



## PUBLISHED BY

THE INTERNATIONAL RADIO CLUB OF AMERICA
WHOLE NO. 430 DECEMBER 18,1976

# DX CALENDAR DX CALENDAR DX CALENDAR

			T1 T1 T			
NNRC	Mon.	12-27-76	0230-0300	WNNO- 990	Wisc. Dells, WI	12kw
NRC			0300-0330	коко-1450	Warrensburg, MO	1kw
NNRC	Mon.	1- 3-77	0130-0230	WTS0-1070	Madison, WI	5kw
IRCA			0330-0400	KOQT-1550	Bellingham, WA	1kw
NRC	Mon.	1-10-77	0100-0400	WBRE-1340	Wilkes-Barre, PA	1/1/4
NNRC			0230-0330	WGLB-1560	Port Wash., WI	4kw
NNRC	Mon.	1-17-77	0230-0330	WEMP-1250	Milwaukee, WI	5kw
NNRC			0400-0500	WLCX-1490	LaCrosse, WI	1/1/4
IRCA	Mon.	1-31-77	0330-0400	KAJO-1270	Grants Pass, OR	5kw
NNRC	Mon.	2-21-77	0200-0300	WDUZ-1400	Green Bay, WI	1/4
NNRC	Mon.	3- 7-77	0130-0230	WHBL-1330	Sheboygan, WI	5/1
IRCA	Mon.	3-14-77	0630-0655	WOI - 640	Ames, IA	5kw
NNRC	Mon.	3-21-77	0200-0300	WIGM-1490	Medford, WI	1/14

WNNO-990 (500w-D), no details available. Reports to John Taylor, Gen. Mgr., Radio WNNO, P.O. Box 990, Wisconsin Dells, WI 53965. Arranged by George Davis III.

KOKO-1450 (1kw-D, 250w-N) will have C&W music, tones, code and voice IDs. Prepaid calls OK to 816-747-9191. Tapes

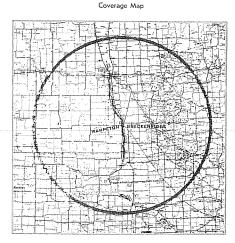
KOKO-1450 (1kw-D, 250w-N) will have C&W music, tones, code and voice IDs. Prepaid calls OK to 816-747-9191. Tapes will be appreciated. Will run lkw. Reports to Bruce Reynolds, Radio KOKO, P.O. Box 398, Warrensburg, MO 64093. Arranged by Bruce Reynolds. WTSO-1070 (10kw-D, 5kw-N) will have regular programming

WTSO-1070 (10kw-D, 5kw-N) will have regular programming with special IDs. Reports to Sherman Stern, CE, Radio WTSO, 5721 Tokay Blvd., Madison, WI 53701. Arranged by George Davis III.

KOQT-1550 (lkw-D) will have gospel music with IDs at approximately 3 minute intervals. Prepared post cards will be preferred if possible. Reports to Ron Cowell, CE, Radio KOQT, P.O. Box 1550, Bellingham, WA 98225. Arranged by Nick Hall-Patch.

WBRE-1340 (lkw-D, 250w-N), no details available. Address is 62 S. Franklin St., Wilkes-Barre, PA 18703. WGLB-1560 (250w-D), no details available. Reports to Richard Bluedorn, CE, Radio WGLB, P.O. Box 347, Port Washington, WI 53074. Arranged by George Davis III.





Gateway Market to the RICH Red River Valley

# 

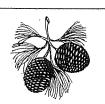
WJAR-920 had a DX Test on 12-19-76 from 0000 to 0200 or 0300 ELT, with 5kw. If anyone heard this, their address is 176 Weybosset St., Providence, RI 02903. (Kraig Stevens)

As per Bruce McFadden, KOIL-1290 is back on the air as of 12-16-76. A non-profit organization will run the station until the FCC can decide who among the several applicants, will get the facilities.

Also Bruce wants to start the Capitol Cities List again, so any members with info on stations in the state and province capitols are asked to send it to 8264-B So. Yorktown Court, Tulsa, OK 74136. Info needed is on formats, signon and -off times, and any other pertinent information.

Tab Books has issued a new book titled Broadcast Engineering and Maintenance Handbook (TAB BOOK No. 852). Written by a V.P. and Chief Engineer of an AM and FM station, it includes info on all aspects of running a radio station from planning, construction, installation, etc., up to modification and repair of the broadcasting facilities. The price is \$19.95 hardbound, from Tab Books, Blue Ridge Summit, PA 17214.

Don't forget, we have a special deal on the '77 WRTH from Gilfer Associates. Just send \$8.45 to IRCA HQ to arrive no later than January 7, 1977. Delivery is expected to be around the end of February, or so. The retail price will be around \$10.95, and this special offer is open to members of NASWA, NRC, and NNRC.



Happy
Holidays
From The
Entire Gang
At KIKX

# The Inside Story \_

EDXR	- 150, 151		
CDXR	- 151, 152	EDXF	
WDXR	- 152, 153	WDXF	 - 153 - 155
DXWW	- 155 - 157		
Ad-Visor -			
Contest Stand	lings		 - 157
GMT Conversion	on Chart -		 • 159
Super-Power,	part 3: Long	wave	 158 159

December 18, 1976 page 149

	V-2000000	••••••••••••••••••••••••••••••••••••••			Mayor of Cornwall". Sounded to be
	easte	Editor: Mike Mitock,	1270	WLBR	either all nx or in a nx block (SGA-NY) PA, LEBANON heard 11/23 at 1635 w/wx, then spot for Sikes Savings & Loan,
540	KMM4	INCUP Lorain, OH 44052  IA, FORT DODGE 11/27 1750 o/XEWA w/	1290	WKNE	then rr mx. Fair in WXYZ QRM.(DP-MI) NH, KEENE 11/23 2004 steady signal w/
550	WKRC	spot for Plummett Pontiac, football scores, wx, c&w mx., nx & s/off.(DN-NC OH, CINCINNATI o/unID which had Ac nx	1300	WMTM	CBS nx, then local nx. (SGA-NY) GA, MOULTRIE dominant over usual rough houses WMAK, WFBR & WSYD. Dentist office music segued from 1719-1727 11/
<i></i>		11/14 0157 w/"Radio 55" ment., and Manilow's "Weekend in New England".			24. S/off at 1727 included rap about their so great mx. (GA-NC)
570	WWNC	(GM-NY) NC, ASHEVILLE heard for the first time 11/23 at 1710 w/nx, then c&w mx. Weak	1320	WKAP	PA, ALLENTOWN 11/29 Loud on ET/TT/OC, some mx 0115-0144. (RA-MA)
600	CFCH	o/u/WKBN. (DP-MI) ON, NORTH BAY fair o/growl o/low hets		WOIC	SC, COLUMBIA 11/29 rare here, very weak way u/WKAP ET w/ID @ 0131 and into R&B. (RA-MA)
610	CHNC	11/21 0152 w/jx, E. Clapton mx.(GM-NY) PQ, NEW CARLISLE in above the pile 1700 11/25 w/MoR mx, FF talk, ID, during gud NE opening. (RAM-NY)	1340	WOOK	DC, WASHINGTON up from the mud for a bit 11/10 2006 w/soul format, DJ screaming "Super Soul 1340, WOOK".
620	TMVW	VT, BURLINGTON 11/25 0012 u/WVNJ w/ jinglethen lost. (SGA-NY)	1380	CKPC	turntables well above speed. (GM-NY) ON, BRANTFORD surprise 11/30 1655 w/mx ID, nx 1655-1705 way o/CKLC, WOWW.
660	WESC	SC, GREENVILLE u/WNBC 11/17 at 1710 with c&w mx and many IDs. Fair sig.	1400	KWON	(RAM-NY) OK, BARTLESVILLE has 0115 s/off. Also
680	CFTR	(DP-MI) ON, TORONTO good here 11/15 0147 w/top HO DJ. Lost u/TTer 0152. Channel pretty dead usually. WNBC off.(GM-NY)			has unlisted RC/TT 4th SUNDAY 0117- 0130 w/IDs every minute, per visit. Tentatively heard this from John Collarmans place 11/29. (FM-0H)
	WCAW	WV, CHARLESTON in regular in recent weeks somehow wiping out super-pest WPTF. Another strong sig 11/22 w/Dow- Jones 1640, wx 1641 & c&w mx w/Glenn	1440	KSGR	AZ, SCOTTSDALE is KDOT's new identity, as of 11/22. Solid Gold Radio has an oldies rr format. KDOT went "oldies" in October. (FM-OH)
730	WLIL	Shear 1642. (GA-NC) TN, LENOIR heard at s/off 11/17 at	1480	CHRD	PQ, DRUMMONDVILLE good sig 0718 11/29 w/FF talk, ID, o/unID. (RAM-NY)
	WPIK	1715. Weak and fading u/CHIR. No NA. (DP-MI) VA, ALEXANDRIA 11/22 1621 fair signal	1490	WNUS	MA, WEST SPRINGFIELD fair to gud 0721 11/30 w/NNIS nx, ID, WCSS nulled. (RAM-NY)
F1.0		u/CKAC w/spots for John Denver concert at the Capitol Centre. (SGA-NY)		KUGR	WY, GREEN RIVER has been on the air since May, and has c&w format.(FM-OH)
740		unID; EE talk about Canadian Football League u/CBL 11/18 0020-22. Probably AB or NF CBC. (GM-NY)		WOLF	TN, SYRACUSE heard 11/22 at 1720 in GY mess w/wx, then rr mx. Weak. (DP-MI)
	KRMG	$\frac{OK}{O}$ , TULSA tuned by & hrd s/off 11/21 0200. Channel pretty dead otherwise.	1510	WRAN	NJ, DOVER likely w/Morristown ments 11/12 0212. New, never heard in the daytime. (GM-NY)
770	KUOM	Faint OM talking after KRMG off. KCBS??? (GM-NY) MN, MINNEAPOLIS excellent o/WABC 11/22	1520	WGOR	OH, TOLEDO 11/24 0258-0307 probably the one with talk and news at 0302. Weak with no IDs noted, w/WKBW silent.
770 820	WOSU	at 1710 w/Minn Nx, then ID. (DP-MI) OH, COLUMBUS trying for WAIT but came	1 5 5 0	VWDC	(RA-MA)
020	WO30	up with this 11/23. Consistent sig w/minor QRM. Sports w/Don Davis 1655, wx 1659 & nx w/Mary (?) 1701.(GA-NC)	1550	KWBC	TX, NAVASOTA tells me that their annual PoP is normally in January, on a Saturday morning. CE thinks it will be Sat. Morn 1/15 or 1/22 from 0100-
830	WNYC	NY, NEW YORK CITY not too difficult to hear before LSS during season. Good but fading sig 11/23 w/nx,wx, & a pitch for money to stay on the air at 1704, followed by consumers news &		WIRV	???? w/typical varied TTs, etc. Will try to find out more. (FM-OH)  KY, IRVINE 11/26 1729 w/spot for sock hop at Estill County Fair Barn & s/off Very good signal. (DN-NC)
850	KOA	stocks till 1710. (GA-NC) CO. DENVER 11/21 0213+ w/phone talk show. Host gave # as 303-861-8251.	1560	WCNW	OH, FAIRFIELD 11/28 1730 Xlnt w/s/off Ment. Broadcast Management Co. as the owner. (DN-NC)
870	WFLO	This more reg here than WHDH. (GM=NY) VA, FARMVILLE w/nx, wx, sx 11/20 at 1655 and ID at 1700. Fair u/WKAR		WBKC	OH, CHARDON heard 11/23 at 1650 w/wx, rr mx, many IDs. First time here u/WQXR. S/off at 1700. Terrible splash
920	CKCY	"Steel City Wx" C temps, "92-CKCY" shotgun jx, EE top-40 format. 11/21,	1580	KLOU	from WLQB (ex-WCZN) (DP-MI) LA, LAKE CHARLES 11/28 2004 w/wx, "its 32 at KLOU". WCLS QRM & unbelievable QRN kept me from IDing this one for an
950	CKNB	0219. (GM-NY) NB, CAMPBELLTON way o/semi-local WIBX w/FF drama, ID 1745 11/22, vry gud		WSRF	hour! (DN-NC) FL, FT. LAUDERDALE 11/24 on ET/OC/some TT 0320-0410. ID @ 0340, good signal
960	CFAC	sig, NE opening. (RAM-NY) AL, CALGARY c&w mx then spot for Kowasaki 11/25 at 0120. Ann "it's 20 after 11 in Calgary". Clear, but		KEND	o/WCLS. (RA-MA) <u>TX</u> , LUBBOCK dropped NIS on 10/1, now has c&w format. Still NSP. (FM-OH)
	CHNS	fading w/CKWS QRM. WFIR gone.(DF-MI) NS, HALIFAX good w/MoR anner giving time as 3:25. unID YL talk nulled.		THE D	<pre>( CALENDAR:     WI, LACROSSE 11/29 NNRC DX tried, but not heard on several spot checks from</pre>
970	WCHS	11/21 0225. (GM-NY) ME, PORTLAND 11/25 0110 o/u/CKCH. "Your total nx & info station". Into	1280	KVWG	0100-0200. (RA-MA)  TX, PEARSALL 11/29 DX Test tried, but not heard in checking freq several
990	CBW	NIS sports. (SGA-NY)  MB, WINNIPEG 11/23 1933 w/"As It  Happens". Good readable sig, o/u/WIBG			times quickly 0200-0300. (RA-MA)  GA, GRIFFIN 11/27 PoP tried, but not heard 0110=0135. Were they on??(RA-MA)
1110	MIHW (	7th province. (SGA-NY) RI, PROVIDENCE slightly o/mess, rr mx, ID, faded back u/WGRG, others. This 0710 11/26. Very rareonly 2nd time heard in 2 years!! (RAM-NY)	BROUG	HT TO David	YOU BY: Nelson 1507 Lamont Ct., Chapel Hill
1220	) CJSS	ON, CORNWALL 11/22 1722 good signal w/ WGAR nulled. Spot for Bank of NS, followed by "Nx Radio Stock Rpt.",	GM- DP-	Greg N Don Pa Realis	7514/ Realistic TRF Nonti/ 5 Hickory Rd., Bayville NY 11709/ Navich/ 3514 Whittier St., Flint MI 48506 Stic TRF; Realistic DX-160; Lafayette
pag	e 150 I	followed by spot for "Nick King for December 18, 1976		guard:	an 7700; 100' longwire

page 150 December 18, 1976

RAM- Roger Morby/ Ushers Rd., Ballston Lake, NY 12019/ Ross RE-3030 & 300' longwire SGA- Steve Apel/244-93 61 Ave., Douglaston NY 11362/ 2-letter combos for states/provinces, so if you wanta copy of the CORRECT ones, just drop me a card or letter, OK? 73, and see you next week.

# central dx Richard C. Evans P.O. Box 392 foundup New Buffalo, Mich. 49117

540 CBK SASK Regina, 11/22 0123-0203. Very good to fair w/program called "Jazz of the Vintage Years" followed by CBC Nx & Vintage Years" followed by CBC Nx & s/off mentioning LPRTs in Uranium City and Lac Ronge. Only 2nd Sask logging; Cuban 90% nulled & KNOE off, but some slight QSB; rptd. (SAM) s/off 0214 11/7 excellent. (LAB)

\*WYNN\*SC\*Florence, 11/22 0303-17. Fair to unreadable on DX Special w/1000 cycle tone broken by live IDs every 3-4 min. o/u very heavy Cuban QRM, KNOE off. new here w/stn called & rptd. (SAM)

620 WSUN FL St. Petersburg, excellent w/C&W Mx, many clear IDs and spot for amateur & ARRL, 0335-0403 11/15. (REG)

KWFT TX Wichita Falls, 12/3 1808 w/spot for K-Mart & for West Optical Co. good signals. 1st time hrd in 8 years of trying. (MH)

730 CKAC PQ Montreal, excellent w/FF pop mx, spots,

trying. (MH)

730 CKAC PQ Montreal, excellent w/FF pop mx, spots, Nx 0335-0400 11/22, clear ID jingle in FF at 0400. (REG)

740 KCBS CA San Francisco, w/ad for new homes into CBS Nx 0300 11/29, o/KCMC. KRMG off.

780 KCRL NV Reno, calendar, oldies 0157 //(BEM)

11/7 poor-fair w/splash, loop precisely nulled WBBM, pointed SW. (LAB)

740 KCMC TX Texarkana, w/CEW Mx and ad for USO 0232 11/29. Much KCBS QRM. (BEM)

850\*WYDE\*AL\*Birmingham. 11/5 0125-28. Xint on ET

850\*WYDE\*AL\*Birmingham, 11/5 0125-28. X1nt on ET w/various tones and C&W Mx; completely

wyne-AL-Birmingham, 11/5 0125-28. Xlnt on ET
w/various tones and C&W Mx; completely
dominating the frequency, wiping out
all QRM; (SAM)

920 KARN AR Little Rock, 0240-302, u/2 unid R&R's,
w/beautiful Mx and ID. (REG)

930 CJCA ALB Edmonton, good 0317-0326 11/28, w/
rock Mx, PSA's, ads, and IDs by DJ,
weak signal lost at 0326. (REG)

940 KIOA IA Des Moines, w/soft rock Mx and many
IDs u/o local WMIX 0327-0339 11/28(REG)

\*WCPC-MS\*Houston, 11/18 0103-14. Very good on
what may be an unlisted r/c w/dialtone & 1 ID at end of check; well o/
WYLD & other unid QRM; this one can
be hrd in the daytime around here, but
never noted running a f/c before; might
be a good bet for y'all who need a MS
logging. (SAM) (They are a frequent
visitor around here on SSS/SRS. I've
cussed them out many a time--rce)

27?? ?? unid, ID sounded like "KGOL-KGOL-FM,
Mount Morrison". Top-40 format into
Nx, ABC I think. Very clear ID at 1700
12/1, but no listing & have checked
maps. No town coming clear.

12/1, but no listing & have checked maps. No town coming close. Any help? possibly daytimer? (BEM)

1040 WHO TA Des Moines, SS talk, 2230 11/7, fair to good. (LAB)

1050\*WAUG\*GA\*Augusta, 11/15 0312-15. Good to fair on PoP w/various tones & Beatles' "Good night Augusta", then off; mixing badly at times w/XEG; no answer to call but rptd. anyway. (SAM)

\*WMNZ\*GA\*Montezuma, 11/15 0208-15. Very, very tentative on ET w/what sounded like MoR mx & IDs after every selection; badly garbled signal only hrd during rare XEG QSB; far too tentative to call or rpt. Drat! (SAM)

1060\*WXLX\*GA\*Milledgeville, 11/27 0143-0406. Very good to poor on PoP w/various tones, much OC & very infrequent IDs. At times. way o/WNOE & KYW, but often bothered by severe QSB; stn called & rptd on this new one. (SAM)

1070 ???? ?? unid, ad for "Pittsburgh Foreign Cars 1834 11/11 fair (possibly WKOK-Sunbury) any help? (LAB) (probably not Sunbury which is north central PA. How about Plattsburgh, NY, or Pittsburgh on Plattsburgh, NY, or Pittsburgh on 1080 kc.--rce)

1130 CKWX EC Vancouver, seems to be regular here w/easy-listening mx, though poor at 0200 11/29 w/ID. IDs as "Big Country CKWX". (BEM)

CKWX". (BEM)

Liberty, daytime DX in here while trying to log KSOO. Hrd 12/1 0900.
Popped up just long enough for good level ID, then back down. (BEM)

\*KSOO\*SD\*Sioux Falls, 11/16 0127-0300. Xint on ET w/various tones, MoR Mx and promo-type IDs; WRVA in 90% null & no sign of SS stn usually hrd here; stn called & rotd on 1st positive

stn called & rptd on 1st positive SD logging. (SAM)
1170 KVOO OK Tulsa, off again this MM 11/29, till 1170 KVOO OK Tulsa, off again this MM 11/29, till 0200, seems to go off every MM. They are off longer on 2nd MM. (BEM)

CKGY ABT Red Deer, ads, C&W Mx 2258 10/13 fair signal. (LAB)

1180 KOFI MT Kalispell, s/off but carrier kept on 0108 10/23 good signal w/slight QRM. (LAB)

QRM. (LAB)

1230 CJRB MAN Boissevain, tx, community Nx, cls Mx, 17/6 1117. Fair. (LAB)

\*WAYX\*GA\*Waycross, 11/15 0131-33. Noted again W/good signal o/all GY QRM; this is definitely an unlisted r/c, as has been consistently brd at the same time for consistently brd at the same time for almost a year. CF sends nice v/l.(SAM)

1260 KWHK KS Hutchinson, R&R 2256 11/10 fair to good signal. (LAB)

1300 WRBC-MS Jackson, w/Nx by lady ancr 0400 11/29.

1300 WRBC MS

KXXO-local off for some reason. (BEM)

KVET TX

Austin, good w/Top 40 Mx & ID at 0400

11/29, into weather. (BEM)

1360 WKMI MI

Kalamazoo, 1730 o/KSCJ w/Nx, sports,

local ads, good ID at 1730 11/16.(REG)

1370\*WFDR\*GA\*Manchester, 11/27 0346-52. Xint on Pop

w/1000 cycle tone modulating at about

25% & long ID at 0352; tentatively

logged before on s/on & rptd then w/no

verie; stn called & f/up sent; abso-

logged before on s/on & rptd then w/no verie; stn called & f/up sent; absolutely no QRM. (SAM)

\*KIKS\*KS\*S.10la, 11/17 0113-18. Surprisingly good on ET w/KFRO 85% nulled; 1000 & 500 cycle tones & brief periods of OC, 1 ID w/call-letters repeated 3 times; 1st hrd last season w/v/l received in about a week; happy to relog this one.

1380 WLCY FL St. Petersburg, 11/25 0330 w/RR (SAM) & ID as "the great 138". (BEM)

1390 WROA MS Gulfport, u/WFMJ TT w/Nx. Wx, and gulf rpt 0135 11/29, into Dobie Gray. (BEM)

\*WFMJ\*OH\*Youngstown, testing w/tone part of early morn. 11/29 Very strong & good ID 0130. (BEM)

1410 KRIG TX Odessa, w/quick "Top-40-like" ID into

1410 KRIG TX Odessa, w/quick "Top-40-like" ID into Mac Davis 12/1 0258. Was looking for

Mac Davis 12/1 0258. was looking lot WING. (BEM)

1420\*KJCK\*KS\*Junction City, testing w/TT. very strong w/much KELI QRM. (BEM)

1450 KGCA ND Rugby, ads for Rugby, 1018 11/6 fair KAYC TX Beaumont, the only one on here //(LAB) 0400 12/2 w/Top 40 & SID. Good sig(BEM)

???? ?? unid, 11/16 0245-48. Another GY mystery tester running what may be a r/c which nossibly begins at 0230; 1000 cycle tone possibly begins at 0230; 1000 cycle tone w/IDs roughly every 3 min; 1 badly man-Qaled version punching thru typical GY QRM sounds like "KOLV; Gallup,NM", but no such animal exists; any help? In the meantime, will try for this one again next month. (SAM)

1460 WXOK LA Baton Rouge, w/SID o/WACO/KSO 12/1 2400 KRNY NE Kearney, 1745 11/16 good w/Wx. //(BEM) ad for Evelyn Wood course at Kearney Holiday Inn, other local ads and pop mx. (REG)

1470 KWSL IA Sioux City, hrd very well, all alone on channel w/Top 40 mx and ID 12/2 0330.

X-KTRI. (BEM)

1490 KIIQ CO Manitou Springs, hrd very well w/Top 40

& Am. Info Nx at 0300 12/2. My log has this stn listed as KEDI. How old is this stn? Or am I behind the times, hi. (BEM) (According to Broadcasting Yearbook, the stn went on the air in Nov., 1956-rce)

KNOC ND Hettinger, ID, local Nx 1200 11/6, fair with QRN.(LAB)

with QRN. (LAB)

1510 KMSD SD Millbank, local & intl Nx 0940 11/7 good w/slight unid QRM (LAB)

WAUK WI Waukesha, clx mx 1700 10/17 fair w/fair QRM. (LAB)

1530\*WHIY\*AL\*Moulton, hrd on ET 11/25 0112 w/ strong signal o/WCKY. Called and reported. (BEM)

1550 WCVL IN Crawfordsville, 11/21 1711 w/local Wx. 1st time hrd in 7 years of trying. Good signals. (MH)

1560\*WYSE\*FL\*Inverness, 11/16 & 20 0230-45. Noted ETing both morning at about the same time w/C&W Mx & sporadic IDs mentioning power of 5000 watts; disappointing signal for the power, often o/u CHMG QRM; as yet, no verie recvd to rpt of a month ago. (SAM)

\*KRCB\*IA\*Council Bluffs, 11/21 0220-24. Good to fair on ET w/1000 cycle tone, brief ID, then off; slight CHMG QRM; hrd before, and after a phone call & rpt w/ no response, an apparent non-verifier. (SAM) (I've got a v/c from them—took 86 days—rce)

86 days--rce)

1570 KLLA LA Leesville, 11/25 Oll6 fair on ET with QRM. ID w/female ancr. Called & rptd. 1590°KKAY°LA°White Castle, hrd on ET, very //(BEM)
good signal w/mx & IDs. No TT. I called
& they said they've been on for 3 days
operating on 1/2 kw. They tested with
tested w/full power tho. 0238-0243

12/1. (BEM)

KUUU WA Seattle, Much to my delight w/RR &
"K-U 16" IDs o/u KEND w/good signal.
12/2 0200. State #33 for me. (BEM)

1600 KCRG IA Cedar Rapids, w/ID hrd down under
KATZ, a much detested regular. Much
like WWRL back east, not a good
signal, but usually the one & only
stn there! 0100 12/2. (BEM)

KOGT TX Orange, w/s/off 0100 12/2. My log says
MM off only. Good signal considering

MM off only. Good signal considering it beams its signal toward the Gulf. (BEM)

PER THE LIST:

KANE-1240 LA (BEM) 0130-0145 WFLI-1070 TN (BEM) 1st WED:

lst THU: WKCB-1540 KY (BEM) off at 0421 4th SAT: KFLN- 960 MT (BEM)

## A TIP OF THE HAT THIS WEEK TO:

LAB - LUDO A. BERTSCH, 3905 Hillsdale Street,

Regina, Saskatchewan S4S 3Y6
REG - ROB GERARDI, 1401 North Main,
Benton, Illinois 62812
MH - MIKE HOGAN, 9224 Cottage Grove Avenue, Highland, Indiana 46322

BEM - BRUCE E. McFADDEN, 8264-B S. Yorktown Ct., Tulsa, Oklahoma 74136 SAM - SCOTT A. MENTZER, Route Three, Tylertown, Mississippi 39667

This column includes about four reports which were received here and promptly misplaced when I moved a couple of weeks ago. They were discovered here 12/7. I'm just as happy that they weren't included in last week's column, anyway, hi. Back on screwed-up hours at work again. Should straighten out soon after the first of the year. Gotta run. 73.

THE STATION THAT'S ALL HEART

KSJBBIG 600

NANCY HARDY, Editor

2301 PACIFIC AVE. ABERDEEN, WA 98520

## western dx roundup ALL TIMES ARE EASTERN LOCAL

DEADLINES: Dec. 23, Dec. 31, Jan. 7, Jan. 14

REPORTERS FOR THIS ISSUE:

.JJ) Jef Jaisun-12860 136th NE-Kirkland, WA 98033

OKK) Don Kaskey-386 Geary St.-San Francisco, CA HQ-140X, SM-2 (ASI) Albert Lobel 10514 Gerritte F

(ASL) Albert Lobel-10514 Caminito Baywood-San Diego Realistic DX-150A, Sanserino CA 92126 loop, 60' E/W longwire, 34' N/S longwire

550 KFYR ND, Bismarck 12/6 0645-0652 medium key announcer playing Elton John, spot for Drunstick Cafe, TC "9 min. before 6 at KFYR--All the radio station you'll ever need." (JJ-WA)

OR, Ashland 11/29 0127 w/special prgm by Mormon Tab. Choir, "KCMX" ID before 580 KCMX

oy mormon rat. choir, "KCMA" ID before going into MTC, out of C&W mx. (JJ-WA) AZ, Flagstaff 11/29 0909 w/song "You Gave Me a Mountain" followed by fast & slurred "Golden Memories...KCLS on a Monday morning." Followed by Budweiser hear got Ir will of local KCLS on a 600 KCLS beer spot. In null of local KOGO. TC

beer spot. In null of local KOGO. TC given as 0710. (ASL-CA)

UT, Logan another long awaited took over after CJAT s/off. Had rock and IDed as "Super 6-ten." 24 degrees at 0410 11/30. Fair signal, not as steady as CJAT. Several other stations u/KVNU but too sleepy to care. (DKK-CA)

EC, Trail 11/30 w/KFRC off, noted nicely atop 0330-0400 w/rock. Nx & wx to 0402 then s/off annot, invited listen-610 KVNU

610 CJAT 0402 then s/off annot. invited listeners to tune to CKOK then GSQ. First time in 19 years of trying from CA. (DKK-CA)

MT, Belgrade 11/29 0842 sneaking up o/ KIDO just prior to KGDN s/on. Spot for 630 KG VW

KIDO just prior to KGDN s/on. Spot for Federal Savings & loan, wx for Bozeman area, gospel mx. (JJ-WA)
?? 12/6 0705½ NE loop. You & I both know this is CBN's frequency, but I heard a definite nx outro "When you see news happening call CKNB." KFI easy null. Am I nuts or does CBN rum // CKNB? (This AM also hrd WTIC & possible CBY, as per 990 & 1080 listings). Can you EC guys help? (JJ-WA) 640 CKNB

690 CFRG SK, Gravelbourg 11/23 2105 w/FF sounded like soccer or hockey play-by-play. Weak u/CBU, KIRO-710 slop. (JJ-WA)
ON, Toronto 12/6 0400 in w/nx about
Toronto, etc. (JJ-WA)
AK, Anchorage 11/29 0540 John Brown

740 CBL

750 KFQD playing hot rock--Midler, C. Richard, Lightfoot. TCs and IDs. Heard on a hunch after hearing KANC slightly earlier. First time since 1963 for KFQD

(then 730). (JJ-WA) <u>OR</u>, Roseburg 11/28 atop XEGM et al 1028 950 KYES

w/ID and light rock. (DKK-CA)
AZ, Lake Havasu City 11/29 0831 w/soot
for Quality Auto Parts & Machine. Phone 980 KFWJ numbers given were 855-2171 & 855-7874. The first number checks w/Mountain Bell.

ID "We'll have...wx for you on KFWJ."
Heard in KFWB null. (ASL-CA)
NV, Fallon 11/28 1846 thru KOMO-1000
slop and CKNW QRM, poor readability, 980 KATA

mx Ramblin Rose "From KVLV..." (JJ-WA)
SK, Regina 11/23 "Country Music CKRM"
TD, C&W mx. In CKNW null, no sign of
KFWB. (JJ-WA) CKRM 980

KFWB. (JJ-WA)
CA, Pittsburg 12/6 0202 w/a special
International program. Sounded like
they were asking for reception reports.
Followed by mention of Walnut Creek
then soft mx. (ASI-CA)
MB, Winnipeg 12/6 0200 just after XECL
s/off w/CBC News and ID "CBC Manitoba."
(ASI-CA) 990 KKIS

990 CBW

990 unID	East Coast Had to be east of CBW, coming
	in u/weak but steady. Slush EZ mx at
	0725, hrd possible Yankee Doodle theme or pips at 0730, slow slushy organ mx,
	Tony Bennett, etc. "Old Fashioned Walk"
	inst. at 0742, talk 0750. Looped identical w/CBW. Not WKLW or WIBG. Knocked
	out by SS ranchero mx. & CBW 0753.
	Could it be CBY? Help! (JJ-WA)
990 unID	12/6 0753-0758 SS ranchero mx on ENE/WSW
	loop (CBW) Is there a domestic w/this? (JJ-WA)
1020 KCBQ	NM, Roswell never bothered to get def-
	inite ID since they changed calls so
	stumbled onto this one 11/27 at 0950. Excellent signal. (DKK-CA)
1030 KCTA	TX. Corpus Christi w/fine signal 11/29
	0645 after nx w/ID. Then into relig. program. All in EE. (DKK-CA)
1060 KRSP	UT, Salt Lake City 12/5 0900 out of
	relig, KRSP jingle ID, into talk & relig mx "Let's Have A Song About
	Jesus." KPAY QRM. (JJ-WA)
1080 KANC	AK, Anchorage 11/29 0517 YL DJ playing
	soul rock. "Music Radio KANC", spot for
	Fireplace Lounge. Drakie jingle ID. XEPRS & KING-1090 OC QRM. First time
	here. (JJ-WA)
TOSO MAIC	CT, Hartford 12/6 0531-0558 talk jock Bill Corsair W/phone calls, PSA for
And the second	Crime Prevention, finally heard WTIC
	mentioned at 0558. Blasted by KRLD s/on
1090 KAAY	at 0559. (JJ-WA) AR, Little Rock 11/29 0615 ID out of
	UN Weekly Report "Clear channel 50,000
	watt KAAY, Little Rock." Into World Tomorrow. 0646 UPI sports scores, 0647
	wx and ID. New state. XEPRS having big
	transmission trouble, easy null tonight.
1230 *KOTK*	(JJ-WA) OR, Lakeview 12/6 0305 on rc w/code IDs
12 JO HQLII	in couplets and 1 kHz tone. Poor. Hrd
3.050TD	no vocals. (JJ-WA)
1250 unID	12/4 2230-2235 Indianapolis-Houston hockey, end of game, post game show.
	No ID or geographical reference. Have
	ruled out WGL & WPAC per phone. Probable midwest, mixing w/WREN, o/u KWSU w/KYAC
	off, Ideas? (JJ-WA)
1280 KJOY	CA, Stockton 12/4 1953 blip ID on spot
1000	outro "keep listening to K-JOY, an East- West Production." (JJ-WA)
1380 KTOM	CA, Salinas 11/23 2009-2015 skipping in
	u/KRKO w/C&W mx, spots for Salinas Auto Stereo, Lem's Dept. Store. (JJ-WA)
1380 KGMS	CA Sacramento 11/23 2019 "We at KGMS
	would like to remind you" plus KGMS
	outro. Sounded like a PSA. Wiped by KTOM. (JJ-WA)
1400 *KXGN*	MT, Glendive 11/29 0216-0332 on for
• • • • • • • • • • • • • • • • • • • •	POP. Ran a mixed bag of tones, sweeps,
	etc. First ID hrd at 0332. CE Don Powers. (JJ-WA)
1420 KSTN	CA. Stockton 11/29 0455 w/good signal.
	Gave phone # of 948-TALK (= 948-8255). First time in many moons since I heard
	this one! XEXX off. (ASL-CA)
1430 KTYN	ND. Minot 11/29 0746 mixing w/KLO,
	some kind of phone-in or pre-taped show, sponsored by ? Electric Supply Co.
	Minot. (JJ-WA)
1430 KELI	OK, Tulsa 12/6 0557 w/wx & ID way u/QRN. (ASL-CA)
1440 WHHY	AL. Montgomery 12/5 0715 blasted in my
	headphones as I was ablut to nod out.
1. P.	Possible LT power boost got 'em here. "WHHYBilly Jack(?)(fast rap)
	884-1440!" Lots of disco soul mx, fading
	in & out till wx at 0737½. Mixing w/KEWI and possible KMLB. Love those new states!
	( A.T.—VA )
1450 KTIP	CA. Porterville 11/29 0517 w/many "K-TIP"
1460 KVRE	TDs and mx. Deep fades. (ASL-CA)  CA, Santa Rosa 11/23 1952-1958 "Colinda"
T400 VAUE	Cajun tune w/Fiddleman Frenchie Burke,
	into s/off, complete w/addresses for
A CONTRACTOR	studio and xmtr sites. Brian Dahl DJ. (JJ-WA) One of my closer unheards
	finelly dug out from u/KDON 11/24 1930-
	2030. Time & ID 1957, C&W mx. (DKK-CA)
v .	

1480 unID 12/6 0325 who was testing here w/TT. No ID heard. Was in KWIZ null at appx. 45°. (ASL-CA)  $\frac{\text{MN}}{\text{ID}}$ , St. Paul 12/6 0533 w/wx followed by  $\frac{\text{MN}}{\text{ID}}$  "The Music Station K-S-T-P." (ASL-CA) 1500 KSTP 12/6 0540 lots of TT this 1st MM. 1500 unID o/KSTP & KXRX. No ID, gone by 0550.(ASL) TN, Nashville 12/6 0528 w/mention of Nash-1510 WLAC ville & call letters in null of strong KGA. Talk of Family Bible Book, c/o WLAC Radio, Nashville, TN. (ASL-CA) 12/6 0340 another one w/TT on this freq. 1510 unID Had variable pitch TT. Ideas anyone? In KGA null. (AŠL-CA) CA, Port Hueneme 11/23 1923 skipping in 1520 KACY u/KYXI w/hot jock rock, "Kay-see 152 ID, Fotomat elves. (JJ-WA) NY, Buffalo 12/6 0510 w/nx by local 1520 WKBW announcer followed by sports. Many WKBW IDs heard. (ASL-CA)

CA, Sacramento 11/27 1830 hrd well on car receiver while driving through San 1530 KFBKClamente on way to Los Angeles. First time ever hrd that early. Had NIS nx & local nx. (ASL-CA) OH, Cincinnati 12/6 0500 w/CBS news 1530 WCKY followed by Garner Ted Armstrong Show. KFBK off. (ASL-CA) FL, Melbourne 11/29 0710 spot for John 1560 WTAI Bell, Inc. located at 2401 ...in Mel-bourne, 727-3312. ID "All country, WTAI" Second one from FL in as many weeks, & last week it was my most wanted state. (ASL-CA) 1560 WSDL LA, Slidell 11/29 0711 good ID heard immediately after WTAI ID, "WSDL Slidell...27 degrees." Another new station but not a new state. (ASL-CA) OH, Fairfield 12/6 0842 heard blip calls 1560 WCNW while looking for WDXR. U/KKAA, also mixing w/unID SS. All were cremoraed (Did you just make up that word?-NH) by KPMC s/on at 0843. A pox on Bakers-field. (JJ-WA) Quite a long column considering only three report-

ers. Hope you all have a happy holiday season. 73

THURSDAY

DEADLINES

THURSDAY

THURS

sults...Married life & my work schedule make predawn DX much easier this season. Asians have been consistent from early September. Cx were quite gud consistent from early September. Cx were quite gud in Sep & Oct, but dipped somewhat in Nov. However, did note considerable improvement on 11/28, 29, 30. Favourite freqs are 830-890 range, esp 840 & 880. Hmmm, while typing this at 4.20pm local time, KUTY solid atop KNDE. Where oh where is KDUN whom I still need? Heald, if you say Reedsport, OR...... (Who, me? I wouldn't have ever thought of saying that....1470 maybe, hi-RtH). Have tried for Cayman 1555 several times. Hrd Yellow Bird IS once, but no definite ann as yet. No DYLA either for that matter. Wooder if the het I had on 1425 last MM could real-Wonder if the het I had on 1425 last MM could really be Thule? No matter, there wasn't a trace of vx. Probably some klutz nearby had left his TV on all night. HLDA 1570 was giving EE lessons, primarily on how to come out of the rain, "You are soaking wet" etc. etc. (Gee, I didn't know NHK was selling their prgms to S. Korea, hi-RtH). Their sig was sohid too. Unfortunately, my tape recorder is in the shop or I would have a very funny tape. XEBBC now atop 1470 @ 4.26pm....KFRC was off 11/30 & in 15 min I logged two stns for the first time, (CJAT and KVNU). Pays to be persistent. Am leaning heavily toward the tape collection since I lost several hundred of my best veries couple yrs back. Just can't get enthused anymore about writing for veries after the shock of that loss. Look forward to seeing Randy Seaver & family at Christmas time.....73 de DKK

West of the Mississippi - RtH East of the Mississippi - jz

more or less have a captive audience. Serious DXing won't occur until after the first of the new year: my gear, loops, etc won't arrive until Feb-Mar 1977. At present, I'm trying to get organised for my wife's arrival.....a bit more important than DXing! Best of DX and 73. (That's what you get for using Uncle Sam as your travel agent. I would have booked you into a hotel where their fluorescent lights, neons, and light dimmers would generate QRM, hi-RtH)

recent question, I am trying to convert, as you all might have noticed to the Metric system, as the USA is one of the few countries left on the old English system. If you don't know it (Metric), learn it. It's not that hard. Also, I still, as many have noticed, insist on kc or kc/s instead of kHz. This is meant in a humourous vain, but cycle is what a kilo does and Hertz rents cars, hi. Why should we rename what is natural for a man? A cycle is a completed circle, which is what a radio signal does. It doesn't Hertz around at 900 kilocycle per second, does it? Hertz around at 900 kilocycle per second, does it? I really don't care what the FCC has adopted, what do they know? They have no knowledge of radio, let do they know? They have no knowledge of radio, let alone engineering, they are political appointees & nothing more. And by the way, the word Kilocycle, is METRIC!!! Of course, I am referring to the FCC in Washington, not the regional field offices, but then, some of them aren't too smart, though we have a few smart cookies, as was our guest speaker at the Convention. Father Jack, I prefer to think of it as gentle persuasion in asking you to report. Menying you beer and pizza at my place, had you not, had absolutely no bearing whatsoever, hi. See you all in 7.73 de RtH.. 7. 73 de RtH..

# DX Worldwide

BRUCE PORTZER.

All times GMT/UTC Deadlines 12/24 & 31 then Saturdays again

7021 Sand Point Way N.E., #215, Seattle, WA 98115, 206-522-2521

## ATLANTIC DX ROUNDUP

FRANCE, Allouis at 0126 to past 0511 w/FF mx, anmts, TC at 0500, ID, lively mx all on tape! 12/3 & 12/4. 164 (Young, CA)

MOROCCO, Azilal, AA anmts by male voice. Typical mx to past 0236. Chants at 0239. Strong & on tape! 12/3 & 12/4. (Young, CA) 209

529 AIGERIA, Ain Beida fair w/AA style inst mx 0528 12/6.

(Connelly, MA) 548 ALCERIA, Oran ultraloud w/female AA chant, mutilating CFNB 0514 12/4. Audio had the echoey acoustics of a large room. Noted also on 12/6 at 0536; weaker

level. (Connelly, MA) 584

SPAIN/TUNISIA, correct time & date was 2224 11/5 (cf DXWW 11/20/76). (Eckman, PA)

ENGLAND, Daventry, BBC carrier noted here w/o audio in KFT splash 0435 12/3 & 12/1. (Young, CA) --- poor-fair during mediocre opening, talk in EE 0515 12/6. 647 (Connelly, MA)

PORTUGAL, Norte loud & dominant on TRF w/man in PP; WGN present as feeble background het 2347 12/1. 719 (Connelly, MA)

SENEGAL, Dakar xint, whalloping WJR & WABC on TRF, man talking in AA, then chants 23h5 & 2358 12/1.(Connelly) SPAIN, Caceres et al louder than WABC on car rx w/man in 58 topping bad het 2132 12/1. (Connelly, MA) 764 773

773 MOROCCO, Sidi-Bennour listed in back of WRTVH; AA singing 0610 12/4. (Young, CA) (This may have been Spain, Jim; they're widely hrd on the EC, whereas, as far as I know, Morocco hasn't been hrd in NA & may not even be on the air. bp)

782 PORTUGAL, Miramar devastating WBBM on Realistic TRF

w/pop mx, vocals, 2357 12/1. (Connelly,MA)
ANDORRA/MOROCCO, Sud R. dominant w/FF talk & FF vocal 0505; Rabat taking over w/male AA chant 0507 818 12/4. (Connelly, MA)

ANDORRA, Sud R. assumed at 0537. Light mx & some talking, doubt Egypt. Hrd 12/3 & 12/L. (Young,CA) MOROCCO, Rabat here 0255 w/chanting AA mx //209. Talking & anmts 0259, ID & marching anthem & off at 0301 12/3 & 12/L. (Young,CA) --- alone, topping HJED het at fair readability w/AA chant 0517 12/6. 818 816 (Connelly, MA)

UNID female AA chant w/flute accompaniment at potent level atop others, seemingly not //818 0518 12/6. 827

(Connelly, MA)

MCROSCO, Oujda, AA singing O6lh 12/4. Male voice in

AA O618. (Young, CA) (Libya also a possibility. bp)

ITALY, Roma seemed like the end of a nxcast 0541. 827 8145

SPAIN, Murcia, RNE here w/Peru het 0542 12/3. 854

TAS make Peru unlikely the stronger. In fact most LAS

very weak this evening. (Young, CA) --- fair w/SS talk, then c1 mx; WHDH running OC (so no splash problem) 0520 12/6. (Connelly, MA)

FRANCE, Paris, FF talking at 0616 12/4. (Young, CA)

ENTIAND, Washford, BBC seems to be EE 0544 w/pop mx, 881 talking on 12/3. (Young, CA)

UNID, AA chant here, fair low audible het on low side likely from an LA 0522 12/6. (Connelly, MA) MOROCCO, Agadir, AA mx 0620 w/other Morocco stns good. Talking by male voice 0629 12/h. (Young, CA) 926

935

1016

TURKEY, Istanbul, Turkish mx Oull 12/4, male voice in language at Oul7. (Young,CA)
WEST GERMANY, Mainz possibly the one here w/mx 0333 1016 mixing w/Turkey on 12/4. (Young, CA) --- hitting strong peaks w/"Apache" by Jorgen Ingmann, then GG talk, taking occ deep fades but at all times dominant o/ Turkey SAH 0550 12/6. (Connelly, MA)

PORTUGAL, Porto Alto assumed w/voices 0332 12/3 & 1034

1043

MOROCCO, Sebaa-Aioun, AA singing here 0622 along w/ other Morocco stns 12/4. (Young,CA) (This is the first rpt I can remember getting on this one. Interesting.bp)

ENGLAND, Start Point carrier here 0432, maybe EE at 0433 talking 12/4. (Young, CA) 1052

ENGIAND, Crowborough, EE by male voice shortly in at Ohit 12/3. (Young, CA) --- BBC xlnt, well atop presumed Albania; man in RF w/"BBC World Service" ID 0545 12/6. 1088 (Connelly, MA)

1106 EGYPT, Batra presumed at 0435 12/4. Typical mx seemed like area. (Young, CA)

1124 UNID carrier here 0331 12/4 but no audio. (Young,CA)

1151 BUIGARIA, Cluj, could this be? Here at 0328 w/orch mx on 12/4. (Young, CA) (Dunno, Jim. Where was the KIIS slop? bp)

What else? 12/4. (Young,CA) (I can't find any rpts of this one in the last 3 FIs. R. Caroline or TGT are 1187

much more likely. bp)
INTERNATIONAL WATERS, Caroline/Mi Amigo good w/movie
theme mx, DD talk o/SAH 0542 12/6. (Connelly, MA) 1187 1196

west GERMANY, Minchen, VOA, GG talking at 0328, mx at 0329. Terribly weak audio. Seemed like there could have been 2 carriers. 12/4. (Young, CA)
FRANCE, Bordeaux, FF talking 0137 here on 12/4. 1205

1214

FRANCE, Bordeaux, Fr talking 0437 here on 12/4.
(Young,CA) --- tarrier & weak audio all evening 0350 12/3. (Manning,CA)
ENGLAND, Washford et al in w/symphony mx & EE anmts in & out all evening 0340 12/3. (Manning,CA)
ENGLAND/ALBANIA, the 2 here at equal strength, both w/talk 0540 12/6. (Connelly,MA) 1214

UNID, (Albania w/African lang?) def lang similar to Swahili here 0315, noted to past 0326. Although Tanzania listed, how could this make it to WCNA? Strong 1214 audio during entire time monitored & male voice the

only pgm 12/4. (Young, CA) WEST GERMANY, Neuminster, female voice in GG 0453, mx at 0457 12/3. (Young, CA) 1268

FRANCE, Strasbourg, FF pop mx here 0510, male voice at 0512 12/4. (Young, CA) 1277

CZECHOSLOVAKIA, Prague, female voice at Oh5h seems to fit the time & format. This is supposed to be the FS 1286 MW outlet, listed, but not at this time(?) 12/3. (Young) --- fair w/Slavic talk by woman; 1 kHz het on low side 0538 12/6. (Connelly, MA)

UNID, carrier w/SAH, traces of opera mx 0537 12/6. 1313 (Connelly, MA)

FRANCE, Iille, carrier here assumed to be France at 0455 on 12/3. (Young,CA) --- fair w/talk & mx 0555 1376 12/6. (Connelly, MA)

ALBANIA, Lushnje good, better than 1586 sig w/Slavic talk by man 0532 12/6. (Connelly, MA) 1391

GUINEA, Conakry, finally found fair audio on this one 0620-0629 11/27 -- a voice speaking FF, but hard 1403 to say whether male or female, followed by mx on banjolike inst & a vocalist in a wailing kind of song. This stn has been found here almost every night this fall, but w/audio too weak to be described. Country #66 from Denver. (Martin, CO) -- 11/29 0430 per tip from Randy Seaver I tuned here & found a strong het against 1400. Randy thinks it's most likely Guinea. Bearing was 73 which checks perfectly. Listened 0430-0645 & hrd no audio. Will have to watch this freq for my 1st ever TA. (Lobel,CA) --- after 1 hr

listening to bongo-bongo type native mx, I'm convinced I had Conakry 0055-0155 11/30 fair w/QSB. One pos FF anmt in long periods of mx, native type, much drumming, repetitious, weird yelling & calls plus some native inst. (Curtis, VT) --- first noted as early as 0354 w/little audio. FF & African langs, male voice mostly. Drum mx, African singing & some

December 18, 1976 page 155

FF pop mx. Hrd nightly but this observation on 12/h till 06lh. (Young,CA) (With the rash of rpts that have come in on this one lately, I wonder if they've gotten some new equipment and/or tweaked up the old equipment. Listed as 100 kw. bp) WEST GERMANY, Saarbrucken, light mx & anmts in GG on 12/3 at 0456. (Young, CA) (Was there much domestic slop?bp) 1421 LUXEMBOURG, Marnach, strong carrier here but little audio (talking) 0h57 12/3. (Young, CA) (Was there much 1439 KPRO etc slop? bp) MONACO, Monte-Carlo, TWR booming in on TRF w/AA pgm 2351 12/1. (Connelly, MA) --- 0057 11/28 fair & in unid lang, short series of mx tones before hour & 1466 time tone. (Curtis, VI) CHINA, Urdimqi, date for this one was 11/7 2235-2305 (cf DXWW 11/27/76). (Eckman,PA) --- tentative for 1525 12/2 2315-2345. Too much adjacent channel slop to read audio, but PFMed as 1525014.9 Hz +0.2 Hz. Also noted SAH of about 7 Hz but unable to PFM second carrier. May be same pair as noted from Philippines in 1973. Could someone please correlate? (Taylor, IN)
FRANCE, Nice in w/weak audio all evening Oh00 12/3.
(Manning, CA) --- FF mx & anmts Oh18, lively mx Oh26
//16h kHz 12/h. (Young, CA) 1554 WEST GERMANY, Langenberg, WDR slight detection of audio on carrier 0305 12/4. (Young, CA) --- fair w/ 1586 jazz 0530 12/1. (Connelly,MA)
WEST GERMANY, München, light mx here 0306, male voice
in GG 0307 12/h. (Young,CA) 1602 PAN AMERICAN DX ROUNDUP DOMINICA, Roseau, R. Jumbo strong Oll5 12/2 FF w/fast 545 rock type IA mx. (Curtis, V.) --- very good u/FF pop mx 1005 12/6. (Portzer, WA) DOMINICA, Roseau, R. Dominica fair thru domestic slop w/mor mx just after apparent s/on 1003 12/6. (Portzer) 595 MEXICO, Los Mochis, Sin., XFTNT noted atop 1355 12/5 w/rlgs pgm, ID at 1400. Good sig. (Kaskey,GA) 650 663.5 ?+ UNID mystery LA here in Sept & Oct disappeared sometime in the closing days of Oct & could not be found thru Nov. Prob returned to its regular freq & we may never know what it was, a fish getting away! (Partin) SURINAM, Paramaribo, SRS 010h 12/1 pseudo-00 talk, good as usual, OM & YL interview pgm. (Curtis,VT) 725 --- good w/US c/w 2359 12/1. (Connelly, MA) GUATEMALA, Guatemala, TGN in very good running "Thru the Bible" in EE. ID by man in EE 0h29 giving several 730 SW //s. Pgm change to SS 0430 12/2. Listeners invited to write for QSL. (Maloney, OK) MONTSERRAT, R. Antilles assumed to be the one w/pop songs in FF, including an FF version of "Hearttreak Hotel", w/anmts by male DJ after each song 00/19-0955 740 12/6 looping towards Caribbean. KCBS/KBRT OCS both off, a rare occurrance on MMs. CKIG slop finally got the better of them 0955. (Portzer,WA) COLOMBIA, Bogotá, HJCY hrd 1000-1015 12/6 w/SS rx & R. Sutatenza IDs. (Tomer,CA) 810 MEXICO, Cd. Obregon, Son., XERSV w/xlnt sig after 1300 s/on 12/5. Took over from CHQR. No TPs hrd on 810 830 834 (Manning, CA) COLOMBIA, Cartagena, HJAQ in fair-good 0800-0930 12/6 w/SS mx, many ments of Colombia & RCN IDs. No sign of XEOY. (Tomer, CA) 1000 UNID, playing uninterrupted EL mx 11/28. Played Ray 1205 0300. Male British ancr into BBC WS nx to 0315, no song titles or DJ activity. Gave ID just before &

this freq as yet. (Kaskey,CA)

MEXICO, Guliacan, XEVQ 12/5 w/R. VQ ID 1333 after mucho
talk & Ranchero mx. Atop freq. (Kaskey,CA)

BELIZE, Belize, R. Belize w/religion, loud, 1210 12/3. Price "For the Good Times" 0254-3 bells then time ticks after 0300 but too much slop from WOAI. Strongly suspect Cayman Islands as per WRTH. Pgm similar to that herd 11/26 on 1555. Checked for possible // but no het hrd 11/28 on 1555. (Maloney,OK)
MEXICO, México, D.F., XEB, R. Cuatro quite strong
12/5 w/"R. Cuatro, la Estacionde el whoop-whoop..." 1220 IDs given frequently. (Tomer, CA)
MEXICO, Cd. Juarez, Chih., XECJC 11/22 08h5 several
"R. Sensacion" IDs by man. Pop mx in SS in null of
KDB w/another unID (prob KOUZ). (Lobel, CA) 1490 MEXICO, San Luis, Son., XEEH, 11/29 1250 w/ID & ment 1520 of San Luis Rio Colorado. (Lobel, CA) CAYMAN ISLANDS, Georgetown, R. Cayman s/on & ID, xlnt sig & mod, in loud 1100 11/19 w/light mx & anmt in EE. (Manning, CA) --- 12/1 was tuned at 1055 but nothing hrd. Back again 1116 & noted 2 stns now here. Dominated to the contract of t 1555 nant w/hymns in EE, other man talking. Faded down, back up 1125 w/"Rock of Ages". Again 2 distinct sigs 1128, man still talking in Oriental lang & hymn playpage 156 December 18, 1976

er w/no annuts between songs. Up again 1135 & held past 1143. Had faded out by 1155 & some XE bombed on 1560 at 1200 to kill further DX there. No IDs but certainly suspect R. Cayman & DYLA. (Kaskey, CA) UNID, fair sigs w/m&f in EE in & out, been trying for quite awhile on this. Ideas? 0650 11/20. (Manning, 1606 CA) (Prob either a pirate or some stn's relay xr for remote operations. bp)

> PACIFIC DX ROUNDUP USSR, Yakutsk, RR talking by male voice 0801 hrd to past 1017 12/4. (Young,CA) 173 USSR, Blagoveshchensk extremely strong 053h u/SFI beacon stn. Strength improved to past 0817. Almost clear of beacon then. RR singing, talking, different format than SW outlets. //182 12/4. (Young,CA) USSR, Yeniseysk here 0925 along w/Khabarovsk w/RR 191 218 talking 12/4. (Young, CA) MONGOLIA, Ulan Bator, R. Moscow IS 0930 w/Mongolian 227 service (relayed by Ulan Bator at this time). stn also here & stronger 12/4. (Young, CA) USSR, Nizhniy Tagil, male voice in RR here 0928 o/ Mongolia 12/4. (Young,CA) 227 USSR, Irkutsk hrd u/Magadan 0933 w/cl mx 12/4. (Young) USSR, Magadan, singing mx o/Trkutsk 0937. Female voice in RR 0946. Hrd past 1143 when still very strong 12/4. 236 (Young, CA) (How did you decide which was Irkutsk & which was Magadan? bp) USSR, Vladivostok 1110-1230 12/5, blanket electrical current in the atmosphere o/L.A. Sig came in weak 1110-1155. At 1155 it improved, 1200 woman talking 245 blank & hrd 2 beautiful mxical chimes, man & woman rpting nx, stn ID hrd 3 times. Then into mx, light opera w/baritone singer. I have a neighbor whose sister is a college grad in languages, God is with me, who translated for me. (Wilson, CA) USSR, Chita believed here 0939 w/RR talking 12/4. (Young) USSR, Novosibirsk at 0943 noted but this could still be the weaker powered RR stn in Birobidzhan. Who cares? Singing noted weakly on 12/4. (Young, CA) USSR, Yuzno-Sakhalinsk 0943 w/female voices in RR. Terrible QRM from beacon stn "GWF" 12/4. (Young,CA) USSR, Svobodnyy 12/1 fair thru splat 0921, however im-584 proved immensely 1035, when 647 // was also booming in. Fair thru slop 12/4 1304. Sporadic audio 12/7 around 0930-1030. (Kaskey, CA) USSR, Iman, 11/30 fair-good 0915-0925; 12/1 poor-fair 647 1024 but up for armchair level 1030 w/Kremlin Chimes. DOZA but up for armchair level 1030 w/Kremlin Chimes. Best ever hrd here. 12/7 good sig 0856 & up to good level again 0911. (Kaskey,CA) --- male & female good 12/3 w/ ID & IS 1200. (Manning,CA)
>
> ALASKA, Anchorage, KYAK, 12/1 w/ad for ski race in Anchorage & time as 12:28 at 1028. ID & into c/w mx. Then was swamped by USSR-647 until past 1035. First time I've IDed KYAK ever. (Kaskey,CA)
>
> N. KOREA, Pyongyang xint 1202 12/3 w/slight flutter w/opera, ID, pips, 3 short, one long, nice. (Manning,CA)
>
> ALASKA, Fairbanks, KFAR finally 12/7 w/rock till 0900 then clear ID. Time 11 pm & more rr. KNBR slop as usual. 1st time hrd this season. (Kaskey,CA)
>
> UNID, 1205 12/3 in lang, weak but solid here, not 650 655 660 UNID, 1205 12/3 in lang, weak but solid here, not quite enuf for ID to anything. TP for sure. (Manning, CA) (90% certain this was HLKA. bp) 707 S. KOREA, Seoul, HLKA w/pips 1300 12/h.(...)(Kaskey,CA)
> N. KOREA, Najin o/u WBAP 12/5 132h //877. (Kaskey,CA)
> CHINA, Nanchang, male clear in CC. Thanks to the Autek for notching the 1 kHz tone. 12/3 1211. (Manning)
> USSR, Spassk Dalniy w/chimes 12/5 1329 o/JOQK.(Kaskey)
> JAPAN, Niigata, JOQK w/pips thru WHAS 12/7 0800. Audio 708 820 835 8110 poor but pips boomed thru easily. (Kaskey,CA)
>
> N. KOREA, Wonsan usual loud female in KK 1215 12/3.
>
> (Manning,CA) --- one of the earliest TPs to arrive.
>
> 11/30 0830 & 12/7 0805. Usual pgmming. (Kaskey,CA)
>
> S. KOREA, Taejon, HLKI atop 12/2 1500 w/pips, 3 low &
>
> 1 high. Strangely emit KRVN was still audible in E/M 840 877 880

1130 also. (Kaskey,CA) CHINA/UNID, 12/7 noted 2 TPs 0925 in KDKA null. Strong-1020 est was playing c1 mx, the other w/talk. Sig quite good at times. At 1000 stn atop at the time was CC w/5 low, 1 hi 11 sec pip sequence, the other seemed to have a 2 or 3 note IS or pip, but covered by CC. From 1000-1045 only CC hrd & noted //835. 1045-1100 sigs were much poorer w/little discernable. Pips surfaced 1100 were 2 low & 1 long hi. This not the same stn that was hrd 1000-1005, but may have been the secondary stn 0930-1000. At 1112 only KDKA audible on freq. 1137 TP there weakly but not //835. My theory: 0925-

Strangely enuf KRVN was still audible in E/W

JAPAN, Osaka, JONR atop 12/1 1002, men talking, gongs gonging & MoR mx in JJ. Noted in passing 12/7 0900-

Thigh. Strangely enuf KI beam of SM-2. (Kaskey,CA)

1010

1000 dominant stn w/5&l pips 1000 & //835 was Changchun carrying CC 1st pgm. Fujien Front BC not likely because neither 835 or 880 CC was more than estremely weak & 1020 was in well. 835 & 880 did not send much strength here until around 1115 when 1020 was almost completely out. Also, 1040 w/u WHO 0930-1100, yet 877, 647 & other northern stns were in well at the time. Also, could it me that MBC net in S. Korea IS using 2 low & 1 high pip nowadays? Had thot HLKY used 2&1 earlier this year & now here on 1020 at 1100. If so, HLAW likely. Will keep trying. (Kaskey,CA)(I hrd HLKY w/2&1 at 1100 one AM a couple months ago. bp)
CHINA, wherever, 11/29 C923 w/large chorus in some sort 1040 of chant w/oriental sounding insts. Lots of QRN. 0926 female ancr in CC. (Lobel,CA) female ancr in CC. (Lobel,CA)

JAPAN, Osaka, JOOR w/very strong sig 12/7 0950 mixing

w/Peking 0951 & xint sig 1005. (Kaskey,CA)

PHOENIX ISLANDS, Canton, WXLE 11/29 0935. This little

250 watt stn at around 1500 miles was really booming

in. Xint sig w/ID "This is the... Island, WXIE..."

Soft mxical variety. Rpt out. (Lobel.CA)

PHILIPPINES, Cebu City, DYIA, (see Cayman Islands-1555

Listing in Pan Am section.bp. (Kaskey,CA)

UNID, carrier here 0915 11/19 w/occasional talk in

Tanguage. (Manning.CA) 1210 1385 1555 1555 language. (Manning, CA)

## DOMESTIC INTERNATIONAL ROUNDUP

1180 FL, Marathon, VOA 11/22 1128 w/KCBQ off. Hrd S-10 sig w/Yankee Doodle, good ID & SS anmt giving freq & other details. (Lobel, CA) 1540 ON, Toronto, CHIN atop WPTR w/II talk 2135 12/1.

(Connelly, MA)

## CONTRIBUTORS

Mark Connelly, 52 Amsden St., Arlington, MA 02174 TRF, R-390A/URR, SM-2 Bob Curtis, 17 Cobbleview Dr., Colchester, Vr 05hl46 SP-600, Longwire

Richard Eckman, 134C Baird, 3700 Spruce St., Philadelphia19174 Don Kaskey, 386 Geary St., San Francisco, CA 9h102 HQ-1h0X, SM-2

Albert Lobel, 1051h Camanito Baywood, San Diego, CA 92126 DX-150, Sanserino loop

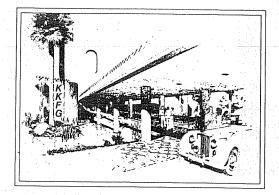
DX-150, Sanserino loop
Mike Maloney, 1500 S. Elm, Bartlesville, OK 7h003
MMR-22, 3' AM box loop
Grant Manning, 12536 Arabian Way, Poway, CA 9206h
Taesu FRG-7 w/Collins 3.1 mech filter, loop w/MOSFET preamp
Gene Martin, 3303 E. Evans Ave., Denver, CO 80210
HQ-180A, Box loop
Bruce Portzer, HO-180A CM C

Bruce Portzer, MQ-180A, SM-2
Charles Taylor, 936 N. Temple Ave., Indianapolis, IN 46201
R-390A/URR, 22.5 M LW, MCF-1 preset freq counter
Randy Tomer, Rte. 2, Box 1/7, Sonora, CA 95370

HQ-180A, Sanserino loop
Ted Wilson, 1001 S. Tamarack Dr., Apt 1, Fullerton, CA 92632
MN-26C, QF-1, 2 loops parallel in line
Jim Young, P.O. Box 576, Wrightwood, CA 92397

SPR-4, 200' longwire

That does it for another week. Watch for more of the same next week, plus an address change in a couple of weeks for ye DXWW editor. Only other news is a possible DX casualty; my Sony tape deck appears to have worn out its motor, a phenonemon which occurs every three years. That's not surprising, since DXers tape recorders tend to be to hi-hi equipment what New York taxicabs are to cars, hi. 73 & good DX. bp.



Charles Gill Box 84 Springville NY 14141

### Domestic Contest News & Standings:

	TP	DT	L	M	R
2. Breger(TX) 3. Young Jim(CA) 4. Larson(NE) 5. Morby(NY) 6. Wheeler(PA) 7. Young Karen(CA) 8. Oliphant(AB Canada) 9. Nittler(NE) 10.Hogan(IN) 11. Hardy Nancy(WA) 12. Eddie(MO) 13. Hardy Bill 14. Erickson(CA)	4535 2241 2122 1876 1838 1367 1274 675 624 243 27 0	62 551 226 226 220 223 00	61 13 29 86 518 26 25 67 21 0	00142620000000	0 109 15 115 79 82 0 0 0 5 9 0
15.Evans(MI)	0	0	0 .	0	0

Contest News: Subject Mystery Station Clues, 1. This station is considered in a Southern State, it recently had its call letters changed. 2. This station in Canada, has in its call letters how you might feel at a sporting event

### Foreign Contest

		$^{\mathrm{TP}}$	TS	MO
l.	Williams(OR)	245	5	1
2.	Oliphant(AB Canada)	175	2	1
3∙	Hogan(IND)	0	0	0
4.	Erickson(CA)	0	0	0
5.	Eddie(MO)	0	0	0

Key to Foreign Contest: TP== Total Points TS == Total Stations MC == Mystery Country

2-A -THE DETROIT NEWS-Wednesday, November 3, 1976

# A salute to WCAR news

I don't want to sound pompous about this, but at one time I was news director of an entire radio station. (You can't see it, but I'm blushing mod-

wGRI, in Griffin, Ga. I'm sure you've heard of it. We blasted out a whole 1,000 watts, daytime only When you walked across the street to Woolworth's for a cup of coffee at their lunch counter, you'left our coverage area. We were under strict instructions to keep the windows open and SPEAK VERY LOUDLY into the microphone. Picked up a lot of extra listeners that way going into the auto parts store downstairs.

I had two primary duties: rush off to every accident on US-19 (or was it 29?) and capture as many screams of agony as possible on my tape recorder for replay later to a morbidly fascinated audience of 15 or 20 people (drive time), and prepare newscasts by that time-honored tradition of ripping and reading.

I reluctantly moved on to better

reading.

I reluctantly moved on to better

I refuctantly moved on to better things one day about five minutes after the station manager went berserk dur-ing a newscast and demonstrated exactly how enriched his language had become during several years in the Navy. With his microphone very on. In a very Southern Baptist town.

### 24 hours of news

But I harbor fond memories. And I really do have an understanding of how demanding radio news can be. And that's why I find the presence of WCAR in the Detroit area so pleasing.

News is all those people do. Twenty-News is all those people do. Twenty-four hours a day, seven days a week, 50,000 watts of power booming out news, sports, entertainment, finance, features, interviews, weather and traf-fic conditions to more than eight million people in Michigan, Ohio and Canada.

Canada.

The all-news format is 10 months old now at WCAR, and it's time to declare it an unqualified success. Not only are ratings up more than 50 percent, but a new advertising rate card went into effect Monday with across-the-board increases.

The station is an affiliate of NIS — News and Information Service — a project dreamed up two years ago by

NBC Radio president Jack Thayer. The idea of providing around-the-clock news coverage was a natural for NBC, which has the largest news-gathering ctaff in the world staff in the world.

Thayer tested his idea at WRC, NBC's outlet in Washington, and then made it available nationwide. Right now there are 770 affiliates on the NIS network, and insiders say there might be 1.000 by the end of the year.

"We just signed a two-year contract with NBC, and we have options to renew it forever," Bruce Houston, WCAR's new station manager, told me rather complacently. "It's the most expensive format conceivable to operate, but it's worth it."

A good portion of the expense came from doubling the staff to some 40 people, most of them full time. And most, because of the nature of the format, are better educated than the average radio employe who spins records for a

### An impressive background

Beth Konrad, the news director, has impeccable credentials. She's been in broadcasting since age 17, has a master's degree, and worked locally in Detroit before signing on with ABC and becoming news director of their Chicago FM outlet. When NIS cranked up, Beth was hired for its San Francisco station. In less than nine months her voice had become familiar to a nationwide NIS audience as she covered the Patty Hearst case, the Zebra murder trial and the Chowchilla kidnaping. Now she's here, with a lot of experience, and even more enthusis. Beth Konrad, the news director, has

Now she's here, with a lot of experience, and even more enthusi-

experience, and even more enthusiasm.

"News has never been as important as it is today," she told me. "It's imperative that people listen to the news. That's why this station is gonna go like gangbusters. We've got the right format, the right staff... this thing is just gonna skyrocket."

It is a good staff. The network will revide pretrief to the staff.

It is a good statt. The network will provide material to cover as many as 50 minutes in any given hour, but WCAR doesn't use that much because its own staff has too much to contrib-

Detroit, Beth Konrad says, is a helluva news town. I agree, and I'm happy WCAR is doing a helluva job covering it.

Reprinted from the August 1976 BM/E, with permission. Submitted by Eric Norberg.

## A Proposal To Improve Radio Coverage in The U.S.:

# **High-Power Stations At Low-Frequency**By Paul H. Lee

Following a study which showed large areas of the western U.S. with very poor radio broadcast service, the FCC has opened an inquiry to seek ways of improving coverage: Put more stations on the clear channels? Let the "clears" raise power to 100kW or 1 megawatt? The author of this article argues for another plan—a series of very-high-power stations on the unused 150 to 285 KHz band.

The reopening of the Clear Channel Proceedings by the Federal Communications Commission has caused much interest and speculation among broadcasters, especially among the clear channel broadcasters, who have much at stake. Should the remaining twelve unduplicated clear channels, which the FCC has protected from encroachment for over a decade, be "diluted" by assignment of Class IB or Class II stations thereon, to provide coverage for areas which do not now have it? Or should these channels remain unduplicated, with the Class IA stations thereon being permitted to go to "super-power" of 500 or 1000 kW? What role can FM play in providing coverage to areas of the United States now lacking in coverage?

economic aspects, and will concentrate on the engineering aspects of providing improved aural service to this country.

Recently, the FCC, as part of its study of radio coverage, has thoughtfully provided maps of existing FM coverage of the United States. One map shows the 1 mV/m areas, and the other shows the 50 uV/m areas. Both maps show very clearly what we here in the western states know, that the eastern states are quite saturated with FM coverage, whereas the states west of the Mississippi River are very lacking in FM coverage. There are vast areas of plains, prairies and mountains with few cities and towns of sufficient size to support a radio station commercially, so FM is not the answer to this problem. Yet people live in these areas and they deserve

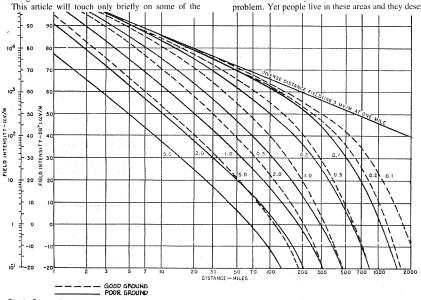


Fig. 1. Curves show the great advantage of the band below 285 KHz over the present broadcast band in groundwave coverage, over good ground (broken lines), and over poor ground (solid lines). For example, at 1000 kW, at 200 KHz the 0.5 mV/m ground-wave contour is 730 miles from the transmitter; at 1000 KHz it is only 190 miles out, over good ground. The corresponding figures over poor ground are 315 miles and 82 miles.

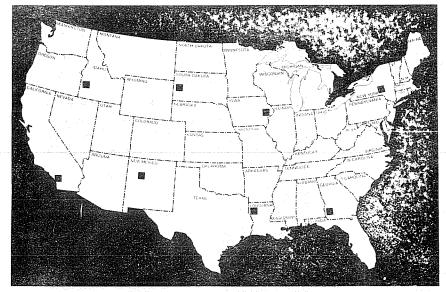


Fig. 2. Map shows how eight strategically-placed high-power stations on the LF band could provide service to the entire United States.

to have coverage.

Nor is local nor regional AM the answer. Such stations must be limited in service area, especially at night to avoid interference with distant co-channel stations. Further, a tabulation of the AM Clear Channel stations makes it obvious that their distribution is very inequitable. Only KFI, Los Angeles and KSL, Salt Lake City, among the "clears" can be classed as western stations. All the rest are in the east or the midwest. Thus there are vast areas of the west without adequate AM service, especially at night.

Is the best approach to this problem raising the power of the twelve Class IA stations, of which KFI and KSL are two, or is there a more sound engineering approach which will provide improved AM service to the entire country?

I believe there is a much more effective and practical solution to the problem. There is a forgotten portion of the frequency spectrum, from 150 to 285 KHz, which is used in Europe, ITU Region I, for high power broadcasting. In this hemisphere, ITU Region II, this portion of the spectrum is allocated to the fixed services. Listening in this band will show some use by the military, by beacons, and by the old-time A-N radio range stations. The need for the latter is greatly diminishing due to increased use of VHF by the airways.

This low frequency band (LF) has a great advantage for high power AM broadcasting because of the greatly diminished effect of ground conductivity on ground wave propagation. Many broadcast engineers are aware of the advantage of a 550 KHz frequency vs one of 1600 KHz. The FCC's ground wave curves in Section 73.184 of the Rules show this very dramatically. What they do not show, and what may not be known to many broadcast engineers, is the even more dramatic effect of going even lower in frequency, down to 150 to 285 KHz.

Figure 1 shows this effect clearly. These

Figure 1 shows this effect clearly. These curves are taken from a Signal Corps publication which has been in existence for many years (unclassified), TM11-499, "Radio Propagation." They are based on the same basic formulae by Norton as are the FCC's curves. They show ground wave field intensity vs distance for various frequencies. For greater ease in use they are based on an unattenuated field at one mile of 186.3 mV/m for 1 kW. For a power other than 1 kW, it is only necessary to add or subtract the required number of DB relative of 1 kW, on the left hand scale, to find the resultant field intensity.

To illustrate, assume kW radiated power over good

To illustrate, assume kW radiated power over good ground, and note that at 200 KHz the 0.5 mV/m ground wave contour will fall at 200 miles from the transmitter, whereas at 1000 KHz it will fall far short at only 53 miles! Over poor ground the difference is even more drastic, with the 0.5 mV/m contour at 200 KHz falling at 82 miles, whereas at 1000 KHz it falls short at only 16 miles!

If power is increased to 1000 kW, at 200 KHz the 0.5 mV/m contour will fall at 730 miles over good ground, whereas at 1000 KHz it will fall at only 190 miles. Over poor ground, at 200 KHz it will fall at 315 miles, whereas at 1000 KHz it will fall far short at only 82 miles. If a taller tower than one-quarter wave were used, with a higher radiated field, the results would be ever better. Does anyone need further proof that this LF bant is the place for super-power broadcasting? To increast the power of the present Class IA stations in the existing MF band would be very wasteful of power and facilities, for it would not provide the national coverage of which a group of super-power stations should be capable, but would only serve to make an existing interference situation worse.

Fig. 2 shows how eight strategically located superpower LF stations could cover the entire United States with non-fading signals. This is not a new concept, by any means. Research in the old *Proceedings of the IRE* turned up an article by W.H. Wenstrom in June 1931, in which he discussed the advantages and disadvantages of LF vs MF high power broadcasting, and showed clearly how LF is the answer. He proposed a group of seven stations, for national, non-fading coverage. Why nothing ever developed from this concept in those days we can only guess, but those knowledgeable in the frequency allocation field have suggested that it was due to pressure by the aviation interests who at that time were pushing for the LF A-N radio ranges, inasmuch as VHF had not yet come into being, for aviation uses.

Implementation of this concept would require that the FCC initiate action by the United States government to obtain action at the forthcoming World Administrative Radio Conference in 1979 to have the 150 to 285 KHz spectrum allocated for broadcasting in Region II. This would be a very desirable action from the standpoint of the clear channel broadcasters.

One may ask what types of antennas would be required. In these days of tall towers for TV broadcasting, tower height is not so great a factor as in former years. Towers of 1500 or 2000 feet are fairly commonplace. Fig. 3 shows tower heights in feet vs frequency in KHz over the band in question. Past studies and research have shown that the height of 0.54 wavetength is the optimum for minimum ground wave vs nighttime skywave fading. Also, it is quite commonplace to use top-

loading to allow the use of shorter towers with reasonable efficiency.

A good example of this approach is the Voice of America's 1000 kW station at Munich, Germany on 173 KHz. (cochannel with Radio Moscow). This powerful station uses a tower 837 feet high, top-loaded by twelve 512 foot cables which make an angle of 55° with the tower. On 173 KHz the measured base impedance of this radiator is 29.5 + j135 ohms. The unattenuated field at one mile is 178.9 mv/m. This is not an unreasonable height for an antenna at this frequency. The ground system consist of 360 radials that extend out to ½ wavelength, with 180 of them extending out to ½ wavelength, and the statement of this installation can be found in the *Proceedings of the IRE* for August 1954, pages 1222 through 1235. Figure 4 shows antenna dimensions vs frequency.

There is also an antenna called the "NORD," used by

There is also an antenna called the "NORD," used by the U.S. Navy for multi-channel RTTY fleet broadcast at LF. It is basically a folded unipole, with three top-loading guys which are tuned to ground at their far ends. By adjustment of the guy tuning the required bandwidth can be obtained with the use of a tower of approximately & wavelength. This approach eliminates the base loading coil or helix, which is always a source of high voltage problems in a high power LF installation. The input impedance of the NORD, due to its folded feed, is inductive (R + jX), and it can be matched to the transmission line with vacuum capacitors. Guy insulation

problems are diminished also.

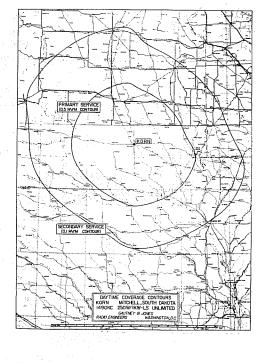
The transmitting plants of super-power stations produce tremendous field intensities close in to the site. For this reason, these plants require location in rural areas away from population centers to avoid environmental problems. Without actually visiting the existing plants of clear channel stations, one can nevertheless be fairly sure that many of them have been subject to residential or industrial encroachment in the years since they were built, and are not now suitably located for conversion to 500 kW or 1000 kW operation. Thus, new plants would be required, and they might as well be built for LF transmission as for MF transmission.

Existing Class IA stations could be converted to Class IB's with channels being dualized to reside living themselved.

Existing Class IA stations could be converted to Class IB's with channels being duplicated to provide limited regional coverage in areas now lacking. But a more sound means engineering-wise for providing national coverage would be the use of LF as outlined here. In the band 150 to 285 KHz 13 channels with 10 KHz spacing could be provided. If 9 KHz spacing like that in Europe were used, 15 channels could be provided. The United States could use 8 of them, with the remainder being allocated by international agreement to Canada, Mexico, and other western hemisphere countries.

This LF approach to super-power broadcasting is one which merits serious consideration by the clear channel broadcasters, and one which should be pursued by the FCC through I.R.A.C. to the next world ITU conference.

BM/E



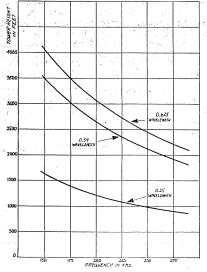


Fig. 3. Antenna heights for frequencies in the LF band, using standard 0.25 wavelength to 0.625 wavelength designs (see story).

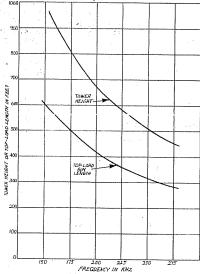
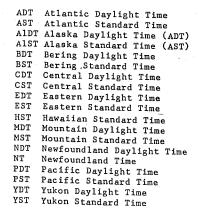


Fig. 4: Antenna heights for frequencies in the LF band, using special antenna design of the VOA in Munich, which has top loading to reduce height (see story).



## GMT CONVERSION CHART

For the use of all members, the following chart of all time zones in North America is reprinted from the Foreign Log Volume 5.

		1 5	The Control of the				the second second			HST	
GMT	(NDT)	(ADT)	NT	AST (EDT)	EST (CDT)	CST (MDT)	MST (PDT)	PST (YDT)	YST (Aldt)	Alst (BDT)	BST
0000 0100 0200 0300 0400 0500	2130 2230 2330 0030 0130 0230	2100 2200 2300 0000 0100 0200	2030 2130 2230 2330 0030 0130	2000 2100 2200 2300 0000 0100	1900 2000 2100 2200 2300 0000	1800 1900 2000 2100 2200 2300	1700 1800 1900 2000 2100 2200	1600 1700 1800 1900 2000 2100	1500 1600 1700 1800 1900 2000	1400 1500 1600 1700 1800 1900	1300 1400 1500 1600 1700 1800
0600 0700 0800 0900 1000	0330 0430 0530 0630 0730 0830	0300 0400 0500 0600 0700 0800	0230 0330 0430 0530 0630 0730	0200 0300 0400 0500 0600 0700	0100 0200 0300 0400 0500 0600	0000 0100 0200 0300 0400 0500	2300 0000 0100 0200 0300 0400	2200 2300 0000 0100 0200 0300	2100 2200 2300 0000 0100 0200	2000 2100 2200 2300 0000 0100	1900 2000 2100 2200 2300
1200 1300 1400 1500 1600 1700	0930 1030 1130 1230 1330 1430	0900 1000 1100 1200 1300 1400	0830 0930 1030 1130 1230 1330	0800 0900 1000 1100 1200	0700 0800 0900 1000 1100	0600 0700 0800 0900 1000	0500 0600 0700 0800 0900 1000	0400 0500 0600 0700 0800 0900	0300 0400 0500 0600 0700 0800	0200 0300 0400 0500 0600 0700	0100 0200 0300 0400 0500 0600
1800 1900 2000 2100 2200 2300 2400	1530 1630 1730 1830 1930 2030 2130	1500 1600 1700 1800 1900 2000 2100	1430 1530 1630 1730 1830 1930 2030	1400 1500 1600 1700 1800 1900 2000	1300 1400 1500 1600 1700 1800 1900	1200 1300 1400 1500 1600 1700 1800	1100 1200 1300 1400 1500 1600 1700	1000 1100 1200 1300 1400 1500 1600	0900 1000 1100 1200 1300 1400	0800 0900 1000 1100 1200 1300 1400	0700 0800 0900 1000 1100 1200 1300

A SASE IS A MUST IF YOU EXPECT A REPLY FROM YOUR EDITOR!

EDITOR: ALBERT S. LOBEL DEADLINES: WEDNESDAYS. PREPAID CALLS ONLY
DEADLINES ARE TUESDAY 'TILL 1 JAN 77. DUE TO USPS DELAYS.

10514 CAMINITO BAYWOOD SAN DIEGO CA USA 92126

PHONE: (714) 566-0092 HOURS: 1830 - 2115 + MM's 2115 - 0600 PLT,

Your editor has found a source to obtain a copy of the broadcast "The East is Red".

I have some station program guides I would like to trade to anyone for station bumper stickers, antenna topper, station posters, All guides are from the following FM stations: WNIU, WGH, WUOT, WDCS. I have only one each so first come first served.

FRANK ADEN JR., 1535 NW ITHACA AVENUE, BEND OR 97701

## WANTED

Copies of DX Monitor Vol. 14,  $\#^{1}$ s 4 and 5. MIRE SANBORN,  $5042\frac{1}{2}$  HAYTER STREET, LAKEWOOD CA 90712

## Säle! 超級

Realistic DX160 receiver and speaker with manual. Shipped w/ original carton. Mint condition. \$135 postpaid. GRAHAM JOHNSON, 10830 SACRAMENTO DRIVE S.W., CALGARY AB CANADA T2W OJ2

Star Roamer - Knight Kit. Has broken bandspread but is still a good receiver. Will go to first person sending me the shiping costs.

CHARLES GEORGE, 6407 HOWARD, DALLAS TX 75227; PHONE: (214) 381-5931, till 2300 CST

page 160 December 18, 1976

THE INTERNATIONAL RADIO CLUB OF AMERICA, INC.

A non-profit club devoted to listening to distant radio stations on the broadcast band (510 to 1630 khz). IRCA is a member of ANARC, the Association of North American Radio Clubs.

OFFICERS: President - Richard C. Evans, Box 392, New Buffalo, MI 49117 (616-469-3866). Secretary-Treasurer -H. John Clements. Board of Directors - Robert L. Foxworth, Nancy Hardy, Grant Manning, Father Jack Pejza, Bruce Portzer, Ronald F. Schatz, and John Zondlo.

DX MONITOR: The official bulletin of IRCA, published 34 times a year; weekly from November to March, 3 times in October, 2 times in April, May, and September, and monthly in June, July, and August.

MEMBERSHIP DUES: \$12.00 First Class to Canada and the U.S.A., Air Mail to Mexico. \$13.50 Air Mail to the rest of the world via Canada. Air Mail direct from Seattle: \$25.00 to Central America, Caribbean, Colombia and Venezuela; \$30.00 to the rest of the world. Sample copies, 50¢ or 3 International Reply Coupons. Make all checks and money orders payable to "I.R.C.A." Members outside the U.S.A., please use money orders payable in U.S. funds.

Editor - in - Chief - Michael G. Worst PUBLISHING STAFF: (206-776-5996), Publisher - Phil Bytheway (206-525-8736); Nick Hall-Patch, Gary Kayser, Tim and Sue O'Hare, Jon Orren, Bruce and Evelyn Portzer.

Permission is granted to publish, broadcast, or otherwise reproduce any of the material in DX MONITOR (except for items which acknowledge that they appear by permission from other sources, or material that is copyrighted), provided credit is given to DX MONITOR and the author or contributor if listed.

Opinions appearing in DX FORUMS are those of the contributors and do not necessarily reflect those of IRCA, the publishing staff, or the DX FORUM editors.

DX MONITOR is printed by Save-On Printing, Seattle, Wash.

```
IRCA FOREIGN LOGS:
                          $3.50 ($3.75 to non-members)
Vol. 3 (1973-74 season)
Vol. 4 (1974-75 season)
                          $4.00
$4.00
                                 ($4.25 to non-members)
                                 ($4.25 to non-members)
Vol. 5 (1975-76 season)
                          $6.50
                                 ($7.00 to non-members)
Vol's. 3 and 4
                          $7.00
                                 ($7.50 to non-members)
Vol's. 4 and 5
                         $10.00 ($10.50 to non-members)
Vol's. 3, 4 and 5
```

IRCA Rubber Stamp with the IRCA emblem, \$3.00 postpaid.

Red and black IRCA stationery is available for \$3.00 per 100 sheets, postpaid.

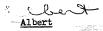
Entire Volume 13 for \$12.00 postpaid by 3rd class mail. Only two sets left. Back issues, 45c each, postpaid.

I.R.C.A., P.O. Box 21462, Seattle, WA 98111

The deadlines still remain at Wednesdays with the following exceptions: DUE TO THE RUSH OF CHRISTMAS MAIL AROUND THIS TIME, YOUR EDITOR IS ANTICIPATING THE POSSIBLE DELAY OF THE ADVISOR CETTING TO HO'S. THEREFORE, THE DEADLINES FOR THE ISSUES REMAINING IN THE CALENDER YEAR WILL BE TUESDAYS. THE WEDNESDAY DEADLINE WILL RESUME WITH THE FIRST ISSUE OF 1977.

Continueing my efforts to cut down on postage costs, I do not plan on sending out any Christmas, New Years, or Hannukkah Cards. Allow me to wish all of you a Merry Christmas or Happy Hannukkah (whichever applies) and a Happy New Near; early. May the year of 1977 bring you much happiness and DX!

73's and good DX 'till next time,



Urc 18 7 + PH w 1976 P.O. BOX 21462 SEATTLE, WA 98111 U.S.A.



# First Class

Dave Williams Box 615, Hay. 101. 97103 Astoria, OR