F. Enclsco Hector Silva Canto

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	kcs.	(258.5 m.)	in the providence of the second	War and a start of the
CMHJ		200	a Cienfuegos Cuba	Richardo Ugalde
KEX		5000	a Portland Oreg. a Fort Wayne, Ind.	H. C. Singleton, Ch. Eng.
XEAS	CI	5000 100	a wheeling, W. Va.	E A. Hadden, Eng.
XED		2500	a Guadalajara, Jal.	Manuel R. Rodriguez
L. €POO		500	z Leon, Gto, a Juarez Chih,	Estaban Perra
1170	kcs.	(256.3 m.)		
WCAU	C	* 50000	e Philadelphia, Pa.	J. G. Leitch
1180	kcs.	(254.1 m.)	Z. Mexico City D. F.	
CMBG		1500	a Havana, Cuba	14/15 Back Mar States
CMBX KOB	ŇX	200	a Havana, Cuba	
WDGY	LMXZ	1000 (5)	a Albuquerque N. Mex. a Minneapolis, Minn.	T. M. Pepperday, Mgr, Dr. Geo. W. Young
MANAZ	CL	1000 (5)	a New York, N. Y. a Macon, Ga	and a grant and a start
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CMGH	1	500	a Matanzas, Cuba	A CALIFORNIA A STATE OF STATE
WOAL	EN	200	z Banes, Cuba a San Antonio, Texas	Oscar Vidal Benitez
M\$320	LZ	1000	a Huntington. W. Va.	S. Swann
1200 CHAB	kcs.	(249.9 m.)		The state of the state of the state
CHGB	F	100(.25) 100	a Moose Jaw. Sask. z St. Anne de la Pocatierre.	A. E. Jacobson, Ch. Eng. G. Thomas Desjardins
CKNX		100	P. Q.	the second se
CKTB	Ē	100	a Wingham, Ont. a St. Catharines, Ont.	B. Howard Bedford, Asst. Mgr. E.T. Sandell
KADA	EM	250	z Val d'Or. P. Q. a Ada, Okla.	Warren Moore, Prog. Dir.
KAST	•••	250 100(.25)	Astoria, Ore. Jonesboro, Ark.	Lawrence King, Ch. Eng. Jay P. Beard, Mgr.
KELO KFDA	N EM	250 250	a Sloux Falls. S. Dak.	Joseph Henkin, Mgr.
KFJB KFXD		250	a Amarillo, Tex. Marshalltown, Iowa	Homer Griffith, Mgr.
KFXJ		250 250	 Nampa, Idaho Grand Junction, Colo. 	Edward Hurt, Mgr. Rex Howell, Mgr.
KGDE	•••	100(.25)	b Fergus Falls, Minn.	Mar E. Wakz, Ch. Eng.
KGFJ		100	f Sterling, Colo. a Los Angeles, Calif.	Elmer G. Beehler Thelma Kirchner, Prog. Dir.
KHAS		250 250	Little Rock, Ark. a Hastings, Nebr.	Orville Rennie, Mgr.
KHBC	CM	250	a Hilo, Hawaii a Monroe La.	Webley Ewards, Mgr. J. C. Liner, Jr., Mgr.
KOOL	PM	100(.25)	z The Dalles, Oreg.	· · · ·
KPHO	P	250 250	a Marshfield, Ore. z Phoenix, Ariz.	Roger L. Spaugh, Ch. Eng.
KVCV	E M	250	a Lowell, Ariz. a Redding, Calif.	Carleton W. Morris, Mgr. Harold Smithson, Mgr.
KVEC KVNU	M	250 250	a San Luis Obispo, Calif. z. Logan, Utah	Earl Travis, Ch. Eng. J. M. Reeder, Ch. Eng.
KVOS	MBE	250	d Bellingham, Wash.	and the second se
KWNO	E	100 250	a Stockton, Calif. a Winona, Minn.	George Ross, Mgr. A. E. Mickel, Mgr.
WABI	ċ	500 250	z San Jose, C. Rica a Bangor, Maine	Carlos Borge Ralph Wallace, Mgr.
WAIM	Ĉ	100	a Anderson, S. C.	Cecil Crawford
WAYX		250	a Waycross, Ga.	Jack Williams
WBAB WBBZ	·	250 250	Atlantic City, N. J. a Ponca City, Okla.	Don Mitchell, Ch. Eng.
WBHP WBLJ	××P	100	a Huntsville, Ala.	
WBOW	N	250	a Terre Haute, Ind.	
WCAT	DUP	250	Burlington, Vt.	C. M. Rowe, Prog. Dir. James Tierney, Ch. Eng.
WCBT	P	250 250	z Roanoke Rapids, N. C. Du Bols, Pa.	
WCLO	Ň	250	a Janesville, Wis.	Charles Brannen, Ch. Eng.
WCPO		250	Columbus, Ohio Cincinnati, Ohio	Glen A. Davis, Ch. Eng.
WDLP		100(.25)	Panama City, Fla.	

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WDSM	M	100	z	Superior, Wis.	Fred A. Baxter
WENY	M	250	d	Elmira, N. Y.	J. E. Mathiot, Ch. Eng.
WEST WESX	M	250 100	a z	Easton, Pa. Salem Mass.	
WFAM	4	100	8	South Bend, Ind.	Al Todd; Paul Mangus
	P	250 250	az	Kinston N. C. Grand Rapids, Mich.	Jonas Weiland
WGRB	M	250		Canton, Ohio	Kenneth Sliker, Ch. Eng.
WHBY	E	250 250		Appleton, Wis.	W. J. Stangel, Ch. Eng.
WHOP .		250 250	а	Hopkinsville, Ky.	David Foote ,Ch. Eng.
WIBX WIL	C	250	8	Utica, N. Y. St. Louis, Mo.	C. H. Stoup, Ch. Eng.
WJBC	1.1	250 250	a	Bloomington, III.	A. M. McGregor
WJBW	v + · ·	250	8		Charles C. Carlson O. K. Garland, Ch. Eng.
WJHL	XZ C	250	-	Johnson City, Tenn. W. Palm Beach, Fla.	Reginald B. Martin
WJOB	* 4	250 100	а	Hammond, Ind.	Randolph Bean, Prog. Di James R. Doss, Jr
WJRD	E	250	8	Tuscaloosa, Ala.	Charles Myers, Ch. Eng.
WKBO WLOF	P	250 250	z	Orlando, Fla.	
WLOG	D	100	а	Logan, W. Va.	Sid Tear, Annc'r.
WLVA . WMFR	•••	250 250	8	High Point, N. C.	J. T. Orch, Eng. E. J. Day, Ch. Eng.
MACHAOD		250	a		A. B. Quigley
WMPC	G	250	8	Lapeer, Mich.	Hollis F. Hayes, Ch. En
WOLS	NC	250 250	4	Florence, S. C. Columbus, Ga.	O. Lee Stone Oliver Hely, Ch. Eng.
WSAM	Ğ	100(.25)	a		····
WSKB		250	a	McComb, Miss.	
WSOO .	M	100 (25) 250	a	Sault Ste. Marie, Mich. Hartford, Conn.	Richard R. Blackburn
WTHT	141	250		Toledo, Ohio	Frank B. Ridgeway
12:40	P	250 250	z	Baltimore, Md.	
1510 4	17	47.8 m.)			
					At a Desirab Man
CHLT	•••	100 50	Z	Sherbrooke, P. Q. Stratford, Ont.	Marcel Provst, Mgr. Frank M. Squires
CKBI	FX	250		Prince Albert, Sask.	Gerald Prest
СКСН	F	100		Hull, P. Q.	R. L. MacAdam
CKMC	''É	50	a		C. S. Chapman, Mgr.
CMCO		200		Havana, Cuba	see and the second s
	• • •	200 200	za		R. G. Gonzalez
CMOA KALB		250			Virgil Evans, Prog. Dir.
KANS	N	250		Wichita, Kans.	Herbert Hollister, Mgr.
KASA KBIZ	M	100			Lyman Brown, Prog. Dir
KDLR		250	Z	Ottumwa, Iowa Devils Lake, N. Dak.	Merle Bjork, Ch. Annc'r
KDON	M	100		Monterey, Calif.	Howard Walters, Mgr.
KFJI KFOR E	MX	100(.25)	-	Klamath Falls, Ore. Lincoln, Nebr.	Geo. Kincaid, Mgr. Don Searle, Mgr.
KFXM	MZ	250		a a di calif	J. C. Lee, Mar.
KGLO	C	250	Z		F. C. Eighmey, Mgr. W. R. Taft, Mgr.
KGY	M	100 250			A. F. Schultz, Ch. Eng.
KIUL		100		Garden City, Kans.	A. F. Schultz, Ch. Eng. F. D. Conard, Mgr.
KLAH		250		Carlsbag, N. Mex. Kilgore, Texas Provo, Utah	Jack Hawkins, Mgr. H. A. Degner, Mgr.
KOCA	EM	250	a	Provo, Utah	
KPFA	EN	250		Helena, Mont.	E. B. Craney, Mgr.
KPPC	² C	100			David Black, Mgr. Milton Cooper, Ch. Eng
KROY KVSO	M	100(.25)		Ardmore. Okla.	Paul W. Ross, Ch. Eng.
KWAT		250		Watertown, S. Dak.	Bartley Sims, Mgr.
KWJB KXOX		250 250	z	Globe, Ariz. Sweetwater, Tex.	
KYUM	··· E	250	8	Yuma, Ariz.	••••
WATN	P	250	Z		Drury Lenington, Prog.
WBAX WBBL	AM 5	100 100	8	Richmond, Va.	····
WBIR	P	100 (25)	z	Knoxville, Tenn.	
WBRB	3 M	100 250	1	A - t. A. A - t	Leslie Hall, Ch. Eng.
WCOU	m	100	z		Al Thompson, Ch. Eng.
WCRW	4	100	-	Chicago, III.	Clinton R. White
WEBO	164	250			J. R. Tate, Ch. Eng. Caleb Frisk, Ch. Eng.
WEDC	G4 3	250 250 250	8.	White Plains, N. Y.	Frank Seitz
				Ch Augusting Ela	Bradley Overton, Ch. En
WFOY		250	-	St. Augustine, Fla.	bradley overton, ch. en

Weiland th Sliker, Ch. Eng. Stangel, Ch. Eng. Foote ,Ch. Eng. Stoup, Ch. Eng. McGregor es C. Carlson Garland, Ch. Eng. ald B. Martin oph Bean, Prog. Dir. s R. Doss, Jr. es Myers, Ch. Eng. Annc'r. ear. ear, Annor. Orch, Eng. Day, Ch. Eng. Quigley F. Hayes, Ch. Eng. e Stone r Hely, Ch. Eng. rd R. Blackburn B. Ridgeway

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e Hall, Ch. Eng. hompson, Ch. Eng. ton R. White . Tate, Ch. Eng. b Frisk, Ch. Eng. k Seitz ley Overton, Ch. Eng.

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WGBB	ä	250 100	6	Augusta, Ga.
WGCM		250		Freeport, N. Y.
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WHAI	M	250		Greenwood, Miss. Greenfield, Mass.
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WINN	1.12	100(.25)		Louisville, Ky.
WJBY	E	250	. (Gedsden, Ala.
WJEJ	• • •	250		Hagerstown, Md.
WILS	8	250	. 2	Lansing, Mich.
WIMC	Ď	250 250	12	
WJTN	В	250	2	Rice Lake, Wis.
WIW	M	250	-	Jamestown, N. Y.
WKOK		250	-	Akron, Ohlo
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WMFG	ĉ	250		Hibbing, Minn.
WOCB		250		
WOMT		100		
WPAX		250		Thomasville, Ga. Petersburg, Va.
WPID	5	250	a	Petersburg, Va.
WRAL	M	250	a	Raleigh, N. C.
WSAY	M	250		Rochester, N. Y.
WSBC	G4	250		Rochester, N. Y. Chicago, III.
WSIX	M	250		
WSNJ		250		
WSOC	MNX	100(.25)		Charoltte, N. C.
WTAX	1.11	100		
WTMA XEAT	N	250	8	
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1220	kcs.	(245.8 m.)		
KFKU		1000(5)	1	Lawrence, Kans.
KPAC		500	a	Lawrence, Kans. Port Arthur, Texas
KTMS	BEX	500	Z	Santa Barbara, Calif
KTW	2			Sarira Darbara, Calit
				Nesttie Wash
KWSC	2	1000		Seattle, Wash.
KWSC	2	1000(5)		Pullman, Wash
KWSC TIGPH WCAD	1225 D	1000(5) 1000 500		Pullman, Wash
TIGPH WCAD WCAE	1225	1000(5) 1000 500 5000	-	Pullman, Wash. San Jose, C. Rica Canton, N. Y.
TIGPH	1225 D	1000(5) 1000 500	a D a	Pullman, Wash. San Jose, C. Rica Canton. N. Y. Pittsburgh, Pa.
TIGPH WCAD WCAE WDAE WGNY	2 1225 MR C D	1000(5) 1000 500 5000 5000 250		Puliman, Wash. San Jose, C. Rica Canton. N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y.
TIGPH WCAD WCAE WDAE WGNY WREN	2 1225 MR C	1000(5) 1000 5000 5000 250 1000(5)		Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y. Lawrence, Kans.
TIGPH WCAD WCAE WDAE WGNY WREN XEBL	2 1225 MR C D	1000(5) 1000 500 5000 250 1000(5) 500	8 b 8 8 8 8 8 2	Pullman, Wash. San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y. Lawrence, Kans. Mazaflan, Sin.
TIGPH WCAD WCAE WDAE WGNY WREN XEBL XEDA	2 1225 MR C D	1000 (5) 1000 5000 5000 250 1000 (5) 5000 250 200		Pullman, Wash. San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F.
TIGPH WCAD WCAE WDAE WGNY WREN XEBL XEDA XEDA	2 1225 MR C D	1000(5) 1000 500 5000 250 1000(5) 500	8 b 8 8 8 8 8 2	Pullman, Wash. San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y. Lawrence, Kans. Mazaflan, Sin.
TIGPH WCAD WCAE WDAE WGNY WREN XEBL XEDA XEDA	2 1225 D MR C D •B	1000 (5) 1000 5000 5000 250 1000 (5) 5000 250 1000 (5) 5000 200 12	8 b 8 8 8 8 8 2	Pullman, Wash. San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F.
TIGPH WCAD WCAE WDAE WGNY WREN XEBL XEDA XEDA X5150 1230	2 1225 D MR C D •B	1000 (5) 1000 5000 5000 250 1000 (5) 500 200 12 (243.8 m.)	abaaaa x xa	Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F. Veracruz, Ver. C.
TIGPH WCAD WCAE WDAE WGNY WREN XEBL XEDA XEDA XEDA XEDA XEDA XEDA XEDA XEDA	2 1225 MR C D aB kcs.	1000 (5) 1000 5000 5000 250 1000 (5) 500 200 12 (243.8 m.) 200		Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y. Lawrence, Kans. Mazaflan, Sin. Mexico City, D. F. Veracruz, Ver. C. Camaguey, Cuba
TIGPH WCAD WCAE WDAE WGNY WREN XEDA XEDA XEDA XEDA CAJE KGBX	2 1225 MR C D aB kcs.	1000 (5) 1000 5000 5000 250 1000 (5) 5000 200 12 (243.8 m.) 200 500		Pullman, Wash. San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico Citv, D. F. Veracruz, Ver. C. Camaguey, Cube Springfield, Mo.
TIGPH WCAD WCAE WDAE WGNY WREN XEDA XEDA XEDA XEDA XEDA CMJE KGGM	2 1225 MRC D #B kcs.	1000 (5) 1000 5000 5000 250 1000 (5) 500 200 12 (243.8 m.) 200 500 1000		Pullman, Wash, San Jose, C. Rica Canton, N. Y. Pittsburgh, Pa. Tampa, Fia. Newburgh, N. Y. Lawrence, Kans. Mazatlan, Sin. Mexico City, D. F. Veracruz, Ver. C. Camaguey, Cuba Springfield, Mo. Albuguergue, N. Mas
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Harry H. Carman C. H. Dyess, Ch. Eng. C. A. Perkins, Ch. Eng. James L. Spates, Mgr. R. F. Fulwider, Ch. Eng. Ronald Woodyard, Mgr. Vernon Story, Ch. Eng. G. Harold Brewer Leo Yiha, Ch. Eng. Joe L. Smith, Jr. Walter McGenty Gene LaValle, Prog Dir. Paul L. Miller, Eng. S. L. Gladfelter, Ch. Eng. Charles Persons, Ch. Eng. Francis M. Kadow H. Wimpy R. E. Ritch Thurlow Greene Ed Jacker, Ch. Eng. James Turner L. L. Caudle, Ch. Eng. Edward Ring, Ch. Eng. D. M. Dradham, Ch. Eng. David G. Cervantes Alejandro O. Stevenson Dario Cordoba Harold Ingham, Mgr. 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 Schuitz, 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 Rodolfo Junco de la Vege Francisco Martinez Ortelio Ramierz H. Sutton, Ch. Eng.

John E. Gardner, Mgr. Robert Sinnett, Eng. A. P. Del Valle, Ch. Eng. Lynn Smeby, Ch. Eng.

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CMHD KGCA KOL KVOR KWLC WASH WFBR WJDX WOOD WWNY XESM XEXE	DOX DOX DOX DOX DOX DOX DOX DOX DOX DOX	200 100 1000(5) 1000 100 500 1000(5) 500 500 100 250 17	d Calbarien, Cuba a Decorah, Jowa a Seattle, Wash. a Colorado Springs, Colo. a Decorah, Iowa a Grand Rapids, Mich. a Jackson, Miss. a Grand Rapids, Mich. z Watertown, N. Y. Mexico City, D. F. a Jalapa, Ver. C. z Texcoco D F
1280 CMKO KFBB KLS WCAP WDOD WIBA WORC WRR WTNJ XEKR XEA2		(234.2 m. 200 1000(5) 250 500 1000(5) 1000(5) 500 500 100 100 100 100 100 100	z Holguin, Cuba a Great Falis, Mont. a Oakland, Calif. a Camden, N. J. a Asbury Park, N. J. b Chattanooga, Tenn. a Madison, Wis. a Worcester, Mass. a Dallas. Texas a Trenton, N. J. z Mexico City, D. F. z Indianapolis, Ind.
1290 CJHC CMBD CMBF KDYL KLCN	R R D	1000 5000 5000 1000 (5) 100	z Halifax, N. S. z Havana, Cuba z Havana, Cuba a Sait Lake City, Utah a Biytheville, Ark.

Feliciano Lopez Islas Ruperto Villarreal P. Villamil Clsero Ramon Duran Hal G. Nichols, Mgr. James A. Murphy, Mgr. Allen Franklin, Prog. Dir. Geo. D. Walker, Mgr. Fred Fabre, Ch. Eng. Irwin R. Wolfe, Ch. Eng. A. W. Graham Leo S. Burch, Ch. Eng. Max Weiner, Ch. Eng. . . . Carmen Gutierrez Bonifacio Ildefonso A. J. Mosby, Mgr. Harold Smithson, Mgr. Don Searle, Mgr. Ken L. Gibson, Mgr. C. M. Books, Mgr. Gil Maynier, Prog. Dir. Ernest Adams, Ch. Eng. Norman Steinbruch Wm. B. Smart, Prog. Dir. Manuel Alvarez M. Elmer Pederson, Mgr. Elmer Pederson, Mgr. Charles Greenley 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. Manuel Angulo Faran Jessie Jacobson, Mgr. S. W. Warner, Mgr. R. L. Horn, Prog. Dir. Frank S. Lane, Mgr. M. F. Chapin, Ch. Eng. M. P. Stanton Chas Jordan, Prog Dir E. P. Knowles, Ch. Eng. Alfonso Avalos

> S. S. Fox, Mgr. C. L. Lintzenich, Mgr.

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KTRH WATR WEBC WJAS	C .z	1000 (5) 250 1000 (5)	a Houston, Texas a Waterbury, Conn. a Duluth, Minn.
WNBZ	C :DX	1000(5) 250 100 1000(.25)	a Jacksonville, Fla.
1300 KALE	kcs.	(230.6 m. 1000(5)	
KFAC KFH WBBR	ċx	1000 1000(5) 1000	a Los Angeles, Calif. a Wichita, Kans.
WEVD WFBC WHAZ	NX NX	1000 (5) 1000 (5)	 Brooklyn, N. Y. New York, N. Y. Greenville, S. C.
WHAL WHAL		250(1)	g Shebovgan Wis. Minneapolis, Minn.
CFGP	kcs.	(228.9 m.	
CHCK	Ē	50	Charlottetown, P. E. J. Yarmouth, N. S.
CKCV CMKE KARM	F ? C	100	a Quebec, P. Q. z Manzanillo, Cuba a Fresno, Calif.
KBND KCKŅ KCRJ	Ĕ	250 250 250	z Bend, Ore. a Kansas City, Kans
KFYO	M	100(.25)	f Dublin, Texas a Lubbock, Texas
KGEZ KGFW KHUB		100 250 250	a Kalispell, Mont, a Kearney, Nebr. a Watsonville, Calif.
KMYR KOCY KOME	P	100(.25) 250 250	a Denver, Colo. a Oklahoma City, Okla
KPDN KRJF	P	100 250	a Pampa, Texas z Miles City, Mont.
	EN	250 250 250	a Shreveport, La. a Rochester, Minn. a Sherman, Texas
KSRO KSUB KUIN	:::	250 100 250	a Santa Rosa, Calif. a Cedar City, Utah a Grants Pass, Ore.
KVIC KVOL		250 250 250	a Victoria, Texas a Lafavette, La:
KVOX KVSF KWFC	č	250 100 250	a Moorhead, Minn a Santa Fe, N. Mex. a Hot Springs, Ark.
KWLM KWOC KWOS	P	100 250 250	z Willmar, Minn. a Poplar Bluff, Mo.
KXRO TGI	M	250	a Aberdeen, Wash d Guatemala City, Guat.
WAML WBRE WBRK	NM	250 350 250 250	a Laurei, Miss. a Wilkes-Barre, Pa. a Pittsfield, Mass.
WBRW WCLS WCMI	M	250	z Welch, W. Va. a Joliet, III. a Ashland, Ky.
WDAK WDMJ WEBR	 B	250 250	a West Point, Ga. a Marguette, Mich.
WEMP WEXL WFBG		250 250 50 250	a Buffalo, N. Y. a Milwaukee, Wis. a Royal Oak, Mich.
WFDF	BXZ P	100(.25)	a Altoona, Pa. a Flint, Mich,
WFIG WGAU WGH	 К	100(.25)	a Sumter, S. C. a Athens, Ga.
WGTM	··.;	250 250 100	a Newport News, Va. a Wilson, N. C. a Philadelphia, Pa.
WINX WIZE WJPF	P P	250 100 250	 Z Washington, D. C. Z Springfield, Ohio a Herrin, III.
WJPR WLAK WLAV	Ň	250 250 250 250 250	z Greenville, Miss. z Lakeland, Fla.
D C .	1.00	Children en	a Grand Rapids, Mich.

B. F. Orr, Mgr.

Chas. Persons, Ch. Eng. Walter McCoy, Ch. Eng. Carlyle Wright, Mgr. Albert J. Kanze, Ch. Eng. Juan Piza

Dick Rand, Prog. Dir. E. Tyler, Log Dept. Russell L. Lowe, Mgr. Frank Blair, Prog. Dir. H. D. Harris, Ch. Eng. Herbert Mayer, Ch. Eng. Laurie L. Smith Lou Keplinger, Mgr.

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J. Samuel Brody A. Lynne Brannen Edward Bishop, Gen. Mgr. Jack Hudson, Ch. Eng. Julius Geise, Ch. Eng.

Poweli Hunter, Ch. Eng. John R. Pepper

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WLBC		250	a Muncie, Ind.
WLBJ		250	a Bowling Green, Ky.
WLNH	M	250	a Laconia, N. H.
WMBO	· · · · · · · · · · · · · · · · · · ·	250	a Auburn, N. Y. a Plattsburg, N. Y.
WMFF		250	a New Bedford, Mass.
WNBH	MX	100(.25)	a Reading, Pa.
WRAW WROL I	NXZ	250	a Knoxville, Tenn.
WSAJ	G3	100	a Grove City, Pa.
WSAV	N	250	a Savannan, Gā.
WSGN	BEM	250	a Birmingham, Ala.
WSJS	MN	250	a Winston-Salem, N. C.
WSOY		250	a Decatur, III. z Steubenville, Ohio
WSTV	GP3	250	a Tallahassee, Fla.
WTAL	3.4	100(.25)	a Philadelphia, Pa.
WTEL	xz	250	a Jackson, Tenn.
WTRC		250	a Eikhart, Ind.
XEAG		250	z Cordoba, Ver. C.
XEFW		300 500	
XETB		500	
XEX		500	z Washington, D. C.
1350	. r	250	
1320	kcs.	(227.1 m.	
CMHQ		200	z Canta Clara, Cuba
KGHF	B	500	a Pueblo, Colo.
KGM BC		1000	a Honolulu, Hawail
KID		500(1)	a Idaho Falls, Idaho a Des Moines, Iowa
KRNT	ċx	1000(5)	a Des Moines, Iowa
WADC	С	5000	a Tallmadge, Ohio
WORK	N	1000	a York, Pa. a New Orleans, La.
MENED	R	5000	a New Oricans, Eu.
	kcs.	(225.4 m.	
1330	RCJ.		
CMJL	1.1.1	200	z Nuevitas, Cuba
KGB	M	1 000	a San Diego, Callf. a Tacoma, Wash.
KMO	M	1000	a Corpus Christi, Tex.
KRIS KSCJ	NX	1000(5)	a Siouy City Lowa
N3C3	11/1		
	C		g Hartford, Conn.
WDRC	MNX	5000	g Hartford, Conn. a Cincinnati, Ohio
WDRC WSAI WTAO		5000 1000(5) 1000(5)	g Hartford, Conn. a Cincinnatl, Ohio a Green Bay, Wis.
WDRC WSAI WTAO	MNX	5000	g Hartford, Conn. a Cincinnatl, Ohio
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WDRC WSAI WTAQ XID9 1340 KDTH KFRO KGIR KGNO WCOA	kcs.	5000 1000 (5) 1000 (5) 1000 (223.7 m. 1000 1000 5000 250(1) 500(1)	g Hartford, Conn. a Cincinnatl, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H.
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WDRC WSAI WSAI WTHO KFRO KGNOA WFEA WFND WPAB XEBJ XEBS XEBW XEFC XEBS XEBS XEED XEED XEED XEED XEED XEED XEED XEE	MXX : kcs. P : E : X Z D R :	5000 1000 (5) 1000 (5) 1000 (223.7 m. 1000 5000 250 (1) 500 (1) 500 (1) 500 (1) 500 (1) 500 (1) 250 100 250 100 250 100 250 (222.1 m 200 200	g Hartford, Conn. a Cincinnatl, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. a Victoria, Tam. z Mexico City, D. F. a Chihuahua, Colh. z Vilta Acuna, Coah. a Merida, Yuc. z Guadalalara, Jal. A Havana, Cuba
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WDRC WSAI WTHO 1340 150 150 150 150 150 150 150 150 150 15	MXX : kcs. P : E : X Z D R :	5000 1000 (5) 1000 (5) 1000 (223.7 m. 1000 250(1) 500(1) 500 (1) 500 (1) 500 (1) 500 (1) 250 1000 250 1000 250 100 250 100 250 (222.1 m 200 200 200 200 200 200 200 200 200	g Hartford, Conn. a Cincinnatl, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. s Victoria, Tam. z Mexico City, D. F. a Chihuahua, Chih. z Villia Acuna, Coah. a Merida, Yuc. z Guadalaiara, Jal. A Havana, Cuba a Havana, Cuba a Havana, Cuba a Boise, Idaho z Brownwood, Texas
WDRC WSAI WSAI WTHO T340 T340 KFRO KGROA WFEA WFAD WPAB XEBS XEBS XEBS XEBS XEBS XEBS XEBS XEB	KCS.	$5000 \\ 1000 (5) \\ 1000 (5) \\ 1000 \\ (223.7 m. 1000 \\ 1000 \\ 5000 \\ 250 (1) \\ 500 (1) \\ 500 (1) \\ 500 (1) \\ 500 (1) \\ 500 \\ 100 \\ 250 \\ 100 \\ 250 \\ 200 \\ 250 \\ 200 \\ 250 \\ 200 \\ 2$	g Hartford, Conn. a Cincinnatl, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. a Victoria, Tam. z Mexico City, D. F. a Chihuahua, Chih. z Vilta Acuna, Coah: a Merida, Yuc. z Guadalalara, Jal. a Havana, Cuba a Havana, Cuba a Boise, Idaho z Brownwood, Texas a El Paso, Tex.
WDRC WSAI WTB9 1340 KDFRO KGROA WFEAO KGNOA WFEAO WFEA	kcs. P :E :Z Z DR : : : : : : : : : :	$5000 \\ 1000 (5) \\ 1000 (5) \\ 1000 \\ (223.7 m. 1000 \\ 1000 \\ 5000 \\ 250 (1) \\ 500 (1) \\ 500 (1) \\ 500 (1) \\ 500 (1) \\ 500 (1) \\ 500 \\ 100 \\ 250 \\ 100 \\ 250 \\ 250 \\ 200 \\ 250 \\ 200$	g Hartford, Conn. a Cincinnatl, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. a Victoria, Tam. z Mexico City, D. F. a Chihuahua, Chih. z Villa Acuna, Coah: a Merida, Yuc. z Guadalaiara, Jal.) a Havana, Cuba a Havana, Cuba a Boise, Idaho z Brownwood, Texas a El Paso, Tex. a St. Louis, Mo.
WDRC WSAI WSAI WTH THO KGROA WFRO KGOA WFEA WFAD WFAD WFAD WFAD WFAD WFAD WFAD WFA	kcs. P :E :Z Z DR : : : : : : : : : :	$5000 \\ 1000 (5) \\ 1000 (5) \\ 1000 \\ (223.7 m. 1000 \\ 1000 \\ 250 \\ 250 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 250 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 200 \\ 1000 (2.5) \\ 500 \\ 1000 \\ (5) \\ 1000 \\ 500 \\ 1000 \\ (5) \\ 1000 \\ 500 \\ 1000 \\ (5) \\ 100 \\ (5) \\ (5$	g Hartford, Conn. a Cincinnati, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. s Victoria, Tam. z Mexico City, D. F. a Chihuahua, Chih. z Vilta Acuna, Coah: a Merida, Yuc. z Guadalaiara, Jal. A Havana, Cuba a Havana, Cuba a Havana, Cuba a Boise, Idaho z Brownwood, Texas a El Paso, Tex. a St. Louis, Mo. a Zareobath, N. J.
WDRC WSAI WSAI H WSAI H WSAI H H H H H H H H H H H H H H H H H H H	MXX : k P : E : ZZDR : : : : : : : : : : : : : : : : : : :	5000 1000 (5) 1000 (5) 1000 (223.7 m. 1000 250(1) 500(1) 500 (1) 500 (1) 500 (1) 500 (1) 500 (1) 500 1000 500 1000 250 200 200 200 200 200 200 200 200	g Hartford, Conn. a Cincinnati, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. e Victoria, Tam. z Mexico City, D. F. a Chihuahua, Chih. z Vitta Acuna, Coah. a Merida, Yuc. z Guadalaiara, Jal.) a Havana, Cuba a Havana, Cuba a Havana, Cuba a Havana, Cuba a Boise, Idaho z Brownwood, Texas a El Paso, Tex. a St. Louis, Mo. a New York, N. Y.
WDRC WSAI WSAI WTH THO KGROA WFRO KGOA WFEA WFAD WFAD WFAD WFAD WFAD WFAD WFAD WFA	KCS. P IZ IZZDR I III KCS. IIIZPZMANAR	5000 1000 (5) 1000 (5) 1000 (223.7 m. 1000 5000 250 (1) 500 (1) 500 (1) 500 (1) 500 (1) 500 (1) 500 (1) 500 (1) 500 (1) 200 200 200 200 200 200 200 1000 (2.5) 5000 1000 (5) 1000 (5)	g Hartford, Conn. a Cincinnati, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. a Victoria, Tam. z Mexico City, D. F. a Chihuahua, Chih. z Vilta Acuna, Coah: a Merida, Yuc. z Guadalalara, Jal.) a Havana, Cuba a Havana, Cuba a Havana, Cuba a Boise, Idaho z Brownwood, Texas a El Paso, Tex. a St. Louis, Mo. a Zarephath, N. J. a New York, N. Y.
WDRC WSAI WSAI H WSAI H WSAI H H H H H H H H H H H H H H H H H H H	KCS. P IN INDR IN INDR IN INDR	$5000 \\ 1000 (5) \\ 1000 (5) \\ 1000 \\ (223.7 m. 1000 \\ 1000 \\ 5000 \\ 250 (1) \\ 500 (1) \\ 500 (1) \\ 500 (1) \\ 500 \\ 100 \\ 250 \\ 100 \\ 250 \\ 200 \\ 250 \\ 200 \\ 250 \\ (222.1 m \\ 200 \\ 250 \\ 100 \\ 250 \\ (222.1 m \\ 200 \\ 200 \\ 200 \\ 100 \\ (5) \\ 500 \\ 1000 (5) \\ 1000 (5) \\ 1000 (5) \\ 5000 \\ 1000 (5) \\ 1000 (5) \\ 5000 \\ 1000 \\ $	 g Hartford, Conn. a Cincinnati, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. a Victoria, Tam. z Mexico City, D. F. a Chihuahua, Chih. z Vilta Acuna, Coah: a Merida, Yuc. z Guadalalara, Jal.) a Havana, Cuba a Havana, Cuba a Boise, Idaho z Brownwood, Texas a Erephath, N. J. a New York, N. Y. a Richmond, Va. z Brownwood, Tex.
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WDRC WSAI WSAI HOTHO KFRO KGCOA WFEA WFAD WFAD WFAD WFAD WFAD WFAD WFAD WFA	KCS. P :E : ZZDR ::::::::::::::::::::::::::::::::	$5000 \\ 1000 (5) \\ 1000 (5) \\ 1000 (5) \\ 1000 \\ (223.7 m. 1000 \\ 250 \\ 250 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 250 \\ 1000 \\ 250 \\ 1000 \\ 250 \\ 1000 \\ 250 \\ 1000 \\ 250 \\ 1000 \\ 250 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 500 \\ 1000 \\ 5000 \\ 1000 \\ 1000 \\ 5000 \\ 1000 \\ 5000 \\ 1000 \\ 1000 \\ 5000 \\ 1000 \\ 1000 \\ 5000 \\ 1000 \\ 1000 \\ 5000 \\ 100$	g Hartford, Conn. a Cincinnati, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fla. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. a Victoria, Tam. z Mexico City, D. F. a Chihuahua, Chih. z Vilta Acuna, Coah: a Merida, Yuc. z Guadalalara, Jal.) a Havana, Cuba a Havana, Cuba a Havana, Cuba a Boise, Idaho z Brownwood, Texas a St. Louis, Mo. a Zarephath, N. J. a New York, N. Y. a Richmond, Va. z Brownwood, Tex.
WDRC WSAI WSAI H WSAI H WSAI H H H H H H H H H H H H H H H H H H H	KCS. P :E : ZZDR ::::::::::::::::::::::::::::::::	$5000 \\ 1000 (5) \\ 1000 (5) \\ 1000 \\ (223.7 m. 1000 \\ 1000 \\ 5000 \\ 250 (1) \\ 500 (1) \\ 500 (1) \\ 500 (1) \\ 500 \\ 100 \\ 250 \\ 100 \\ 250 \\ 200 \\ 250 \\ 200 \\ 250 \\ (222.1 m \\ 200 \\ 250 \\ 100 \\ 250 \\ (222.1 m \\ 200 \\ 200 \\ 200 \\ 100 \\ (5) \\ 500 \\ 1000 (5) \\ 1000 (5) \\ 1000 (5) \\ 5000 \\ 1000 (5) \\ 1000 (5) \\ 5000 \\ 1000 \\ $	g Hartford, Conn. a Cincinnati, Ohio a Green Bay, Wis. a Irapuato, Gto. z Dubuque, Iowa a Longview, Tex. a Butte, Mont. b Dodge City, Kans. a Pensacola, Fia. a Manchester, N. H. a Fayetteville, N. C. a Toledo, Ohio a Ponce, Puerto Rico z Obregon, Son. e Victoria, Tam. z Mexico City, D. F. a Chihuahua, Chih. z Villa Acuna, Coah: a Merida, YuC. z Guadalajara, Jal.

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 Zuniga Aurelio G. Zaragoza J. H. McGill, Pub. Dir. Webley Edwards, Mgr. Jack Duckworth, Mgr. Edmung Linehan, Prog. Dir. Robert Wilson J. E. Mathiot, Ch. Eng. H. G. Nebe, Ch. Eng. 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 Harold C. Johnson, Mgr. E. B. Craney, Mgr. N. C. Peterson, Mgr. Emilio Manzanilla Fernando Elizalde Maria Remedios Delgado Vincente Hernandez Julio Molina Font J. M. Gonzalez, Dir. C. G. Phillips, Mgr. Karl O. Wyler, Mgr. Clarence Cosby, Mgr. Wifred H. Wood Brown County Brdcstg. Co.

Donald A. Burton

Luis Marauri H.

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KCRC	EM	250	Enid, Okla.
KLPM		1000	a Long Beach, Callf. a Minot, N. Dak.
WCSC	MC	1000 500 (1)	a Charleston, S. C.
WFBL	CX 2	1000(5) 500(1)	a Syracuse, N. Y. a Chicago, III.
WOBC WSBT	C2Z	1000	a Vicksburg, Miss
1400	>	500	a South Bend, Ind.
1370	kcs.	(218.8 m.	
CFAR CFOS		100	a Flin Flon, Man. z Owen Sound, Ont.
CJOC	F	100	a Lethbridge, Alta.
CKRN		250	a Lethbridge, Alta. a Moncton, N. B. z Rouyn, P. Q.
CMGE		200 75	a Cardenas, Cuba z Trujillo, D. R.
KENO	P	250 250	z El Dorado, Ark.
KEVR	З	100	a Seattle, Wash.
KFPW	D'	250	a Fort Smith, Ark.
KEVS		250 100	a Cape Girardeau, Mo.
KGFL		100	a Roswell, N. Mex. a San Angelo, Texas a Clovis, N. Mex.
KIUN		100	a Clovis, N. Mex. a Pecos, Texas
KIUP		250 250	 Durango, Colo. Galveston, Tex.
KMAC KOBH	5	250 250	a San Antonio, Tex.
KOH	NXZ	500	a Rapid City, S. Dak. a Reno, Nev.
KOKO		100 250	a La Junta, Colo. a San Antonio, Tex.
KORN	***	250 250	a Fremont, Nebr.
KRKO	Ξż	30	a Berkeley, Celif. a Everett, Wash.
KRMC	M.	250 250	a Jamestown, N. Dak. a Temple, Texas
KTSW	EMN	250	a Oklahoma City Okla
KTUC	CE XZ	250 250	a Tucson, Ariz.
KVFD	G	100 250 250	a Walla Walla, Wash. a Fort Dodge, Iowa
KVGB KVRS		250	a Fort Dodge, Iowa a Great Bend, Kans. a Rock Springs, Wyo.
KWLK		250 250 250	a Longview, Wash.
KYAN	P	250	a Longview, Wash. a Sheridan, Wvo. z Cheyenne, Wyo a Albany, N. Y.
WABY	BM	100(.25)	a Albany, N. Y. a Dothan, Ala.
WARM	·M	250 250	a Scranton, Pa
WATW		; 100	a Ashland, Wis.
WBLK	NZ	250 250	a Clarksburg, W. Va. a Buffalo, N. Y.
WBTH		250	z Williamson, W. Va. a Danville, Va.
WCBI WCBM		250	a Columbus, Miss.
WCNC	•••	250 250 250	a Baltimore, Md. z Elizabeth City, N. C. a Columbia, S. C.
WCOS WDAS		250	Philadelphia, Pa.
WDEF	P	250 250 250	z Chattanooga, Tenn. a Champaign, III.
WEOA	Ċ	250	a cvansville, ind.
WFOR		100 - 250	a Hattlesburg, Miss. a Ft. Lauderdale, Fla.
WGBR	N	250 250	a Goldsboro, N. C. a Fort Wayne, Ind.
WGRC	M	250	a New Albany, Ind.
WHDF		250	a Memphis, Tenn. a Calumet, Mich. a Hickory, N. C.
WHKY	··;	250 250	a Hickory, N. C. a Virginia, Minn.
WHUS		250 250	Port Huron Mich
WHYN	P	250	 Cookeville, Tenn. z Holyoke, Mass.
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Wm. Butterfield, Annc'r. Jay Tapp, Ch. Eng. Richard Schmidt, Mgr. Clyde Wiegand, Ch. Eng. J. M. Weaver, Ch. Eng. M. Wilcox

J. O. Tardif, Mgr. Genero Sebater Frank Hatton F. E. Bolls

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Arthur Dailey, Mgr.

E. Whitmore, Mgr. Earle Yates, Mgr. Chas. C. Alsup, Mgr. Jack Hawkins, Mgr. Jack Hawkins, Mgr. Lawrence Yates, Mgr. Howard Davis, Mgr. Robert Dean, Mgr. Merle Snider Leonard Wilson ugene Roth, Mgr.

Arthur Westlund, Mgr. Lee Mudgett Frank Gillesple Prog. Dept. Burton Bishop, Mgr. Joseph Lee, Mgr. K. W. Trimble, Gen. Mgr Frank Howe, Mgr. H. E. Studebaker, Mgr.

Ken Nielson, Mgr.

H. W. Siebert, Mgr.

Harold Smith, Mgr. Julian Smith, Mgr.

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Roy Albertson

Birney Imes

Lewis Hiland, Ch. Eng.

Harold Davis, Prog. Dir.

Tom M. Bryan

Jack Gardner, Ch. Eng.

Vernon Baumgartner Angus Pfaff, Mgr. M. L. Medley Hampden-Hampshire Corp.

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WIBM	B	250	a Jackson, Mich.
WISE	N	250	z Asheville, N. C.
WJAC	R	250	a Johnstown, Pa.
WJHO		100(.25)	a Opelika, Ala.
WKPT	N	250	a Kingsport, Tenn.
WLLH	Sx	10-100	a Kingsport, Tenn. a Lawrence, Mass.
WLLH	MS	250	a Lowell, Mass.
WMAN		250	a Mansfield, Ohio
WMBR	C	250	a Jacksonville, Fla.
WMFD		100(.25)	a Wilmington, N. C.
WMGA		250	z Moultrie, Ga.
WMIN	1.1.1	250	a St. Paul, Minn.
WMSL	E	250	a Decatur, Ala.
WOC	C	250	a Davenport, Iowa
WORD	ĉ	250	a Spartanburg, S. C.
WPAY	X	100	a Portsmouth; Ohio. a Williamsport, Pa.
WRAK	MN	250	
WRJN		250	a Augusta, Maine a Racine, Wis.
WSAU		250	a Wausau, Wis.
WSLB		250	a Ogdensburg, N. Y.
WSVS	G2	50	a Ogdensburg, N. Y. z Buffalo, N. Y.
WTCM	P	250	z Traverse City, Mich.
WTSP	-	250	z St. Peterburg, Fla.
XECZ		100	z San Luis Potosi, S. L. P.
XEI		125	a Morella, Micho:
XELZ		100	z Mexico City, D. F.
1410			
		1917 9 1	
1380	kcs.	(217.3 m.)	
KERLI		1000	
KERN	BE	1000	a Bakersfield, Calif.
KQV	ċx	1000	a Pittsburgh, Pa.
WALA	CX.	500(1) 250(.5)	a Mobile, Ala.
WING	NX	1000	a Dayton, Ohio
WKBH WNBC	B	1000	a La Crosse, Wis.
	U	1000	a New Britain, Conn.
1420			
1390	kcs.	(215.7 m.)	
CMJC			
CMJC KABR	×	(200 500(1)	z Camaguoy, Cuba a Aberdeen, S. Dak.
CMJC KABR KLRA	×c	(200 (500(1)) 1000(5)	z Camaguey, Cuba a Aberdeen, S. Dak. a Little Rock, Ark.
CMJC KABR KLRA KRLC	XCZ	(200 (500(1)) 1000(5) 250	z Camaguoy, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Léwiston, Idaho
CMJC KABR KLRA KRLC WFCI	XUNP	(200 (500(1)) 1000(5) 250 1000	z Camaguoy, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Léwiston, Idaho
CMJC KABR KLRA KRLC WFCI WHK	C Z P	(200 (500(1)) 1000(5) 250 1000 1000(5)	z Camaguoy, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Léwiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio
CMJC KABR KLRA KRLC WFCI WHK WQDM	KBMX AD	(200 (500(1)) 1000(5) 250 1000 1000(5) 1000(5)	z Camaguey, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albana, Vt.
CMJC KABR KLRA KRLC WFCI WHK WQDM XEM	KBMX AD	(200 (500(1)) 1000(5) 250 1000 1000(5)	z Camaguoy, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Léwiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio
CMJC KABR KLRA KRLC WFCI WHK WQDM	KBMX AD	(200 (500(1)) 1000(5) 250 1000 1000(5) 1000(5)	z Camaguey, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albana, Vt.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM	KBMX AD	(200 (500(1)) 1000(5) 250 1000 1000(5) 1000(5) 1000 500	z Camaguoy, Cuba a Aberdeen, S. Dak. Little Rock, Ark. a Léwiston, Idaho z Pawtucket, R. I. a Cieveland, Ohio f St. Albans, Vt. z Chihuahua, Chih.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM	KBMX AD	(214.2 m.	z Camaguev, Cuba a Aberdeen, S. Dak. Little Rock, Ark. a Léwiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM 1430 1400 CMAR	KBMX AD	(214.2 m. 200 1000 1000 500	z Camaguey, Cuba a Aberdeen, S. Dak. Little Rock, Ark. a Léwiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba
CMJC KABR KLRA KRLC WFCI WHK WODM XEM	KBMX AD	(214.2 m. 200 1000 1000 1000 1000 1000 250 1000 1000 500	z Camaguoy, Cuba a Aberdeen, S. Dak. Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba
CMJC KABR KLRA KRLC WFICI WHK WODM XEM 1430 1400 CMAR CMKR KLO	KBMX AD	(214.2 m. 200 1000 1000 1000 500 (214.2 m. 200 5000	z Camaguey, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah
CMJC KABR KLRA KRLC WFCI WHK WODM XEM 1400 CMAR CMKR KLO KTUL	KBMX AD	(214.2 m. 200 1000 1000 1000 1000 1000 250 1000 1000 500	z Camaguev, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okia.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM 1430 1400 CMAR CMKR KLO KTUL TGX	KCS.	(214.2 m. 200 1000 1000 1000 500 (214.2 m. 200 200 5000 5000	z Camaguey, Cuba a Aberdeen, S. Dak. Little Rock, Ark. a Léwiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okla. d Guatemala City, Guat.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM 1400 CMAR CMKR KLO KTUL TGX WARD	КС КВМХ АD ксз. ВЕМ С	(214.2 m. 200 1000 1000 1000 500 (214.2 m. 200 200 5000 5000 5000 5000 5000	z Camaguey, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okla. d Guatemala City, Guat. a Brooklyn, N. Y.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM 1400 CMAR CMKR KLO CMAR CMKR KLO KTUL TGX WARD WBBC	ксз. ВЕМ ВЕМ С	(214.2 m. 200 1000 1000 1000 500 (214.2 m. 200 5000 5000 5000 5000 5000	z Camaguev, Cuba a Aberdeen, S. Dak. Little Rock, Ark. a Léwiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okla. d Guatemala City, Guat. a Brooklyn, N. Y. a Brooklyn, N. Y.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM 1400 CMAR CMKR KLO KTUL TGX WARD WBBC WIRE	KCS.	(214.2 m. 200 1000 1000 1000 500 (214.2 m. 200 5000 5000 5000 5000 5000 5000 5000 5000	z Camaguev, Cuba a Aberdeen, S. Dak. Little Rock, Ark. a Léwiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okla. d Guatemala City, Guat. a Brooklyn, N. Y. a Brooklyn, N. Y.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM 1400 CMAR CMKR KLO KTUL TGX WARD WBBC WBBC WIRE WLTH	KCZ AD KCS. BEM C 2 MR 2	(214.2 m. 200 1000 1000 1000 500 (214.2 m. 200 200 5000 5000 5000 5000 5000 5000 5000	z Camaguey, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okla. d Guatemala City, Guat. a Brooklyn, N. Y. a Indianapolis, Ind. a New York, N. Y.
CMJC KABR KLRA KRC WFCI WHK WODM XEM 1430 1400 CMAR CMKR KLO KTUL TGX WARD WBBC WIRE WLRH WVFW	KCS.	(214.2 m. 200 1000 1000 1000 500 (214.2 m. 200 500 500 500 500 500 500 500	z Camaguev, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okla. d Guatemala City, Guat. Brooklyn, N. Y. a Indianapolis, Ind. a New York, N. Y.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM I 400 CMAR CMKR KLO CMAR CMKR KLO CMAR CMKR KLO WBDC WIRE WLTH WVFW XEA	KCZ AD KCS. BEM C 2 MR 2	(214.2 m. 200 1000 1000 1000 500 (214.2 m. 200 50000 5000 500	z Camaguev, Cuba a Aberdeen, S. Dak. Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okia. d Guatemala City, Guat. a Brooklyn, N. Y. Brooklyn, N. Y. a Indianapolis, Ind. a New York, N. Y. Brooklyn, N. Y. Campeche, Cam.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM 1400 CMAR CMKR KLO CMAR CMKR KLO TGX WARD WBBC WIRE WLTH WVFW XEA XEAJ	KCZ AD KCS. BEM C 2 MR 2	(214.2 m. 200 1000 1000 1000 500 (214.2 m. 200 50000 5000 500	z Camaguev, Cuba a Aberdeen, S. Dak. Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okia. d Guatemala City, Guat. a Brooklyn, N. Y. Brooklyn, N. Y. a Indianapolis, Ind. a New York, N. Y. Brooklyn, N. Y. Brooklyn, N. Y. a Brooklyn, N. Y. a Rowklyn, N. Y. a Brooklyn, N. Y. a Rowklyn, N. Y. a Rowklyn, N. Y. a Rowklyn, N. Y. brooklyn, N. Y. brooklyn, N. Y. campeche, Cam. z Navojoa, Son.
CMJC KABR KLRA KRLC WFCI WHK WODM XEM 1400 CMAR CMKR KLO KTUL TGX WARD WBBC WIRE WLTH WVFW XEA XEAJ XEAU	KCZ AD KCS. BEM C 2 MR 2	(214.2 m. 200 1000 (5) 250 1000 (5) 1000 (5) 1000 (5) 1000 500 500 500 500 500 500 50	z Camaguev, Cuba a Aberdeen, S. Dak. a Little Rock, Ark. a Lewiston, Idaho z Pawtucket, R. I. a Cleveland, Ohio f St. Albans, Vt. z Chihuahua, Chih. z Pinar del Rio, Cuba z Santiago de Cuba a Dgden, Utah a Tulsa, Okla. d Guatemala City, Guat. a Brooklyn, N. Y. a Indianapolis, Ind. a New York, N. Y. a Brooklyn, N. Y. brooklyn, N. Y. a Brooklyn, N. Y. brooklyn, N. Y. campeche, Cam. z Navojoa, Son. z Tijuana, B. Cfa.
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.... Pedro Marti, Ch. Eng. Andres Martinez Dalton Le Masurier, Mgr. O. L. Taylor, Mgr. Mrs. W. J. Virgin E. A. Donaher

W. H. Dúnn, Prog. Dir. Harold H. Thomas

Robt. Wilds, Ch. Eng.

H. B. Greene, Ch. Eng. Richard Dunlea Frank R. Pidcock

Zeferino Z. Jimenez Carlos Gutierrez Maria Gardena de Zetina

Robert Stoddard, Mgr. J. J. Laux, Mgr. W. O. Pape, Mgr. M. S. Gilkerson, Ass't. Eng.

Rogers B. Holt, Ch. Eng.

Miguel Guillen Perez W. L. Dean, Prog. Dir. S. C. Vinsonhaler, Mgr. Donald H. Wike, Mgr.

E. L. Gove, Tech. Sup.

Jaime Nadal Paul R. Heitmeyer W. C. Gillespie

Aron Kronenberg Bert Child, Prog. Dir. Earl Lewis, Ch. Eng.

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Robert Donahue

Allen R. Richter Maurice L. Myers J. Mitchell H. C. Bieda

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WHIS		(211.1 m.)		Bluefield Mr. M.	
WROK	M CE	500(1)		Rockford, III.	Edw. L. Ketts
CBY	F	100	a	Toronto, Ont.	1
CHNB	P	100	z	North Battleford, Sask.	Leon Trepanier
CKLN	F	100(.25)		Nelson, B. C.	Hume Lethbrid
KABC	M	200	8	Moron, Cuba San Antonio, Texas	Cesar Canals Chas: Belfi, Pro
KATE	E 4	250 100		Albert Lea, Minn.	Geo. Russell, P Wm. Allingham
KCMC	M	250 100	4	Texarkana, Texas	W. T. Casper, F Jack Wallace, P
KEUB	EM	250 250		Price, Utah	Sam G. Weiss
KFBC KFIZ	PE	100 (.25)	z	Cheyenne, Wyo.	Geo. Bairey, M
KFMB KFUN		250 250	az	San Diego, Calif.	Lynn B. Fairba
KGFF	EM	250	z	Shawnee, Okla,	Las Vegas Brdc Ross Porter, Mg
KGLU	3 EN	100 250			E. L. Allen
KIDW	3	100 250	az	Lamar, Colo. La Grande, Ore.	Sherrill Ellswort Paul E. Walden,
KORE	·m	100 250	a	La Grande, Ore. Marysville, Calif. Eugene, Ore.	Leon Stauffer, Frank Hill, Mgr
KRBC KRBM	EN	250 250	a	Abilene, Texas	Max Bentley, A
KRIC		250 100	Z	Beaumont, Texas	Thomas Baland
KSAN		250		San Francisco, Calif.	Thomas Belzel, S. H. Paterson,
KVAK		250 100	1	Atchison, Kans.	Dietrich Dirks, I
KWAL KWBG	X		8	Hutchinson, Kans.	C. Howarth and W. B. Greenwald
WACO	CM 4	250 250	bb	Portland, Ore.	W. B. Greenwald T. W. Symons, James W. Pate
WAGM	•••	100	a z	Presque Isle, Maine	R. W. Macintos Howard N. Gree
WAPO	NXZ	250 250	-	Chattanooga, Tenn.	R. G. Patterson Edward Belsel,
WBML WCBS	PN	250	z	Macona, La.	V
WCHV		250 250 250		Springfield, III. Charlottesville, Va. Rocky Mount, N. C.	R. L. Ashenfelt
WELL	BX	100	8	Battle Creek, Mich.	Wm. Avera Wy
WFMJ		250	8	Youngstown, Ohio Atlantic City, N. J.	Gov. E. D. Rive
WGNC		250 250	za	Gastonia, N. C. Valdosta, Ga.	F. C. Todd, Mg
WGPC	x	100	8	Albany, Ga. Olean, N. Y.	
WHEC		250 250 250	8	Cicero, III. Anniston, Ala.	Edwin Mullinax
WILM		250	8	Wilmington, Del. Ironwood, Mich.	a contract the sale
WKIP		250		Poughkeepsie, N. Y.	
WLAP	B	250 250	8	Lexington, Ky. Erie Pa.	Winston L. Clar
WLPM	÷.ċ	250 250	-	Suffolk, Va. Springfield, Mass.	Jack Siegel
WMBC WMBH	•••	250 250 250	8	Detroit, Mich. Joplin, Mo.	E. H. Clark, Ch.
WMBS WMFJ	XZ	250 250 250	8	Uniontown, Pa. Davtona Beach, Fla.	Chas. McClane, W. Wright Esch
WMSD	P	250 100 (.25)	az	Muscle Shoals City, Ala. Martinsville, Va.	····
WMWH WNAB	р Р	250	i z z	Augusta, Ga. Bridgeport, Conn.	W. Montgomery
WNOE		250 250		New Orleans, La. Paducah, Ky.	
WRAR.	ĊX	100	8	Parkersburg, W. Va.	
	kcs.	(209.7 m.)			A States
CJGX CMKZ	F	1000 200	a z	Yorkton, Sask. Palma Sòriano, Cuba	A. L. Garside,
Page E	ichty		34		Joaquin Venero
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Leon Trepanier, Ch.Eng. Hume Lethbridge, Mgr. Cesar Canals Chas. Belfi, Prog. Dir. Geo. Russell, Prog. Dir. Wm. Allingham, Mgr. W. T. Casper, Prog. Dir. Jack Wallace, Prog Dir. Sam G. Weiss Geo. Bairey, Mgr. Lynn B. Fairbanks, Mgr. Las Vegas Brdcstg. Co., Inc. Ross Porter, Mgr. E. L. Allen Sherrili Elisworth, Mgr. Paul E. Walden, Ch. Eng. Leon Stauffer, Ch. Eng. Frank Hill, Mgr. Max Bentley, Mgr. . . . Thomas Belzel, Mgr. S. H. Paterson, Mgr. Dietrich Dirks, Mgr. C. Howarth and C. Berger W. B. Greenwald, Mgr. T. W. Symons, Jr. Mgr. James W. Pate, Mgr. R. W. MacIntosh Mgr. Howard N. Greenlee, Mgr. R. G. Patterson, Mgr. Edward Belsel, Prog. Dir. L. Ashenfelter, Ch. Eng. Vm. Avera Wynne Sov. E. D. Rivers C. Todd, Mgr. dwin Mullinax Winston L. Clark, Mgr. ack Siegel H. Clark, Ch. Eng. has. McClane, Eng. V. Wright Esch . . .

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. L. Garside, Mgr. oaquin Venero Obregon

KGNF WPRP WSLI WSPB WWDC KINY KSO WBNS WHEC WHP WMPS WOKO XERH 1440	BMCCCBBC	1000 250 250 250 1000 1000(5) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1) 500(1)	a North Platts, Nebr. a Ponce, Puerto Rico a Jackson, Miss. a Sarasola Fia z Washington, D. C. a Juneau, Alaska a Des Moines, Iowa a Columbus, Ohio a Rochester, N. Y. a Harrisburg, Pa. a Memphis, Tenn. a Albany, N. Y. z Mexico City, D. F.
CKGB KDFN KELA KXYZ WBIG WCBA WMBD WSAN XEFI	FXXXC CX	1000 500 1000 1000(5) 500 1000(5) 500 1000 206.8 m.	a Timmins, Ont. a Casper, Wyo. a Centralia, Wash. a Houston, Texas a Greensboro, N. C. a Allentown, Pa. a Peoria, III. a Allentown, Pa. a Chihuahua, Chih.
CFCT CHGS CMHM HRN KCMO KGCX KIEM KTBS TGO WAGA WGAR WHOM WSAR XEDJ XFF XERK XEY 1500	···· ···· NZ ···· ···· ···· ···· ····· ····· ····· ····	500 500 2000 500 1000(5) 1000 500(1) 1000 200 500(1) 1000(5) 500(1) 1000 100 100 100 250	a Victoria, B. C. f -Summersida, P. E. I. z Cientuegos, Cuba b Tegucigalpa, Hond. a Kansas City, Mo. a Wolf Point, Mont. a Eureka, Calif. a Shreveport, La. a Quezaitenango, Gust. a Atlanta, Ga. a Cleveland, Ohio a Jersey City, N. J. f Fall River, Mass. z Magdalena, Son. a Juarez Chih. z Tepic, Nay. z San Luis Rio Colonia,
1460 CMKF KSTP WISV	RC	(205.4 m 250 50000 50000 (204 m.)	z Holguin, Cuba z St. Paul, Minn. a Washington, D. C.
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CUIC		100	a Sault Ste. Marie, Ont. a Gallup, N. Mex.

J. B. Eaves, Eng. Julio M. Conesa G. G. Benson, Ch. Eng.

Capital Brdcstg. Co. C. B. Arnold, Mgr. Edmund Linehan, Prog. Dir.

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Gilberto Gil Son,

Manuel J. De Gongora Stanley Hubbard, Mgr. Harry R. Crow; Clyde Hunt

L. Sanchez Julio A. Garcia A. L. Smith, Mgr. J. T. Ward The Northern Corp.

J. Garcia R. Haymond Ramsey Elmer Herkner

Mario Abril Dumois Marjorie Jamison C. H. Topmiller, Ch. Eng.

Modeste Ortega

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J. C. Whitby A. W. Mills

Page Eighty-one

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KBKR		250		a Muskogee, Okla. Baker, Ore.	
KBST	M	100		Big Spring, Texas	Loui
KDB	EM	250 250		Duluth, Minn.	Cille
KDRO	P	100(.25)			Earl
KEYS	P	250	z	Sedalia, Mo. Corpus Christi, Texas	
KGKY		250 250	1	SCOUSDIUTT, Nebr	
KNOW	M	250		Brady, Tayas	G. L
KOTN		250		Austin, Texas	
KOVC		250		Pine Bluff, Ark. Valley City, N. Dak.	B. J
KPAB		250 250		Laredo, Texas	Mark
KPLC		250		Lake Charles, La.	C. R
KPQ	M	250 250		Paris Tayan	'J. B
KRNR	M	100(.25)		Wenatchee, Wash. Roseburg, Ore	Cole
KROD		250	8	El Paso, Texas	Justi
KTOH	111	250	8		Dorre C. J.
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KWEW		100		Hobbs, N. Mex.	Mrs.
KXO	M	100		E Centro, Calle	W. E F. M
KYCA KY5M	EN	250	F	rescott, Ariz.	
WBOC	EN .	250 250	1	Mankato, Minn.	H. K
WCNW	· 2	100 (.25)	a	Salisburg, Md. Brooklyn, N. Y.	Penir
WDAN	ċ	250 250		Danville, III.	Arth
WDNC	ç	250		Durham, N. C.	Perry
WERC	MN	100(.25)	z	crie, Pa.	
WGIL		250 250		Lancaster, Pa.	Ernes
WGKV	Ň	100	a z	Charleston W/ Mr	Paul
WGTC		250	ā	Greenville N C	
WHBB		100	a	Selma, Ala. Detroit, Mich, Miami Beach, Fia.	••••
WKAT	xż	250	a	Detroit, Mich.	Winif
WKBB	Ň.	250 250		Miami Beach, Fia.	Arthu
WKBV WKBZ		100(,25)			L. Ca
WKBZ		250		Muskegon, Mich.	
WKEU	D	100	8	Griffin, Ga.	
WKNY WMJM		250	a	Kingston, N. Y.	John
WMOG		100(.25)	a	Cordele, Ga	Corde
WMRC		250	a		÷114
WMRN	P	250	z	Marion, Ohio	Texti
WNBF	C.	250	4	Binghamton N. Y	
WOLF	M	250 250		New London, Conn. Syracuse, N. Y.	Geral
WOMI		250	8	Owensboro, Ky.	
WOPI		250		Bristol, Tenn.	••••
WRDW	C	250	a	Augusta, Ga.	
WRGA		250 250	8	Rome, Ga.	
WSTP	MI	250	a	Salishury N. C	LE PALATE
WSYB	M	250		Roanoke, Va. Salisbury, N. C. Rutland, Vt.	James
WTMC		100	z	Ocala, Fla.	
WTMV		250	â	E. St. Louis, III.	
WWRL	G2 ·	250		Woodside, N. Y.	• F. S.
wwsw		250	8	Pittsburgh, Pa.	
XEOK		and the second se	-	Mexico City, D. F.	
	P	250	z	Batavia, N. Y.	1100 000
	P	250	z	Corous Chalad	Batavi
		250	-	Corpus Christi, Tex.	Nuece
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H. Speck, Mgr. is P. Thornton ry V. Keneaster, Prog. Dir. pert Fawcett, Prog. Dir. Pollock, Mgr. ... Burns J. Parrish, Mgr. J. Parrish, Mgr. rk C. Crandail, Mgr. rvel M. Valentine R. Porter, Mgr. Bert Mitchell, Mgr. e E. Wylie, Mgr. tin B. Toles, Mgr. tin B. Toles, Mgr. tin B. Toles, Mgr. h. C. Carman, Mgr. est L. Spencer, Mgr. C. C. Minyard, Sec'y. E. Whitmore M. Bowles, Mgr. A. Bowles, Mgr. Vimberly, Ch. Eng. Insula Brdcstg. Co. Nur Faske Y W. Esten, Ch. Eng. st Stanbiola Kalbfleisch fred Powers our P. Smith, Ch. Eng arlson R. McKenna ele Dispatch Pub. Co. ile Brdcstg. Co. d J. Morey s R. Yost, Ch. Eng. Liggett, Ch. Eng.

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Stewart, Ch. Eng ente, Dir.

nlesinger Carrera, Dir.

Please turn to page 88

Frequency is given in kilocycles in second column. For power and network affiliations, refer to the list of North American stations by Frequencies.

affiliations,			New London	Atlanta
ALABAMA	El Dorade	Sam Bernardino	New London WNLC 1500	Atianta WAGA 1450
A REAL PROPERTY OF	KELD 1370	KFXM 1210	Waterbury	WATL 1370
	Fort Smith	San Diego	WATR 1290	WMBI 1080
VAnniston	KFPW 1870	KFSD 600	WBBY 1530	WGST 890
TEDMA 1420	Hot Springs KTHS 1060	KGB 1330	1000	WSB 740
Birmingham	KTHS 1060 KWFC 1310	San Francisco KFRC 610	DELAWARE	Augusta
(API 1140	Jonesbero	KFRC 610 KGO 790	DELAWARE	WGAC 1210 WMWH 1420
/BRC 980	KBTM 1200	KJBS 1070	Wilmington	WMWH 1420 WRDW 1500
78GN 1810	Little Rock	KPO 680	WDEL 1120	Brunswick
MSL 1370	KARK 890	KSAN 1420	WILM 1420	WMOG 1500
Dothan	KGHI 1200	KSFO 660		Columbus
74GF 1370	KLRA 1390	KYA 1230	DISTRICT OF	WRBL 1200
Gadsden	Pine Biuff	San Jose	COLUMBIA	Cordele
YJBY 1210	KOTN 1500 Siloam Springs.	KQW 1010	Washington	WMJM 1500
Huntsville	KUOA 1260	San Luis Obispo	WINX 1310	Dalton WBLJ 1200
7BHP 1200	AUGA 400	KVEC 1200	WJSV 1460	WBLJ 1200 Gainesville
Mobiles TALA 1380		Santa Ana	WMAL 630	WGGA 1210
TMOB 1200	CALIFORNIA	KVOE 1500	WOL 1230	Griffin
Montgemery		Santa Barbara	WRC 950	WKEU 1500
WCOV 1210	Bakerfield	KBD 1500	WWDC 1420	Macon
VEFA 1410	KERN 1380	KTMS 1220	FLORIDA	WBML 1420
Opelika	KPMC 1550	Santa Rosa KSRO 1310	Daytona Beach	WMAZ 1180
WTHO 1370	Berkeley	Stockten	WMFJ 1420	Moultrie WMGA 1370
Selma	KRE 1870	KGDM 1100	Ft. Lauderdale	WMGA 1370 Rome
WHBB 1500	Beverly Hills	KWG 1200	WFTL 1370	WRGA 1500
Husele Sheals	KMPC 110 Chico	Visalia	Ft. Myers	Savannah
City	KHSL 1260	KTKC 890	WFTM 1210	WSAV 1310
WMSD - 1420	El Centro	Watsonville	Galnesville	WTOC 1260
Tuscaloosa WIRD 1200	KX0 1500	KHUB 1310	WRUF 880	Thomasville
WJRD 1200	Euroka		Jacksonville WJAX 900	WPAX 1910
A state of the sta	KIEM 1450	COLORADO	WJAX 900 WJHP 1290	Valdosta WGOV 1420
ALASKA	Freano	Alamosa	WMBR 1370	WGOV 1420 Wayoross
and the second sec	KARM 1310	KGIW 1420	Lakeland	WAYX 1200
Anchesen	KMJ 580	Colorade Springs	WLAK 1310	West Point
Anchorage CFQD 180	Giendale	KVOR 1270	Miami	WDAK 1810
	KIEV 850	Denver	WIOD 610	
Fairbanks GFAB 610	Long Beach	KFEL 920	WQAM 560	HAWAII
A REAL PROPERTY OF THE OWNER OF T	KFOX 1250	KLZ 560	Miami Beach	Hlla
LINY 1430	KGER 1360	KMYB 1310	WKAT 1500 Ocala	KHBC 1200
and the second se	Los Angeles	KOA 820	WTMC 1500	Honolulu
Ketchikan	KECA 780 KFAC 1300	KPOF 880 KVOD 630	Orlando	KGMB 1320 KGU 750
KGBU 900	KFAC 1300 KFI 640	1	WDBO 580	Lihue
	KFSQ 1110	Durango KIUP 1370	WLOF 1200	KTOH 1508
ARIZONA	KFVD 1000		Panama City	
	KFWB 950	Grand Junction	WDLP 1200	IDAHO
Blobe	KGFJ 1200	KXFJ 1200 Greeley	Pensaoola WCOA 1840	Bolae
KWJB 1210	KHJ 900	KFKA 880	WCOA 1840 St. Augustine	KIDO 1350
Jerome	KMTB 570	La Junta	WFOY 1210	Idahe Fails
KCRJ 1810	KNX 1050 KRKD 1120	KOKO 1370	St. Petersburg	KID 1320
Lowell		Lamar	WSUN 620	Lewiston KRLC 1890
KBUN 1200	Marysville	KIDW 1420	WTSP 1370	
Phoenix EOY 550	KMYC 1420	Pueblo	Sarasoto	KFXD 1200
EPHO 1200	Moreed	KGHF 1320	WSPB 1420	Pocatelio
KTAB 620	KY08 1040	Sterling	Tallahassee WTAL 1310	KSEI 900
Presoutt	Modeste KTRB 740	KOEK 1200	WTAL 1310 Tampa	Twin Falls
EYCA 1500	Monterey	A statement of the stat	WDAE 1220	KTFI 1240
Safford	KDON 1210	CONNECTICUT	WFLA 620	Wallace
KGLU 1420	Oakland		WKGA 940	KWAL 1490
Tueson ETUC 1870	KLS 1280	Bridgeport WICC 600	Wast Palm	ILLINOIS
TVOA 1260	KLX 880	WNAB 1420	Beach WINO 1200	
Yuma	KBOW 980	Hartford	WJNO 1200	Aurora WMRO 1250
TYUM 1210	Pasadena	WDRC 1330	GEORGIA	Bioomington
15	KPPC 1910	WTIC 1040		WJBC 1200
	Redding	WTHT 1200	Albany	Carthage
ARKANSAS	KVCV 1200	New Britain	WALB 1230 WGPC 1420	WCAZ 1070
-	Saoramente	WNBC 1880	WGPC 1420 Athens	Champaign
the second se				
Blytheville	KFBK 1490	New Haven		WDW8 1870
Blytheville ISO 1290	KFBK 1490 KROY 1210	WELI 930		WDWS 1570

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Chicage		1
WAAF	920	
WBBM	770	
WCBD	1080	
WCFL	970	
WCRW	1210	
WEDC	1210	
WENR	870	
WGES	1360	
WGN	720 1130	
WLS	870	6
WMAQ	670	
WMBI	1080	
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WHFC	1420	
WDAN	1500	1
Decatur	1000	
WSOY	1310	
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WMT Daven	600
WOC	1370
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Dubuq KDTH	1340
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KBIZ Shenan KFNF KMA Sloux KSCJ KTBI KAN Atchiso KVAK Coffoyvi GGGF Dodge GGNO Empori CTSW	1210 doah 890 930 City 1330 1420 8A8 1420 Nilo 1010 City 1340 1370
KBIZ Shenan KFNF KMA Sloux KSCJ KTBI KAN Atchiso KVAK Coffeyvi CGGF Dodge GNO Empori CTSW Garden	1210 doah 890 930 City 1330 1420 8A3 1420 843 1420 1420 1420 1340 1370 City
KB12 Shenan KFNF KMA Sloux KSPJ KTBI KAN Atchiso Coffeyvi	1210 1200 800 930 City 1330 1420 SAS 1420 SAS 1420 1420 City 1340 1370 City 1370 City 1370
KBIZ Shenan KFNF KMA Sloux KSCJ KTBI KAN Atchiso KVAK Coffoyvi GGGF Dodge GNO Empori KTSW Garden LIUL Great I CYGB	1210 doah 890 930 City 1330 1420 SAS 1420 SAS 1420 I010 City 1340 1370 City 1210 Bend 1370
KBIZ Shenan KFNF KMA Sloux KSNJ KTBI KAN Atchiso VAK Coffeyvi GGF Dodge GRO Emporis CTSW Garden LIUL Great I VGB	1210 1210 120 890 930 City 1330 1420 8A8 1420 14300 140
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KBIZ Shonan KFNF KMA Sloux KSCJ KTBI KAN Atchiso KVAK Coffeyvi COGF Dodge GNO Emport CGNO Emport CTSW Garden LIUL Great I CYGB Hutchin WBG Kansas CCKN	1210 doah 890 930 City 1330 1420 8A8 n 1420 8A8 n 1420 1420 City 1340 1370 City 1210 Bend 1370 City 1310 City 1310 City 1340
KBIZ Shenam KFNF KMA Sloux KSCJ KTBI KAN Atchiso KVAK Coffoyvi GGGF Dodge GNO Empori CTSW Great I CYGB Hutchin CYGB Hutchin CYGB Hutchin CWBG Kansas	1210 1210 120 120 120 130 1420 1420 1420 1420 1420 1370 City 1370 City 1370 City 1370 City 1370 City 1370
KBIZ Shenan KFNF KMA Sloux KSCJ KTBI KAN Atchiso KAN Coffoyvi GGF Dodge GNO Empori CTSW Garden Hutchin WBG Kansas CCKN Lawrenc CCKU	1210 idoah 890 930 City 1330 1420 SAS 1420 SAS 1420 SAS 1420 City 1340 1370 City 1210 Bend 1370 City 1210 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1310 1420 City 1210 City 1210 City 1210 City 1210 City 1210 City 1210 City 1210 City 1210 City 1210 City 1210 City 1210 City 1210 City 1210 City 1210 City 1220
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KBIZ Shenan KFNF KMA Sloux KSCN KKTBI KAN Atchiso KKTBI KAN Atchiso KAN Coffeyvi GGF Dodge Garden LUL Great I CVGB Kansas CKN Lawrenc CKU Manhatti SAC	1210 idoah 800 930 City 1330 1420 SAS n 1420 SAS n 1420 SAS n 1420 City 1340 City 1370 City 1370 City 1370 City 1370 Send 1370 City 1310 Send 1370 City 1310 Send 1370
KBIZ Shenan KFNF KMA Sloux KSCJ KTBI KASJ KAN Atchiso KVAK Coffoyvi GGGF Dodge CGNO Empori CTSW Garden LIUL Great I CVGB Hutchin CWBG Kansas CKN Lawrenc CKU Manhatt SAC	1210 doah 890 930 City 1330 1420 SAS 1420 SAS 1420 City 1340 1370 City 1370 City 1370 City 1370 City 1370 San 1420 San San San San San San San San
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KBIZ Shenan KFNF KMA Sloux KSCJ KTBI KASI KASI KASI KASI KOGF Dodge GNO Empori KIVL Garden LIUL Great CVGB Hutchin CWGG Kansas CKN Lawrenc CKU ZEU MEN Manhati SAL Topeka IBW Wichita ANS	1210 doah 890 930 City 1330 1420 SAS 1420 SAS 1420 City 1340 1370 City 1310 Bend 1370 City 1310 Bend 1420 City 1310 Son 1420 SAS 1420 City 1340 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS 1420 SAS SAS 1420 SAS SAS 1420 SAS SAS SAS SAS SAS SAS SAS SA
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MAIN	E
Augusta WRDO	1370
Bangor WABI	1200
WLBZ Lewiston	620
WCOU Portland	1210
WCSH WGAN	940 560
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WCAO WCBM	600
WFBR WFBR	1370 1270 1270
Cumberian	id 1
WTBO Frederick	800
WFMD Hagerstow	
WJEJ Salisbury	1210
WBOC	1500

SEI	10
A	1.7
Boston	1.000
WAAB	141
WBZ	99
WCOP	112
WEEDI	59
WHDH	83
WMEX	1470
WNAC	123
WORL	
WORL	92
Fall RI	VOL
WSAB	145
Greenfiel	d
WHAI	1210
Holyoke	
Holyoke WHYN	1370
Hyannis	10.0
WOCB	1310
Lawreno	
WLAW	680
WLLH	1370
Lowell	13.7
WLLH	1370
	dford
WNLH	1310
Pittsfield	
WBRK	1310
Salam	
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	Cotumbus	
1	WCBI	11
	Greenville	-
10	WJPB	11
	Greenwood	
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	Gulfport	
1	WGCM	12
1	Hattiesburg	
	WFOR	18
	Jackson WJDX	10
f	WJDX	12
1	WSLI	14
	Laurel	1
	WAML	13
	WSKB	10
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	Meridian	-
	WCOC	8
	Vicksburg	1.0
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STATIONS AN B 0 NOR'

Part Part of	NC
Columbia	1
FRU	630
Jefferson WOS	City 1310
Joplin	1010
VMBH	1420
Kansas (CMO	1450
TTE	1530
IMBC	950
VDAF	610 860
VHB Poplar	Bluff
WOC	1310
St. Jose	ph 680
St. Loui	
MOX	1090
KBD	550 1350
KWK KXOK	1250
WEW	760
WIL	1200
Sedalla KDRO	1500
Springfie	id
KGBX	1230
KWTO	560
MONT	ANA
Billings	
KGHL	780
Bozeman KRBM	1420
Butte	
KGIR	1340
IT THE D	alls 1280
Helena	
KPFA	1210
Kallspel	1310
Miles	City 1310
KRJF Missouli	-
KGVO	1260
Wolf F	Point 1450
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NEBRA	SKA
Fremon	t 1370
Grand	island
KMMJ	740
Hasting KHAS	1200
Kearne	
KOFW	1210
Lincoln KFAB	770
KFOR	1210
Nortoll	1060
WJAG North	Piatte
KONF	1430
Omaha	1200
KOWH	660
wow	590
Scottsb RGKY	1500
NEV	AUA /egas
Las V	1370
KFUN	1420
KOH	630
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	ERICAN
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Laconia	1310
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Portsmou VHEB	740
	RSEY
	Park 1280
Atlantic	City
WBAB	1200 1420
Bridgeton	1210
Camden WCAM	1280
Jersey (City
WAAT WHOM	940 1450
Newark WHBI	1250
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WPAT	900 Ink
WBRB Trenton	1210
WTNJ	1230
Zarepha WAWZ	1350
	EXICO
Albuque KGGM	rque 1/230
KOB Carisbad	1180
KLAH	1210
Clovis KICA	1370
Gallup KAWM	1500
Hobbs KWEW	1500
Roswell	
	1270 Fe
KVSF	1310
NEW Albany	YORK
WABY	1370
WOKO Auburn	
WMBO Bingha	1210 mton
WNBF Brookly	1500
WARD	1400
WBBC WBBR	1400 1800
WCNW WVFW	1500 1400
Buffalo	
WBNY	1370
WEBR WGR	1310 550
WKBW WSVS	1480 1870
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	G	reens	boro
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BY LOC	ATIONS
Greenville WGTC	1500
Hickory WHKY High Po WMFR	1370 Int
WMFR Kinston	
WFTC	1200
Raisigh WPTF	680
WRAL	1210
Roanoke Rapids	
WCBT Rocky N	1200
WEED	1420
Salisbury WSTP	1500
Wiiming	ton 1370
WMFD Wlison	
Winston	1310 -Salem
WAIR	1250
WSJS	1310
NORT	н
DAKO	TA
Bismarci	
Devils	550 Lake
KDLR	1210
Fargo WDAY	940
Grand	Forks 1410
Jamesto	wn 1370
KRMC Mandan	
KGCU Minot	1240
KLPM	1360
Valley KOVC	1500
OHI	
Akron WAKR	1530
WIW	1210
Ashtabu WICA	la 940
Canton	1200
WHBC Cincinn	atl
WCKY WCPO	1490 1200
WKRC	550
WLW	700 1380
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Clevela WCLE	610
WGAR WHK	1450 1390
WTAM	1070
Columb WBNS	1430
WCOL	1200
WHKC WOSU	640 570
Dayton WHIO	1260
WING	1380
Lima WLOK	1210
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Mansfield	
	1370
Marion	
WMRN Portsmouth	1500
WPAY WPAY	1370
Sringfield	1010
WIZE	1310
Steubenville	ALA
WSTV Tallmadge	1310
WADC	1320
Toledo	
WSPD	1340 1200
Youngstown	
WFMJ	1420
WKBN	570
Zanesville	
WHIZ	1210
OKLAHO	A
Ada	
RADA	1200
Ardmore KVSO	1210
Elk City	1210
KASA	1210
Enid	
KCRC	1860
Muskogee KBIX	1500
Norman	1000
WNAD	1010
Oklahoma	City
ROCY	1319
KOMA	1480 1370
KTOK WKY	900
Okmulgee	000
KHBG	1210
Ponea Cl	1200
WBBZ Shawnee	1200
KGFF	1420
Tulsa	
KOME	1210
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WLEU	1420
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Greent	970
WHJB	620
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WSAJ	1310
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WHP	1430
WKBO	1200
WAZL	
Johnsto	1420
WJAC	1370
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WGAL	1500
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KYW	1020
WCAU	1170
WDAS	1370
WFIL	560
WIP	1310
WPEN	610 920
WTEL	1310
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KQV	1380
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WTMA Columbia	1210
WCOS	1270
WIS	500
Florence	
WOLS	1200
Greenville WFBC	
WMRC	1300
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WORD .	1370
WSPA	920
Sumter WFIG	1010
WEIG	1310
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UNNOTA	
Aberdeen	1.1.5
KABR	1300
Brookings KFDY	790
Plerre	780
KOFX	630
Rapid City	
KOBH	1370
WCAT Sloux Fall	1200
KELO	1200
K800	1110.
Vermillion	
KUSD Watertown	890
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Yankton	1210
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KPRC	920
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WOAT	119
Sherma	
KRRV	88
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KXOX	191
Temple	
RTEM	137
Texarka	
KCMC	142
Vernon KVWC	180
Viotor	150
KVIC	181
Waco	101
WACO	142
Waslaco	
KRGV	1260
Wichita KWFT	Falls
TAMPT.	62(
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UTA	н
Cedar (
KSUB	lty
Logan	1310
RVNU	1200
Ogden	4200
KLO	1400
Price	
KEUB	1420
ROVO	
	1210
Salt Lak RDYL	
KSL	1290 1130
KUTA	1500
	2000
VERMO	NT
Burlingto	
WCAX	1200
Rutland WSYB	1500
St. Albar	1500
WQDM	
Springfield	
	1390
WNBX	1260
WNBX Waterbury	1260
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WNBX Waterbury WDEV VIRGINI Charlottes WCHV Danville WBTM Frederloke	1260 550 A ///// 1420 1870 burg
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Green Bay	1420
PATW	1330
Janesville WCLO	1200
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Marinette WMAM	570
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Chatham CKCO	630
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COSTA RI	UA	CMCM	850
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TISCY	575	CMCQ	1410
San Jose	010	CMCU	1110
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Guatasitanango XEA 1240 XENT 1310 XENT 1310 Maxedaltenango XEDH 1310 XENT 1310 XENT 1</td><td>Clambohe Clambohe XEX 1170 XEOA 1240 XEFW BIO 0000 CHIHUAHUA DURANGO <t< td=""></t<></td></br<></br></br></br></br></br></br></br></br></br></br></br></br></br></br></br></td>	Cludad TrujilioCampecheRIG900KEA1400HIX900CHIHUAHUAHIX900ChihuahuaHIT1050ChihuahuaHIZ1870XEBW1340HIZ1870XEBW1340HIZ1870XEBW1340HIZ1870XEFU1440HIZ1870XEFV1200HISQ1470XEFV1200KEW1380XEFV1200San SalvadorXEFV1210KW1520XEBX640GUATEMALAXEAT1310GuatemalaCitySabinasKW1520XEITB1240GQ1450XETB1240HONDURASXETB1310TogucigatpaXEBX1400KEM1240XETB1340HONDURASXETB1320TogucigatpaYellaAcunaMEXICODISTRITOFEDERALMexicoCityKEB1220XEBSKEB1220XEBSKEB1220XEBSKEB1220XEBSKEB1220XEBSKEB1220KEB1220KEB1220KEW150KEW1200KEB1220KEB1220KEB1220KEB1220KEB1220KEB1220KEB1220<	CampecheXEXXCampecheXEXXCampecheXEXXCampecheXEXXXEA1400CIUdad TrujilioCALIFORNIAKEXXEA1400CIUdad TrujilioCIUdad TrujilioKEA1400CHIHUAHUADURACIURANot colspan="2">Not colspan="2">Not colspan="2">OURACIURANot colspan="2">Not colspan="2"Not	Campeche XEX 1170 Campeche XEA 1400 DURANGO EIN 1090 CHIHUAHUA DURANGO EIN 1090 CHIHUAHUA XEBP 1150 EIN 1000 CHIHUAHUA XEBP 1150 EIN 1000 XEBW 1340 XEBP 1160 EIN 1470 XEBW 1340 XEBP 1160 EIN 1470 XEFF 1480 XEBO 1160 XEBP 1160 EIN San Saivador XEFF 1480 XEFM 1160 XEFM 1160 GUATEMALA XEA 1400 XEFN 1160 XEWE 720 Guatemais City XEAS 1160 XEWE 720 Guatemais City XEAS 1160 XEWE 720 Guatemais City XED 1100 XEWE 720 Guatemais City XETR 1310 XEWE	Cluded Cluded HIGCampeche SEALEA1400DURANGO OURANGOXEOABIN HIX1090CHIHUAHUA ChinushusDURANGO DURANGODURANGO DURANGOXEOABIX HIZ1050Chinushus XEERU1240XEER1150PUE PueblaBIR EL SALVADORXEERU XEER1240XEERU XEERU1240XEERU XEER1160San San San San SalvadorXEEFV XEEF1460XEERU XEERU1240BUATEMALA GU GU GI GI GI I I I GI GI I I I I I I GI GI I I I I I I 	Clauded Trulitio BTG Campache 900 XEA 1400 XEAX 1170 XEOA 1240 BTN 1090 CHIMUAHUA Durango Durango Durango XEXH 1150 BTT 1090 CHIMUAHUA Durango Durango XEXH 1150 BTT 1090 Chimuahua XEBY 1210 Puebla BTT 1090 XEBU 1240 XEBY 1310 BTT 1090 XEFF 1460 XEFF 1310 XEFT 1210 San Salvador XEF 1210 XEFT 1240 SINALOA XECT 1310 GUATEMALA XEA 1490 XEFT 1240 SINALOA SINALOA GU atzaitanango XEA 1490 XENT 1200 XENT 1200 Guatasitanango XEA 1240 XENT 1310 XENT 1310 Maxedaltenango XEDH 1310 XENT 1310 XENT 1	Clambohe Clambohe XEX 1170 XEOA 1240 XEFW BIO 0000 CHIHUAHUA DURANGO DURANGO <t< td=""></t<>

1530 kcs. (196 m.) CMCJ CMCR KITE WBRY WAKR 200 200 1000 Havana, Cuba Kansas City, Mo. Waterbury, Conn. Akron, Ohio a CMX BP 8 1000 aź 1550 kcs. (193.4 m.) KPMC WQXR 1000 Bakersfield, Calif. New York, N. Y. MX * 8 . 1580 kcs. (189.8 m.) CMRT 200 z Guines, Cuba 1600 kcs. (187.4 m.) CMBH 5000 . . . Havana, Cuba 1.01 Page Eighty-eight

Pete Houck, Eng. S. E. Warner, Ch. Eng.

L. A. Schamblin, Mgr. Russell Valentine, Ch. Eng.

Raul Torres Pardal

Alberto Alvarez Ferrera

NORTH AMERICAN B. C. STATIONS BY CALL LETTERS

For power and network affilia- tions, see the list of stations by frequencies. The space under the call letters may be used for logging or checking.										
CBA 105	O CHGB	1200	скск	1010	CMBD	1290	смбы	760	CMKC	1250
CBF 91	O CHGS	1450	CKCL	580	CMBF	1290	CMHA	1090	CMKD	910
CBJ 112	20 CHLN	1420	СКСО	1010	CMBG	1180	СМНВ	1240	CMKE	1310
CBK 5	40 CHLP	1120	CKCR	1510	СМВН	1600	CMHD	1270	CMKF	1460
CBL 8	40 CHLT	1210	CKCV	1310	CMBL	720	CMHI	830	CMKG	1000
CBM 9	60 CHML	1010	сксч	1370	CMBQ	1150	СМНЈ	1160	СМКН	1110
CBO 8	80 CHNB	1420	CKGB	1440	CMBS	1250	CMHK	1210	CMKJ	760
CBR 11	00 CHNC	610	CKIC	1010	СМВХ	1180	СМНМ	1450	CMKL	950
CBV 9	50 CHNS	930	CKLN	1420	CMBY	1410	CMHN	760	СМКМ	1080
CBY 14	20 CHRC	580	CKLW	1030	ÇMBZ	1010	СМНО	1020	CMKN	640
CFAC 9	30 CHSJ	1120	СКМС	1210	CMC	1350	СМНР	1100	СМКО	1280
CFAR 13	70 CHW	K 780	СКМО	1410	CMCA	1350	CMHQ	1320	CMKQ	1490
CFCF (500 CJAT	910	CKNB	1210	СМВС	1250	CMHT	920	CMKR	1400
CFCH S	30 CJBR	1030	CKNX	1200	CMCD	630	CMHW	950	CMKS	860
CFCN 10	ADLD DEC	730	СКОС	1120	CMCF	810	СМНХ	1480	CMKU	730
CFCO	STO CJCB	1240	CKOV	630	CMCG	1080	CMJA	860	CMKV	570
CFCT 14	450 CJCJ	690	CKPC	930	CMCJ	1550	CWJC	1390	CMKW	1050
CFCY	630 CJCS	1210	CKPR	580	CMCH	1050	CMJE	1230	СМКХ	1190
CFGP 1	310 CJGX	(1430	CKRN	1370	CMCK	970	CMJF	930	CMKY	1140
CFJC	880 CJH	c 1290	CKSO	780	CMCL	730	СМЈН	1360	CMKZ	1430
CFLC	930 CJIC	1500	СКТВ	1200	CMCM	850	CMJI	1130	CMOA	1210
CFNB	550 CJK	L 560	CKUA	580	CMCO	1210	СМЈК	1020	CMOX	1510
CFOS 1	370 CJLS	1310	CKVD	1200	CMCQ	1410	CMJL	1330	CMQ	690
CFPL	730 CJO	C 1370	CKWX	950	CMCR	1550	MEMD	870	CMRT	1580
CFPR	580 CJO	R 600	СКХ	1120	CMCU	1110	CMJN	610	CMW	550
CFQC	600 CJR	C 630	CKY	910	CMCW	1510	OLWD	1260	CMX	880
CFRB	690 CJR	M 950	CMAB	1240	CMCX	1050	CMJP	1420	CMZ	920
CFRC	1510 CKA	C 73	CMAC	1030	CMCY	590	WIWD 0	1070	FQN	609
CFRN	960 CKE	81 121	CMAN	540	CMGE	137	XTWD 0	900	HIG	900
CHAB	1200 CK	CA 142	O CMAR	140	O CMGF	112	0 СМК	750	HIN	1090
· · · · · · · · · · · · · · · · · · ·	1310 CK	CH 121	O CMBC	78	CMGH	119	CMKB	1350	HIT	1050

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ніх	80					1 - 3		1 and	in the second	1000	
HIZ				O KFJM	141	0 KGDE	120	KHJ	900	KMLB	1200
-	137	_		AVE.	121	KGDM	110	KHQ	590	KMMJ	740
HISQ	147	0	134	O KONT	142	0 KGEK	120	KHSL	1260	KMO	1330
HOK	64	1	129	1	124	0 KGER	136	KHUB	1310	KMOX	1090
HRN	145		78	0 KFKA	88	0 KGZE	1310	KICA	1370	KMPC	710
KABC	142	0.	144	0 KFKU	122	0 KGFF	1420	KID	1320	KMTR	570
KABR	139		137	KFNF	89	0 KGFJ	1200	KIDO	1350	KMYC	1420
KADA	120	KELO	120	KFOR	121	KGFL	1370	KIDW	1420	KMYR	1310
KALB	1210	KENO	137	KFOX	125	KGFW	1310	KIEM	1450	KNEL	1500
KALE	1300	KERN	1380	KFPL	131	KGFX	630	KIEV	850	KNOW	1500
KANS	1210	KEUB	142	KFPW	1370	KGGF	1010	KINY	1450	KNX	1050
KARK	890	KEVR	1370	KFPY	890	KGGM	1230		710	KOA	830
KARM	1310	KEX	1160	KFQD	780	KGHF	1320	KIT	1250	KOAC	the state of the s
KASA	1210	KEYS	1500	KFRC	610	KGHI	1200	KITE	1530		550
KAST	1200	KFAB	770	KFRO	1340		780	KIUL	1210	KOAM	790
KATE	1420	KFAC	1300	KFRU	630		1340	KIUN		ков	1180
KAWM	1500	KFAM	1420	KFSD	600	THE REAL	1420	KIUP	1370	KOBH	1370
KBIX	1500	KFAR	610	124.54	1120		1370		1370	KOCA	1210
KBIZ	1210	KFBB	1280	KFUN	1420		LI TA	KJBS	1070	KOCY	1310
KBKR	1500	KFBC	1420	KFUO	830		570	KJR	970	КОН	630
KBND	1310	KFBI	1050	KFVD	1	KGKY	1500	KLAH	1210	KOIL	1260
KBPS	1420	KFBK	1490	1.2.6	1000	KGLO	1210	KLBM	1420	KOIN	940
KBST	1500	KFDA	1200	KFVS	1370	KGLU	1420	KLCN	1290	KOKO	1370
KBTM	1200	KFDM	100 100	KFWB	950	KGMB	1320	KLO	1400	KOL	1270
KBWD	1350	KFDY	560	KFXD	1200	KGNC	1410	KLPM	1360	KOMA	1480
KCKN	1310	a and	780	KFXJ	1200	KGNF	1430	KLRA	1590	KOME	1310
KCMC	1.17	KFEL	920	KFXM	1210	KGNO	1340	KLS	1280	KOMO	920
	1420	KFEQ	680	KFYO	1310	KGO	790	KLUF	1870	KONB	1500
КСМО	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	KHBC	1200	KMED	1410	KOVC	1500
KDKA	980	KFJI	1210	KGCX	1450	KHBG	1210	KMJ	580	KOVO	1210
The state				-	The last	100	april 1	200	4.7.1.	ast P	

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KOWH	660	KROC	1810	KTSM	1350	KWEW	1500	TGI	1310	WADC	1520
KOY	550	KROD	1500	KTSW	1570	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	кујв	1210	TIFA	1000	WAGM	1420
KPFA	1210	KRSC	1120	KUIN	1310	KMJJ	1040	TIGH	690	WAIM	1200
KPFT	1210	KSAC	580	KUJ	1370	KWK	1350	TIGPH	605	WAIR	1250
КРНО	1200	KSAL	1120	KUOA	1260	KWKH	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	KWOC	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	KSO	1430	KVGB	1370		560	TIRCC	1200	WARD	1400
KQV	1380	KSOO	1110	KVI	570	1 1	1370	TIRS	920	WARM	1370
KQW	1010	KSRO	1310	1. Carlos 1. Car	1310		760	TIXD	800	WASH	1270
KRBC	1420	KSTP	1460		1200		1420		725	WATL	1210
KRBM	1,420	KSUB	1310		1260		1500		575	WATN	1210
KRE	1370	KSUN	1200	1 A.	630		1250		685	WATW	1370
KRGV	1260		620		1500		1210	1	1040	WAVE	940
KRIC	1420		1450		1310		1310		640 840	WAWZ	1350
KRIS	1330		1370		114		1440		1065	WAYX	1200
KRJF	1310		1240		127		1230		950		1420
KRKD	1120		106		120	KYAN	1500			WBAA	890
KRKO	1370		89		137	1	1040	1		WBAB	1200
KRLC	1390	- and -	150	PI	131		1500		920	1	760
KRLD	1040	1 Links	37	1 2 2 2		O KYUM	1210		940		1060
KRLH	1370	1 million	74	11-1-1	and the	O KYW		WABC	860	WBAP	800
KRMD	1310		129	1111 2.20	1	0 TGQ		WABI	1200	WBAX	1210
KRNR	1500		142	1.1.1	1. 12	0 TGW		WABY	1370	WBBC	1400
KRNT	1320		81.23	O KWBG		O TGX		WACO		WBBL	1210
RANT	1520		1.50	1		1	1	1			

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HIX	800	KDON	101				and a			2114	
1990 B		1.2.1	1210	KEIM	141	0 KGDE	1200	KHJ	900	KMLB	1200
HIZ	1370		150		1210	KGDM	1100	KHQ	590	KMMJ	740
1.1	1470	1	1340	KONT	1420	KGEK	1200	KHSL	1260	KMO	1330
HOK	640	1	1290		124	KGER	1360	KHUB	1310	KMOX	1090
HRN	1450		780	KFKA	88	KGZE	1310	KICA	1370	KMPC	710
KABC	1420	KELA	1440	KFKU	122	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	
KARK	890	KEVR	1370	KFPY	890	KA DOLL	1230	KIRO			1050
KARM	1310	KEX	1160		780		-	1.00	710	KOA	830
KASA	1210	KEYS	1500	2.12.13		-	1320	KIT	1250	KOAC	550
KAST	1200			1.51 10	610		1200	KITE	1530	KOAM	790
		KFAB	770		1340	KGHL	780	KIUL	1210	KOB	1180
KATE	1420	KFAC	1300	KFRU	630	KGIR	1340	KIUN	1370	KOBH	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	1280	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	1420	KFBK	1490	KFVS	1370	KGLU	1420	KLCN	1290	KOKO	1370
KBST	1500	KFDA	1200	KFWB	950	KGMB	1320	KLO	1400	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	KOMO	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	KGYO	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	2.00	KORN	1370
KDB	1500	KFIX	1420	KGBX	1230	KHAS	1200	KMBC	The mail	KOTN	1500
KDFN	1440	KFJB	1200	KGCU	1240	KHBC	1200	KMED	24121	KOVC	1500
KDKA	980	KFJI	A CONTRACTOR	KGCX	1450		-161.9 h	KMJ	State 1	KOVO	1210
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KOWH	660	KROC	1810	ктям	1350	KWEW	1500	TGI	1310	WADC	1320
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	<u>KMJ</u>	1040	TIGH	690	WAIM	1200
KPFT	1210	KSAC	580	KUJ	1370	KWK	1350	TIGPH	605	WAIR	1250
КРНО	1200	KSAL	1120	KUOA	1260	KWKH	1100	TIGPH2	1225	WAJR	1200
KPLC	1500	KSAN	1420	KUSD	890	KWLC	1270	тіно	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	KYCY	1200	KWOC	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	KSO	1430	KVGB	1370	KWTO	560	TIRCC	1200	WARD	1400
KQV	1380	KSOO	1110	KVI	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	KYOA	1260	KXO	1500	TISCY	575	WATN	1210
KRE	1370	KSUN	1200	KYOD	630	KXOK	1250	VAS	685	WATR	1290
KRGV	1260	KTAR	620	KVOE	1500	KXOX	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	KTHS	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	137	KYOS	1040	WAAB	1410	WBAB	1200
KRLD	1040	KTOH	1500	KVSF	131	KYSM	1500	WAAF	920	WBAL	760
KRLH	1420	KTOK	37	KVSO	121	O KYUM	1210	WAAT	940	WBAL	1060
KRMC	1370	KTRB	74	KYWC	150	O KYW	1020	WABC	860	WBAP	800
KRMD	1310	KTRH	129	KWAL	142	O TGQ	145	WABI	1200	WBAX	1210
KRNR	1500	KTRI	142	KWAT	121	0 TGW	152	WABY	1370	WBBC	1400
KRNT	1320	KTSA	55	KWBG	142	TGX	40	WACO	1420	WBBL	1210

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WBBM	770	WCAT	1200	WDAF	610	WENN	1000		1.5		
WBBR	1300		1111	1.1	610		1200	WGAL	1500	WHAZ	1300
1000		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	1379	WEST	1200	WGAU	1310	WHBC	1200
WBEN	900	WCBA	1440	WDAY	940	WESX	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				
WBOC	1500	WCHV	1420	WDOD	1280	1000		WGKV	1500	WHDL	1420
WBOW	1200			-		WFBM	1230	WGL	1370	WHEB	740
		WCKY	1490	WDRC	1330	WFBR	1270	WGN	720	WHEC	1430
WBRB	1210	WCLE	610	WDSM	1200	WFCI	1390	WGNC	1420	WHFC	1420
WBRC	930	WCLO	1200	WDSU	1250	WFDF	1310	WGNY	1220	WHIO	1260
WBRE	1310	WCLS	1310	WDWS	1370	WFEA	1340	WGOV	1420	WHIP	1480
WBRK	1310	WCMI	1,310	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	ЖНКС	640
WBTM	1370	WCOL	1200	WEBQ	1210	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		WGY		WHLS	1370
WCAE	1220	wcov	1210	WEEI	590	WFPG	101	WHA		WHMA	1420
WCAL	760	WCPO	10	WEEU	830	WFTC	and the second	WHAL	1 - A -	WHN	1010
WCAM	1280	WCRW	1210	WELI	930	WFTL	A DECEMBER	WHAI	the way is	WHO	
WCAO	600	WCSC	1360	WELL	1420	10	Same	- Heald and	12 1 3		1000
ALC: NO		towner	- internet	S. Lefter		WFTM	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WHAM		WHOM	1450
WCAP	1280	WCSH	940	WEMP	1310	WFVA	1 Carlos In	WHAS	All and	WHOP	1200
WCAR	1100	WDAE	1220	WENR	870	WGAC	1210	WHAT	1310	WHP	1430

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			LU DA LU							
WHUB	1370	WJBY 121	WKIP	1420	WMAM	570	WMWH	1420	wov	1100
WHYN	1370	WJBW 120	WKNY	1500	WMAN	1370	WMVA	1420	WOW	590
WIBA	1280	WJDX 127	DAWW C	670	WMAZ	1180	WNAB	1420	wowo	1160
WIBC	1050	WJEJ 121	WMAS	420	WMBC	1420	WNAC	1230	WPAB	1340
WIBG	970	WJHL 120	WKOK	1210	WMBD	1440	WNAD	1010	WPAD	1420
WIBM	1370	WJHO 137	WKPA	1120	WMBG	350	WNAX	570	WPAR	1420
WIBU	1210	WJHP 129	WKPT	• 1370	WMBH	1420	WNBC	1380	WPAT	900
WIBW	580	WJIM 121	WKRC	550	WMBI	1080	WNBF	1500	WPAX	1210
WIBX	1200	WJJD 113	WKST	1250	WMBO	1310	WNBH	1310	WPAY	1370
WICA	940	WJLS 121	O WKY	900	WMBR	1370	WNBX	1260	WPEN	920
WICC	600	WJMC 121	WKZO	-590	WMBS	1420	WNBZ	1290	WPIC	780
WILT	1200	WJMS 142	O WLAC	1470	WMC	780	WNEL	1290	WPID	1210
WILL	580	WJNO 120	0 WLAK	1310	WMCA	570	WNEW	1250	WPRA	780
WILM	1420	WJOB 120	0 WLAP	1420	WMEX	1470	WNLC	1500	WPRO	630
WIND	560	WJPF 131	0 WLAY	1310	WMFD	1370	WNOE	1420	WPRP	1420
WING	1380	WJPR 131	0 WLAW	680	WMFF	1310	WNOX	1010	WPTF	680
WINN	1210	WJR 7	WLB	760	WMFG	1210	WNYC	810	WQAM	560
WINS	1180	WJRD 120	WLBC	1310	WMFJ	1420	WOAT	1190	WQAN	880
WINX	1310	WJSV 14	WLBJ	1310	WMFR	1200	woc	3370	WQBC	1360
WIOD	610	WJTN 12	0 WLBL	900	WMGA	1370	WOCB	1210	WQDM	1390
WIP	610	WJW 12	O WLBZ	620	WMIN	1370	WOI	640	WQXR	1550
WIRE	1400	WJZ 7	SO WLEU	1420	MLWM	1500	WOKO	1430	WRAK	1370
WIS	560	WKAQ 12	TO WLLH	1370	WMMN	890	WOL	1230	WRAL	1210
WISE	1370	WKAR 8	TO WLNH	1310	WMOB	1200	WOLF	1500	WRAW	1310
WISN	1120	WKAT 15	00 WLOF	1200	WMOG	1500	WOLS	1200	WRBL	1200
WIZE	1310	WKBB 15	00 WLOG	1200	WMPC	1200	WOMI	1500	WRC	950
WJAC	1370	WKBH 13	BO WLOK	1210	WMPS	1430	WOMT	1210	WRDO	1370
WJAG	1060	WKBN 5	70 WLOL	1300	WMRC	1500	WOPI	1500	WRDW	1500
WJAR	890	WKBO 12	00 WLPM	1420	WMRN	1500	WOR	710	WREC	600
, WJAS	1290	WKBV 15	00 WLS	870	WMRO	1250	WORC	1280	WREN	1220
WJAX	900	WKBW 14	80 WLTH	1400	WMSD	1420	WORD	1370	WRGA	1500
WJBC	1200	WKBZ 15	00 WLVA	1200	WMSL	1370	WORK	1320	WRJN	1370
WJBK	1500	WKEU 15	00 WLW	700	WMT	600	WORL	920	WRNL	880
WJBO	1120	WKGA 9	40 WMA	L 63	WMUR	610	wosu	570	WROK	1410
Charles .	1. A. C.			-			1		in the second	

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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	WSYB	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	WTAM	1070	WXYZ	1240	XEBX	640	XEH	740	XERA	840
WSBT	1360	QATW	1330	WSXO	700	XEBZ	810	XEHK	1230	XERB	1090
WSFA	1410	WTAR	780	XEA	1400	XEC	1150	XEHR	1230	XERC	830
WSGN	1310	WAW	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	WTCN	1250	XEAG	1310	XECZ	1370	XEK	1000	XET	690
WSLI	1420	WTEL	1310	XEAI	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	LWTW	620	XEAT	1210	XEDL	1240	XEL.Y	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. 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 M o d u l a t ed 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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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.

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QUIET RADIO ATTACHMENT

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Adapter with Acme DeLuxe Headphones-

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Many Radio Technicians Make \$30, \$40, \$50 a Week

Radio broadcasting stations employ technicians as operators, maintenance men, etc. Radio manufacturers employ testers, inspectors, servicemen in good pay jobs with opportunities for advancement. Radio jobbers and dealers employ installation and servicemen. Many Radio Technicians open their own Radio sales and repair businessses and make \$30, \$40, \$50 a week. Others hold their regular job and make \$5 to \$10 a week fixing Radios in spare time. Automobile, police, aviation, commercial Radio; loudspeaker systems, electronic devices, are newer fields offering good opportunities to qualified men. Television promises many good jobs soon.

Many Make \$5 to \$10 a Week Extra

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