

PUBLISHED BY THE INTERNATIONAL RADIO CLUB OF AMERICA

DECEMBER 22, 1973 VOLUME 11, NUMBER 13

DX CALENDAR

Mon.	JAN. 7	0100-0530	KBUC	1310	SAN ANTONIO, TX 5KW [
		0300-0330	KPCA	1580	MARKED TREE, AR. 25kw
MON.	JAN. 14	0200-	WDLC	- 680	ESCANABA, MI 10/1kw L
		0600-0800	WKRT	920	CORTLAND, NY 1kw L
Mon.	JAN. 21	0100-0200	WCSH	970	PORTLAND, ME 5kw U2
		0300-0400	KABQ	1350	ALBUQUERQUE, NM5/.5KWU2
Мои.	JAN. 28	0330~	KFAY	1250	FAYETTEVILLE, AR 1KW D1
		0400-0500	KCRA	1320	SACRAMENTO, CA5/1kw U4
		0515-0545	WTSO	1070	Madison, WI 10/5kw U4
THUR	s.Jan.31	0645-0700	KBTC	1250	Houston, MO 1kw D1
Mon.	FEB.11	0200-	WHIS	1440	BLUEFIELD,WV 5/.5kw U1
WED.	FEB.13	0545-0600	KLYR	1360	CLARKSVILLE, AR . 5kw D1
Mon.	FEB.18	0130-0330		1505	THE VALLEY, ANGUILLA
					.5ĸw
Sun.	FEB.24	0230-0300	KGVO	1290	Missoula, MT 5kw U3

KBUC TEST WILL CONSIST OF 30/50/100/400/1000/5000/7500/10,000 HZ TONES, WITH DIFFERENT MODULATIONS, C&W MUSIC, AND MANY IDS. PROGRAM
WILL TEST MAIN TRANSMITTER AS WELL AS THE 500 WATT PSA POWER. REPORTS GO TO HOWARD E. HETTINGER, KBUC, Box 20267, SAN ANTONIO, TX
78220. ARRANGED BY ARTIS PLOYER FOR 1000 78220. ARRANGED BY ARTIE BIGLEY FOR IRCA.

KPCA -- Skip Dabelstein, who arranged the test for NRC, will suggest TO THE STATION THAT THE TEST CONSIST OF A SERIES OF ONE MINUTE TTS, C&W MUSIC, AND CODE IDS. V/S IS DALE SANDERS, KPCA, BOX 550, MARK D TREE, AR 72365. HE IS QUITE ENTHUSIASTIC ABOUT THE TEST, SO GIVE IT A TRY.

WDLC --- NO PROGRAM DATA, BUT 10 KW WILL BE USED. WRITE ROBERT HASLOW, WDBC RADIO, P.O. Box 419, ESCANABA, MI 49829. ARRANGED BY EUGENE VONDEREMBSE FOR NNRC.

CPC REPORTS AND FLASH TIPS

KIWA WAS ON ACCORDING TO BILL CONNOLLY. KTUF WAS NOT HEARD BY BILL SINCE KOA'S CARRIER WAS STILL ON. CHARLEY KELLEHER REPORTS A STATION IDING AS "THE ALL NEW KXXO" WAS HEARD ON 1300 KHZ FROM 0217-0245 EST 12/10, WITH LIGHT POP MUSIC; DIRECTION SEEMED TO BE TEXAS OR MISSOURI. THE TOWER OF KIFG-1510 COLLAPSED DURING A SNOWSTORM 12/4, ACCORDING TO KEITH MEHL. KSMK-1340 IS STILL USING THESE CALLS, CONTRARY TO FCC INFO RECENTLY. CJC1-620 RELAY NOTED on 1340 recently, using calls of $\underline{\text{CJP1}}$, per Bruce Portzer, who also notes that $\underline{\text{CHPQ}}$ -1370 is now on the air, mostly parallel to CHUB-1570, APPARENTLY NSP. BRUCE HEARD THE KIWA-1550 SPECIAL WITH FAIR SIGNALS, ON PAST 0330 EST. CHPQ IS IN VANDERHOOF, B.C.

ACCORDING TO NEWS REPORTS, CONGRESS HAS PASSED A BILL, WHICH HAS BEEN SIGNED BY PRES. NIXON, AUTHORIZING DAYLIGHT SAVING TIME. IT WILL GO INTO EFFECT ON JAN. 6. PAUL DAPLYN SAYS ONTARIO WILL PROBAG-LY FAVOR DST FOR ECONOMIC (I.E., TRADE WITH US) REASONS RATHER THAN ENERGY REASONS. ALL REPORTS TO DX ROUNDUPS SHOULD BE IN EASTERN DAYLIGHT TIME. THERE MIGHT BE SOME CONFUSION, SINCE CANADA AND POSSIBLY SOME STATES WILL STILL BE ON STANDARD TIME.

DEC 22

PM

THE INTERNATIONAL RADIO CLUB OF AMERICA-- A NON-PROFIT CLUB DEVOTED TO LISTENING TO DISTANT RADIO STATIONS ON THE BROADCAST BAND (540-1600 KHZ). IRCA IS A MEMBER OF THE ASSOCIATION OF NORTH AMERICAN RADIO CLUBS (ANARC), DEDICATED TO PROMOTING COOPERATION BETWEEN THE RADIO CLUBS IN NORTH AMERICA.

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Address correction requested







EXP 4/6/74 V12N28 MICHAEL G. WORST 3608 PHINNEY NORTH SEATTLE, WA 98103

FIRST CLASS

DX ROUNDUPS

EASTERN	2) 1360 WCHL NC CHAPEL HILL; This one was dominant w/
Editor: Mike Mitock, 975 Osborn Ave., Lorain, OH 44052 DEADLINES: Tuesday	WDRC off MM 12/3, also two other domestics which were unID, and an unID LA. All
* * * * * * * * * * * * * * * * * * *	around 0300. (JMP)
OF SPECIAL INTEREST:	1370 WDEA ME ELLSWORTH; Running nx 0530-37 12/2, o/u/w/WSPD for first time on RS. (JMP)
1550 *WSHN* MI FREMONT; r/c 0109 to 0130 12/1 w/MoR and 1 kHz TT's. I believe they always	WFDR GA MANCHESTER; Very good w/no QRM w/s/off 1729 11/25. New, and plugging the FM
use the vocal selection "Say Auf Wied- erseh'n" prior to TT's. They don't	on 93.3 (JMP)
use "The Baby Food Capitol of the World"	WLOP GA <u>JESSUP</u> ; Good w/minor QRM 1730 11/26. Plugging 105.5 FM, s/off w/no SSB. (JMP)
in their final ID anymore. (PRD)	1390 WCSC SC CHARLESTON; w/CBS nx at 0130 11/18.
560 WFIL PA PHILIDELPHIA; in w/WMCA slop @ 2117	1440 WGIG GA <u>BRUNSWICK</u> ; Xlnt w/ "Wonder Rock" ID 1801 11/25. General rr format. (JMP)
11/18 w/ "Bill" and ID "FL Radio". 590 KHAR AK ANCHORAGE; mixed w/CKRS w/rr mx, "The	1460 WRAD VA RADFORD; Religious prgms @ 2214 11/17, and ID.
Letter" & Elvis Presley 11/18 @ 0135. Much Flutter. CKRS put in a good ID	1480 WLEA NY HORNELL; strong w/s/on just before
at 0140.	WBLU 0600 12/2. Little QRM. (JMP) 1500 WDEE MI <u>DETROIT</u> ; Heard w/ much WTOP QRM at
600 WPDQ FL <u>JACKSONVILLE</u> ; w/ mx and ID at 0151, 11/18. Much flutter.	2200 11/17. MoR mx.
610 KFRC CA <u>SAN FRANCISCO</u> ; w/rr mx and much flutter	1500 *WDEN* GA <u>MACON</u> ; Along 11/26 w/ET-rr. (JMP) 1510 *WMEX* MA <u>BOSTON</u> ; Strong w/ET-OC 0123 11/26. (JMP)
u/WIP @ 0201WIOD not heard. 11/18. 630 WPRO RI <u>PROVIDENCE</u> ; mixed w/WMAL. Gave phone	1540 CHIN ON <u>TORONTO</u> ; Good in mess w/mx in FF, SID in EE, 1630-1640. (PRM) (Date?mrm)
# as $241-6161$. WMAL had MoR mx. $0210 \ 11/18$.	KXEL IA WATERLOO; DX is back as this dominates
790 WTAR VA <u>NORFOLK</u> ; in w/MoR mx at 0220 11/18.	o/WPTR nightly. (PRM) WRGM VA <u>RICHMOND</u> ; 12/1, w/rr mx, advertising
800 CHRC PQ QUEBEC; Vry good w/FF MoR in null of CKLW 12/3 0148. (JMP)	movie "American Graffiti". 1750+ o/
++u/CKLW w/fast talks at 0225 w/fair cx.	WPTR w/good sig. New. (TRS) 1550 *WEXT* CT W. HARTFORD; Good w/ET 0159 12/1.
820 WBAP TX <u>FORT WORTH;</u> w/WGY slop at 2202 w/ religious prgms 11/18.	OC & voice ID's. Good verifier. CE is John G. Eppler. (PRD)
850 *WYDE* AL BIRMINGHAM; ET-OC 0150 12/3. Atop channel w/ ID. (JMP)	@ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @ @
880 WCBS NY <u>NEW YORK; off 0130-0430 12/2 to replace</u>	THIS WEEKS R/C's: 4th MM: KAMA-1060 (PRD) WTON-1240 (JMP)
auxiliary guy wires. S/on ancmnt 0429 12/2. (PRM)	1st Sat; WSHN-1550 (PRD)
KRVNNE <u>LEXINGTON</u> ; 12/3, on spur-of-the-moment NRC DX test via Bob Foxworth notifying	A BIG THANKS TO:
KRVN of WCBS' quarterly SP, noted t/in	(JMP) - Jim Poterba, Yardley PA 19067 (TRS) - Thomas R. Sundstrom, Willingboro, NJ 08046
0233 w/end of ID, into TT, another ID indicating w/50 kw into ND antenna @	-Richard K. Shaftan, N. Y.C., NY 10010
0246 t/out. Monster signal but audio	(PRD)-Paul Daplyn, Ottawa, ON K2A 2N5 (PRM)-Paul Mount, Teaneck, NJ 07666
920 WMEL FL MELBOURNE; in briefly 0234 11/25 w/rr.	+ + + + + + + + + + + + + + + + + + +
Surfaced again 0330 then buried u/QRM. Think DJ's name was Rick Art. (PRD)	and with the coming new Year, let's all hope that one day,
WGST GA ATLANTA; Poor 0254 w/rr 11/25. (PRD)	there will truly be, Peace on Earth: NOTE: Effective with appropriate legislation, times in
930 WJAX FL <u>JACKSONVILLE</u> ; 12/1 atop freq 0050+ w/ "mood" mx thru 0100 ID, into NBC nx,	this column will be $EDST$ Continue to use EST untill
while looking for KWOC (MO) NNRC DX, which, if on, not hrd. (TRS)	the time change is official! ! . 73, and Happy Holidays!
970 *WWDJ* NJ HACKENSACK; ET-TT-OC. Off 0000-0500	CENTRAL Richard C. Evans
12/2 (PRM) 980 WKLM NC <u>WILMINGTON</u> ; Quite good w/s/off 1700	UENITAL Box 2048, Gary, Indiana 46409
12/3No SSB, just o/WRC/WILK. (JMP)	OF SPECIAL INTEREST:
1010 WINS NY <u>NEW YORK</u> ; noted off 0430 12/2. (PRM) 1050 WHN NY <u>NEW YORK</u> ; noted off 12/2 @0430. (PRM)	580 WKTY WI <u>LaCrosse</u> , has dropped AN. S/off 0300, 0100 MM. (GBS)
1060 *KAMA* TX <u>EL PASO</u> ; r/c 0200 11/26 weak w/400 Hz TT's and Voice ID's. (PRD)	740 CBNM NFLD Marystown, seems in most MM 0430
1070 *WFLI* TN LOOKOUT MOUNTAIN; ET-OC 0300 11/26 way	<pre>s/on O Canada, why no WC reports of this? (GBS)</pre>
atop channel. (JMP) 1090 KAAY AR <u>LITTLE ROCK;</u> u/WBAL w/MoR mx at 2227	950 KRSI MN St. Louis Park, Drake C&W is NSP except OC tests some MM's. (GBS)
on 11/18.	1070 WTSO WI Madison, former 0300 s/off now
and ON 12/3 (MM) What gives here? (JMP)	AN, think SP MM. (GBS) 1260 WNDE IN <u>Indianapolis</u> , former AN-6 now NSP,
1230**WBVP**PA <u>BEAVER FALLS</u> ; Fair on DX TEST w/ID's breaking thru 0207 and 0215 in 0200	<pre>w/teletalk MM & RR other times. ID "Windy in Indy". Great Nx as</pre>
0220 monitoring period; like during	only double local strength
WCRO test, local WEEX decided to run ET-OCthis 12/3. (JMP)	here. (GBS) 1270 WWCA IN <u>Gary</u> , MM SP now 0250 or 255 til
++12/3 w/ID for ET on NNRC DX noted 0208, 0214, 0218, t/out. At times sitting	$\overline{0630}$, bad Nx for KTFI 0210 s/off
atop freq, good sig & much better than	chasers. (GBS) (I hrd SSB 0250 a couple of weeks ago. Shouldn't
WCRO from a few weeks ago. Didn't answer phone when called. New. (TRS)	bother anyone who's not north of Chicago, as pattern is figure 8
1260 *WBUD* NJ TRENTON; ET-OC 0408 12/1 killed the channel. (JMP)	NW-SE pattern. 5 miles east of
1280 WYVE VA WYTHEVILLE; Fair o/u/ WADO mess w/	where I live, WWCA is hard to hear at night, yet towers are 1½ miles
s/off 1716 11/19; No SSB. (JMP) 1350 WORK PA <u>YORK</u> ; w/ music and ad for "Treasure	SE of my padrce)
shop" @ 0107 11/18. (Mmmm, seems this	540 WYLO WI <u>Jackson</u> , poor w/C&W 1550 11/21(AWO)
became WZIX back on 10/28(\cdot\mrm) WZIX PA <u>YORK;</u> Managed to get rpt for this one	560 WQTE MI Monroe, fair w/beautiful Mx 1607 11/20. (AWO)
for call change before pattern change 1633-1640 12/2 u/WHWH local. (JMP)	570 WMCA NY New York, Long John Nebel w/spot
a series and the series and the series are series are series and the series are series	for Empire Ford in Mt. Vernon.

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			DECEMBER O () 1000
)			DECEMBER 22, 1973
			WGAR. (JA) "R. S. Manitoba"ID
	KRMC	οĸ	0420 12/1 o/XEB (BN) Midwest City, poor w/XEB/WGAR &
			1210/1230 splash, ment. "KRMC
			Radio" & no more heard (s/off?) 1828 11/14. (GBS)
	KZEE	ТX	Weatherford, fair w/buzz w/s/off
			ment. (still) 250 watts 1828 11/1. (GBS)
123	30 WBOK	LA	New Orleans, 11/27 2135-2136 poor
			to fair (occ.) w/singing ID and Tammy Tyrell's "Come on and see
			me". Soul Mx. (JA)
	WCUZ	IM	Grand Rapids, mostly o/QRM w/C&W 0610 11/3. (GBS)
12	40 WBEJ	TN	Elizabethtown, good w/QRM 0520
12	50 CBOF	гио	10/29. (GBS) Ottawa, good in FF o/ORM 0604
			11/5. (GBS)
12	60 WNDE	IN	Indianapolis, 0320-0340 11/19. Hrd o/WNDR. mod. RR Mx. Called
			themselves "Windy". Think they
			went off around 0340. Poes this sound right? (HM) (No-rce)
	WNDR	ИХ	Syracuse, 0330-0400 u/WNDE and
128	BO WMRO	IL	after WNDE s/off. Mod. Rock.(HM) Aurora, s/off very poor 0100
			12/3 just after local WWTC.(GBS)
	WLMJ	OH	Jackson, s/on w/SSB (?) strong way o/QRM 0602 10/29. (GBS)
	WKST	PA	New Castle, s/on w/SSB strong
130	OVMW OC	ОН	way o/ORM 0545 10/29. (GBS) Mount Vernon, s/on no SSB (?)
			strong way o/ORM 0600 10/29,
13:	LO WISE	NC	no sign of "local" WOOD. (GBS) Asheville, good w/R&R o/WIFE
			0142 11/26. (AWO)
13:	30 WTRE	IN	Greensburg, s/on fair u/local WLOL OC w/SSB 0559 10/29, then
			WLOL s/on w/volume way up, lotsa
13	50 KRNT	IA	fun. (GBS) Des Moines, 12/3 in good o/WXCL
77	eo maro	мт	Des Moines, 12/3 in good o/WXCL w/ID 1900, then Nx. (PB) Caro, "K-Y-O Wx" & "Farm Nx in
130	50 WKYO	MI	depth" good o/QRM 0622 11/5.(GBS)
Ø.	WKOP	NY	Binghamton, backwards s/on, anmts
			then SSB fair-good o/u QRM 0525 11/5. (GBS)
	WHBG	VA	Harrisonburg, EL Mx (?) strong o/WMOV pest, WBAY o/slept (?),
			0011 10/29. WBAY on early 11/12
137	70 KWRT	МО	(had 0542 s/on) (GRS)
1.0	O KWKI	МО	Boonville, "KWRT Radio Nx" strong way o/QRM 1750 11/14. (GBS)
	KXLF	MT	Butte, fading in and our u/o WSPD
			w/MoR Mx pres. by Knevil Imports 0135-0200 11/30. S/off 0200 with
138	0 WVSA	AL	no SSB. (REM)
		* ****	Vernon, 0700 s/on to 0703 11/23, hrd s/on, then faded out (w/SSB)
	KEWP	AR	KWK permanently off. (HM) North Little Rock, 0544-0550 11/18
			RR Mx, faded out 0550. (HM)
	WGUS	SC	North Augusta, 0600 s/on 11/4, hrd occassionally after that, C&W-
	Limara		gospel Mx. (HM)
	WTNN	TN	Millington, 0563-0600 s/off (?-rce) 11/18 also at s/on a few days
	Marro	***	later. w/SSB. (HM)
	WTVR	VA	Richmond, 0500 ID 11/11, C&W Mx, Weak signal. v/1. (HM)
139	0 кнов	NM	Hobbs, weak u/WNUS w/sports pres.
			by Coors Beer, local spot and s/off 1840-1845 11/30. (REM)
143	0 CKFH	ONT	Toronto, 12/3 way o/everything
			else for short time w/RR Mx 1905 by the "Guess Who". DJ In 1906(PB)
145	0 WROB	MS	West Point, 11/27 2106-2108 fair
			on top of GY w/another soulful sound on WROB. Soul Mx. (JA)
146	XMAM C	AL	Phenix City, finally had o/u super-
			pest KSO 11/30 w/promo for hi-lo jackpot, then into Mx. (PB)
	WKAM	IN	jackpot, then into Mx. (PB) Goshen, 11/30 slipped thru KSO
			at 2200. Nx followed. (PB)
	WMBA	PA .	Ambridge, fair w/R&R on special

'Ambridge, fair w/R&R on special ET, 0129 11/26. (AWO)

1470**KANO**MN**<u>Anoka</u>, ET 12/1 0445-0555 with guitar music. (BN)

3

Fair o/u WFAA thru WNAX OC 0310 11/12. (GBS) Montreal, ID (in EE) good o/ORM 0220 11/12. (GBS) 600 CFCF PO Saskatoon, 12/1 0249 weak but way o/Cuban w/18 deg. temp. in Saskatoon. RR oldies. (JA) CFQC 680 CKGB ONT Timmins, fair u/QRM, possibly RR 0655 11/5. (GBS) San Francisco, fair w/Nx 0302 11/26. (AWO) KMBR WDBC MI Escanaba, fair w/Nx into RR 1630 11/20. (AWO) Prineville, DX Test hrd poor-fair 0334 11/26 w/u XETRA & severe QRN. 690 * *WVOK * *AL * * **KRCO**OR** Hrd only "on the air for..." plus few Morse Code Ins. (GBS)

Blind River, xlnt 12/3 w/lite RR
C&W 1632-1637 ad 1638 for Lee's 730 CJNR ONT Jewelry in Blind River. (PB) (AWO) Leamington, good w/RR 0150 11/1 Louisville, good 11/30 w/ad for record 2035, Wx 2036, RR Mx. DJ liked to yell a lot. (PB) CHIR ONT 790 WAKY KY 830 KBOA MO Kennett, presumed the one hrd for few seconds very weak about 1645 12/3, WCCO off briefly for CD test. (GBS) 930 Paterson, slipped in 11/30 1930 for ID, thru WBEN. (PB)
Buffalo, 11/30 w/phone-in talk show on euthanasia 1927. Guest WPAT NJ WBEN was a prof. from the U. of Buff. was a prof. from the U. of Buff.
Denver, 11/30 in weak thru (PB)
WWJ 1932-1935 w/RR, ads, ID by
NJ as "5:35 at Kim". (PB)
Indianapolis, "xmtr test" u/KRSI
OC w/WBBF/WKAZ 0330 11/12 (GBS)
Charleston, poor u/KRSI OC with
WXLW/WBBF 0330 11/12. (GBS)
*Baker, ET ending 0245 12/1.TT (BN)
Hull, strong o/WWSW w/RR or EL 2 KIMN WXLW IN WKAZ 960**KFLN**MT* Hull, strong o/WWSW w/RR or EL & FF jingle 0415 11/5. (GBS) 970 CKCH PQ WUPY Ishpeming, 12/3 in good w/slogan "people power" 1655, one RR song, s/off 1658, no SSB. (PB) Fargo, x1nt 12/3 1740-1747 w/MoR Mx, ads, PSA's, and "Perspective at 1745. (PB) WDAY ND WWSW PA Pittsburgh, good-weak 11/30 with "Spectrum" from CBS 2109. (PB) 980 WRC DC Washington, RR Mx think WSIX was washington, AR Fax think WSIX was off, but not sure. Called themselves "The Big 98". Was trying for WILK test. 0200-0230 11/28(HM) Nanville, weak thru WONE 11/28 W/RR, Jingle, 1950. (PB)
Chillicothe, only poor signal due to strong KLRA, hrd s/off w/SSB 1759 11/14. (GBS)
St. Ste. Marie, fair w/CPP 1556 YTIW IL 1010 KCHI St. Ste. Marie, fair w/R&R 1556 11/20. (AWO) (AWO 1050 CJIC ONT (AWO) Ann Arbor, fair w/MoR 1611 11/1. Minneapolis, professional sounding bootlegger hrd 1840 11/2 w/deep WPAG MI WMKO voiced DJ, RR, PSAs, temp for "the loop" & ment. 35W Interstate Highway, ID about 1845& off about 1848, no s/off, just sudden silence (maybe OC, XEG faded in). Maybe FCC walked in? (GBS) KCAS TX Slaton, good way o/ORM w/jingle and s/off 1845 11/1. (GBS) Norfolk, good o/WPAG w/"Super (W?) CMS" license plate contest 0625 10/29. (GBS) WCMS VA Benton Harbor, on 480w. psa with sports, dave loc. in promo as "Twin Cities" good w/KYW/WOIO 0630 10/31. (GBS) 1060 WHFB MI **KHYM**TX* *Gilmer, good on ET 0325 11/5.(AWO)
Birmingham, good w/QRM 0635 10/29
soon faded. (GBS) 1070 WAPI AL 1150 * * WGOW * * TN * Chattanooga, good on ET w/RR 0142 11/19. (AWO) 1190 KLIF Dallas, poor w/PA 0130 11/19(AWO)
Boissevain, 11/30 2245-2310 fair
to good o/u WGAR w/GG program til ТX 1220 CJRB MAN 2300, then Nx, sports, Wx and Radio S. Manitoba ID (CKSM and CJRL usually fight it out under

WBIG NC Greensboro, 12/3 weak thru WMBD w/MoR Mx, ad 1843 that mentioned Greensboro. (PB) 1480**WMAX**MI**<u>Grand Rapids</u>, good w/R&R on ET 0035 11/5 & 0210 11/19. (AWO) 1490 KTTR MO Rolla, 11/29 1947-48 poor to fair in mess w/Rolla ment. twice in ad. MoR Mx. (JA) *Indianapolis, fair w/religion on ET 0300 11/5. (AWO)

Boston, fair w/ET 0211 11/19.(AWO)

*Mayville, very good on DX after

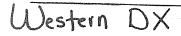
KOMA OC off 0305 12/1. HJLQ QRM
0315. (BN) Fair but fady w/C&W 1500**WBRI**IN* 1520 * * KMAV * * ND * Mx on reception measurement 0300-0350 12/3. (REM) Butler, s/off ment. "Midwest Mo." fair in mess 1800 11/21. (GBS) 1530 KMAM MO Lineville, ending ET xlnt way over ZNS 0240 12/3. (GBS) 1540 * * WANL * * AL San Francisco, good briefly w/o
WAAY w/Cl Mx on CIM Concert Hall
0237 12/3. S/off w/SSB 0259.(REM)
Winfield, s/on SSB poor/fair with
63w. psa w/CBE/KKJO 0700 11/3.(GBS) 1550 KKHI CA KNIC KS **WSHN**MI**Fremont, f/c 12/1 (1st Sat) on later than listed, hrd IPs 0215 & 0130. Difficult u/KKJO but readable. (BN) 1570 KOLS OK Pryor, in good 11/28 w/Wx and Nx
ending 1813. S/off 18/14, address
given as Box 66, SSB. (PB) 1580 WPGC MD Morningside, in weak thru lots of QRM 12/3 w/promo for a contest, lots of ads, jingles, RR Mx 1609-1615. (PB) 11/28 0646-0647 good and alone w/ID and ment. of Washington, D.C. in local ad.(JA) washington, D.C. in local ad.(JA)
Springdale, s/off SSB good o/KVGB
1819 11/15. (GBS)
Coldwater, 11/30 thru pesky WAKR
W/RR, ID 2005. (PB)
Eminence, 11/27 0646 good briefly
w/ID and livestock ad. (JA) 1590 KSPR WTVB MI 1600 WSTL ΚY KRES Superior, Nx ending 1805, s/off w/SSB 1814, ment. studios in American Legion Bldg. Good with MILTON, GOOD O/QRM "WNST time is 4:14" 1614 11/28, into C&W. (GBS) WNST WV

PER THE LIST: 3rd Mon. KWKY-1150 IA (AWO)

A TIP OF THE HAT THIS WEEK TO:

Don't forget--reports after the first of the year go to John C. "Charlev" Keleher, 3924 Sleepy Hollow Lane, Fort Wayne, Indiana 46804.

Kudos to Bill Hardy for his excellent forum rpt. in the 12/8 DXM. One more thing to point out, though. After midnight on any morning but Sundays, though. After midning to any morning but sundays there are more than a quarter million long-haul trucks moving. When roads are bad, as during this time of year, they need local radios for road warnings, as well as time killers. The article on DST looked great. Must be going.



editor- Teff Brasier 10341 Shirley Ave. Northidge, A 91324

NO REPORTS THIS WEEK. JEFF.





DX FORUM

EASTERN EDITOR: BRUCE HEIMBURGER, 1710 CAMBRIDGE RD., ANN ARBOR, MI 48104

NO COPY RECEIVED BY PRESS TIME. FJP

CENTRAL EDITOR: JOHN ZONDLO, SHALES HALL, BOX 120 MUNCIE, IN

Yom Butas-5612 Alta Dena Dr.-Huntsville, AE 35302 di all. Not such DX here lately due to working and school. Only 9 veries were received during and school. Only 9 veries were received during Hovember. Will be going to Washington, D.C. from January 26-February 2, 1974. Would like to hear from any Diers there along with your phone # so I can call when I arrive. Hope I have time to do some Dieng. I will take my 4 band Lafayette portable. With the upcoming Christmas holidays I hope the arrang asymmetry was well there about to spend several normings up. Well thats about all, 73's. Have a merry and safe Christmas. Dave Milton-2632 E. Stanford-Springfield, so 65804 Treetings from Springfield! This is my second time I've written to CDXF and I think it's a lot of fun. DX has been good lately, been listening to sunrise and sunset stations - with good results, summer and sunset stations - with good results, about 25 new ones since Movember 15. Three veries in- high, WSCJ & WSPA, which was my first from Louth Carolina. Hope to get more of the 900-1000 vicinity stations this season, they're bugged by so much QRH most of the time it's impossible to hear. That's all I can think of now. Herry Christ-

R. Fenner-Box 2705-The Fas, MB, Canada R9A 1M5 Tive recently started getting up in the mornings to DX and the results have been quite astounding. On November 16 for instance I heard 18 new stations in three and a half hours. I sent a tentative report to a 500 watt Arizona station that I'm pretty sure I received on 1060 kHz. If it's correct and verified I'll send a picture of it to INCA. Sixteen hundred miles for 500 watts is something to be proud of Anyway, that's only maybe. By the way, does anyone know how to ve ify CJGX 940? It's aggravating to be unable to verify a 24 hour broadcaster that always comes in S-9. Let me apologize for a piece in my last Forum report about receiving Radio Ceylon on 1460 kHz. It seems that I'm the victim of a radio that has poor image rejection. Totals have reached 413/50 hrd/vfd to December 1st. 73 and Good DX. Carl Dabelstein-3300 N. 56th St.-Lincoln, NE 6 The Eincoln Clan was saddened with the loss of fellow IRCAer Bernie Macholan, who passed away in November. Latest veries to come this way have been TGN, XEVIF, EWYK, EGTR, HIEC, ETTR, WGNS, LBRJ, WKIS, WDQN, KTEF, WTRO, WHLD, WTTO, WBBA, HILR, CFTR, R. Paradise, WETQ, CKAY, WANF. This brings the total to 1,498. I hope you are all hearing the DX tests I have been lining up. 73's and the very best seasons greetings. HAVE A MERRY CHRISTMAS AND A DX-FUL 1974!!!-jz

WESTERN

Michael G. Worst, 3608 Phinney N., Seattle, WA 98103 Deadlines Wednesdays

James E. Critchett, 1103 North Street, Yreka, CA 96097 Somebody has to report from among the West Coast DXers, it might as well be me. I listen in every night from 0140 ELT to about 0300, and at present am trying to fill in the blanks in my 24-hour log for that period. I have most spaces filled from 0300 to 0900 daily, as a result of listening since May 1st. Don't listen much during the daytime or evening hours. I prefer to read books during the latter period, and read DX pubs and write letters and do some house and yard work, and shopping and taking naps the rest of the day. If I am not off on a trip somewhere. DX notes for the past week include KARY-1310, on at 0900 Sunday 12/8 & KRYS-1360 ident at 0500 w/nx. WHK-1420 ID'd twice at 0521 Mon. 12/10. (Same day for KRYS above.) KOA-850 had open carrier the whole period of the scheduled WRUF DX special; KTAC announced at 0315 they would be testing with tones, so no WRUF heard. KKHI-1550 was of course on RS during the first half of the SCHEDULED KIWA DX special, but nothing was heard here 0300 - 0330 on 1550 kc. Maybe



Ron Schatz § Box 592814 AMF § Miami, FL 33159 AC305-945-4915 eves § Deadlines: Tuesdays.



From all of me To all of you, Best wishes For the Holiday Season.



This is going to be a fairly large issue, with at least 17 reporters and over 120 items. The "CAT" came home from the P.I., and we have a reporter in Newfoundland - halfway to Europe from the rest of us. § I had to miss the 12/10 YV election returns, but I imagine we'll be getting reports on it in the next few issues. § On looking over DXWW in the 12/8 issue I come to realise that I've been quite unfair to NRC. their IDXD. and its editor. and I so remorto NRC, their IDXD, and its editor, and I so remorsefully apologise to them for my comments therein. sefully apologise to them for my comments therein. IDXD continues to be worthy competition which I am proud to emulate. § In order to avoid postal delays common this time of year I'll be closing out on Mondays for the next few weeks. I never receive much on Tuesdays at the Box anyway, so it's a safe risk. If there's time I'll addend Tuesday entries. § I've been requested to indicate arrival times of reports: At present my trips to the AMF are irregular, so I can't do it, but I'll start after my personal schedule changes in January. By the way, an "AMF" address means that reports posted by AIRMAIL are processed directly to the Box, while surface postings are not. There may be as much as 2 or 3 days difference in arrival time as a result - so use airmail where appropriate. use airmail where appropriate.

5 5 5 5 5 5 5 5 5 5 5 5 5 5

The RFS Haitian Station List

	4VUE 4VI	-	Lumière Lumière	P-au-P Cayes	0.25 1
780	4VIE	R.	Lumière	Jérémie	0.25
840	4VEF	R.	4VEH	C-H	10
860	4VLS	R.	Progres	P-au-P	0.2
	4VRMN	R.	Nouveau Monde	P-au-P	1
	4VCD	\mathbb{R} .	Carillon	P-au-P	0.3
1000		R.	Cacique	P-au-P	0.3
1035	4VEC	R.	4VEH Révolution Duvaliér:	C - H	10
1080	4VA				P 1
	4VAB		Caraïbes		1
1246	4VM		liffusion Haïtienne		0.6
1280	4VHW		Métropole		0.2
1330	4VW		Haiti		1
1385	47S	Ρ.	Port-au-Prince B. C.	P-au-P	ī
1430	4VGM	Μ.	B. C.	P-au-P	1
1465	4VEA		Voix du Nord		0.1
1475	4V		du Peuple Haïtien		0.1
1500	4VOC	R.	Select (limited skee	l)P-au-P	1.5

The broadcasting language in Haiti is French, The broadcasting language in Haiti is French, but the people in the streets speak Crécle. It is characterised by the definite article ("la" or "a") following the noun, the verb not conjugated but left in the infinitive, the use of FF emphatic pronouns in all positions, etc. "U" is pronounced "I" and "EU" becomes "E". "I don't speak Crécle" would be "Moin parler pas créole", using FF orthography.

Trans-Pacific DX Roundup

Chas. A. Taylor (Indianapolis) comments on Sabah:

"Concerning the latest controversy over the new 1475 kHz outlet, I'll add my few cents worth which is as authoritative as one can get until a verie is forth coming: § I had no DF facilities in Sorsoforth coming: § 1 had no DF facilities in Sorsogen, but I feel safe in saying that this particular outlet is sited in Sabah. Some outstanding reasons come to mind: (1) During tests noted on the outlet in question, modulation was taken from R. Malaysia Kota Kinabalu (RMKK). This modulation was clear, with nc distortion or fading as would be expected if the modulation were relayed from shortwave. Conversely, the Tagalog program to the Philippines was evidently relayed from shortwave as there were numerous short term phase shifts and related distortion, but without the related short term variations in signal intensity. The Tagalog programs were announced as originating from Kuala Lumpur, not RMKK. The implication is that for tests, audio was relayed from RMKK via VHF or UHF link or landline. Knowing the topography of Sabah, that would require the TX site to be near Kota Kinabalu. (2) Tests:were:audible before LSS Philippines and faded up rapidly at LSS Philippines, implying a TX site East of the Philippines or at about the same longitude as the Philippines (the sctual case with Sabah), while signals as far West as Kuala Lumpur faded up somewhat later. (3) Sabah is much closer to the Philippines than any other of the Malaysian states. There is an obvious advantage in siting a TX site as close to the target as possible when the medium wave bond is than any other of the Malaysian states. There is an obvious advantage in siting a TX site as close to the target as possible when the medium wave band is to be used. (4) 50 kW MW outlets from Kuala Lumpur are barely audible in the Philippines. As to the conjecture that the TX is in the U.S.S.R., there are two solid rebuttals to that line of thought: (1) two sclid rebuttals to that line of thought: (1) The very first program to the Philippines featured a monologue by the Ambassador to the Philippines to Malaysia. (2) The frequency of the Sabah outlet was noted consistently as 1475,003 Hz while the frequency of the U.S.S.R. outlet was noted as being something consistently distinct. I don't have my notes on hand so I cannot quote the exact value. § A report was sent to R. Malaysia Kuala Lumpur for reception of this outlet. Hopefully some firsthand information will be forthcoming. § Note that my report in an earlier DXWW mistated the time of the Tagalog broadcast. It is 1100 to 1200 as noted by other DXers". other DXers".

1080 MALAYSIA, Sabah, Sandaken, a QSL & v/l wasre-ceived (reception 9/16/73) signed by Henry Kinujim. Says 10 kw & 450' tower. He termed the outlet "new", altho WRTH73 lists Sandakan as 780 kHz. This 780-kHz outlet was never heard & is unlikely due to excessive co-chan-nel interference de DXCC-780 10 kw in Cagayande Oro City (Taylor, P.I.)

33 items from Bisquera (HI), Lobel (San Diego), Oldfield (Alta.), Pejza (San Diego), Peterson (SF - Oakland), Portzer (Seattle), Sanserino (Orange Courty). More on 1475 Sabah:

HAWAII, Honolulu, KORL fair 1225 11/21 w/phone in show & "Coral" ID (Portzer) /(Oldfield): RYUKYU IS., Okinawa VOA 10/28 110C poor & weak ID faded quickly. TNX to GK's report.

weak 1D faded quickly. This to GR's report.

655 KOREA-N 10/28 0945-1005 bits of audio (screaming & yelling). 1105 stronger, more yelling & talking (Oldfield) § Pyongyang only TP heard 12/3 1243 weakly w/YL talking (Pejza)

720 UnID 0950 10/8 JJ girl & JJ songs. C1 channel but weak & faded. Didn't think KUAI was JJ.

Credo???? (Oldfield)

735 KOREA-N2 10/28 1105 woo'r & corred (/ 655 1114)

KOREA-N? 10/28 1105 weak & seemed // 655. 1115 was definitely not // 655. Man yapping & yel-

ling (Oldfield)

JAPAN 0950 10/8 noted the loud grumble that

840^q

JAPAN 0950 10/8 noted the loud grumble that always comes just before JOIB breaks thru. Drowned out all else (Oldfield)

HAWAII, Honolulu KGU 10/8 0955 noted S4/WJR W/"Sports Voice of Hawaii" (Oldfield)

JAPAN, Osaka, JOBE 1235 12/7 OM JJ, IS. YL W/ID at 1240. Big signal, WCCO nulled (Sanserino), also below:

AUSTRALIA, Rockhampton, Qsld., 4RK. Nice full V/I signed by H.D. Humphreys, a regional manager. Report was sent to Rockhampton.

GILBERT & ELLICE IS., Tarawa, VSZ1 10/8 0950 S%5 (?? -RFS) OM talking in EE & Polyn. 1gg playing native songs + US rock like "Surfari" (beach song). Strong at 1030 recheck w/M&F & their regular choir-sung anthem (?), 1036-42 f/out. Seemed to have just an OC, s/off?? \$ 10/28 0840 poor ... 0940 stronger & giving semi-local CKRD-850 trouble. Still strong at 1015. \$ 11/12 0915 noted for a few minutes poor, but no fades (Oldfield)

HAWAII, Honolulu, KAIM 10/27 & 28 0906 w/WWL. Poor w/religion (Oldfield) Amen! (RFS)

JAPAN, 10/28 1045 JJ fair w/some WWL (Oldfield)

JAPAN, Sendai, JOHK 1308 12/7 OM JJ, YL DJ W/US style pop mx in JJ. Big signal at tx. UnID 1310+ 12/7. Carrier, no audio. This has been noted this season & last, best after 1400

890

or LSR. Looping $290-300^{\circ}$. 10 kw (Sanserino for top 2) BRUNEI listed w/ TONGA, Nuku'alofa, A3Z 10/28 0845 fair. 0900 better & little fading on a clear channel. Also 11/12 1000-06 Polyn. mx & YL caught just as KGBS dropped dead at 1000 s/off (Oldfield) RSFSR, location?, R. Moscow JJ service. Weak

RSFSR, location?, R. Moscow JJ service. Weak signal in JJ looping TP received at 1235-50 12/3, ID per IRCA Fgn. Log II. Freq measured at 1250 as 1134.145 kHz. (Peterson)
RYUKYU IS. Okinawa, Japan, VOA monitored 1058-1135 12/3. S/on w/"Yankee Doodle" at 1058-135 & giving VOA ID. Another ID given on hour in EE & CC & into CC talk. At 1115 went to rock mx to 1130 when there may have been a VOA ID in CC & on w/CC talk. Audio was somewhat garbled & w/QRM from local KIOK-1170 & even a little QRM from VOA-1180 Marathon, believe it or not! Also China jamming (see below). Freq at 1105: 1177.993 kHz. Reported. CHINA, unk. loc. R. Peking. At 1110 12/3, while listening to VOA Okinawa, heard one bar of "East is Red" on chimes. Could not have come from VOA, so probably a jammer; possible 1178

or mast is Red on chimes. Could not have come from VOA, so probably a jammer; possible source of VOA audio garbling. FBIS lists Hofei for location but that is pretty tentative for me (Peterson for top 2)

HAWAII, Honolulu, KZOO? 11/12 0948 JJ poor w/some WCAU. This was probably KZOO at this time. (Oldfield)

INTO 10/8 1100 pips & JJ. Weak & faded quick-

1260

direction as a JJ. Any TP's s/on at this time (Oldfield) Just a guess: Omsk, RSFSR, over the pole (RFS)

JAPAN, Sendai, JOIR probably the one w/M&F in JJ 1155 12/2 atop channel (Portzer)

HAWAII, Honolulu, KCCN 10/8 0939 w/old familiar ID: "At 1420 KCCN, Community service comes first". All Hawaiian mx & lots of QRM. Poor 1420

first". All Hawaiian mx & lots of QRM. Poor & faded (Oldfield) I remember this one having a studio in a TREE in the International Market Place - no longer (RFS)

1475 MALAYSIA, Sabah, Kota Kinabalu heard at 1056 12/3 w/a 15-mote theme played on what sounded like a xylophone. This lasted 4 minutes, then nothing for one minute, then man in an Oriental lgg (probably Tagalog). Heard again at 1129. Six pips (got only 3 on tape, did not turn tape over in time). Pgm was nx b'cast w/YL at first, then OM. Sounded like nx of the SE Asian area.

then OM. Sounded like nx of the SE Asian area. kept mentioning many SE Asian cities. Man talked on various subjects till 1155 when signal faded, then came back for a few short seconds w/what sounded various subjects till 1155 when signal faded, then came back for a few short seconds w/what sounded like an anthem. Not heard again, report sent (Lobel) § Booming in again 12/3 1127-40. Pips at 1130 but much slop at the time (Pejza) § In like gangbusters 1145-1200 12/3. At tx an absolutely fantastic signal! This should make it a ways inland in areas w/out 1470/1480 QRM. Give it a try. Freq. at 1145 a rock-solid 1474.995 kHz as it has been for the last month. Carrier dropped out at 1200:20, leaving a tentative YNAG (see Latins) (Peterson) § Noted here 11/19, chimes 1058, MoR mx & OM anmts 1100-30, talk 1130-55, instrum. mx to 1159, short anmt. then anthem. The next day I whipped out my copy of "National Anthems of the World", compared the one for Malaysia w/the one on my tape, & 10 & behold - they were the same. In my book that's as good as a definite ID, so that gives country no. 43 logged. Signal was fair-poor at best w/lotsa QRM from unID tester on 1470, but managed to scrape together something resembling a report (Portzer) § Malaysia 1115+ 12/7, mx, singing, chanting &/or yodeling? Fade at IS, 6 weak pips at 1130. OM w/talk till 1147 (Philippino?). NA, s/off 1203, carrier off 1204. Local KWIZ-1460 tough (Sanserino)

1477

gh (Sanserino)
CHINA, Chingtechen, 12/7 1544 tentative. OM
in CC talk. Clear & static-free (Bisquera)
AUSTRALIA, Emerald, Qsld., 4QD 10/8 1020 fair
w/a play o/u/CBE. WOKJ arrived at 1030 &
killed 4QD (Oldfield)
PHILIPPINES, Cebu City, DYLA 12/7 1530, 1'st
time this season w/OM in EE playing US Xmas
Carols. Some fading & noise. Clear enough
to tape (Bisquera)

Carols. Some fading & noise. Clear enough to tape (Bisquera)

THATLAND, Ban Pachi, VOA 12/7 1521, in like local (Used my portable Sony to log this one). 1580

Dr. Margaret Mead on energy & other scientific subjects (Bisquera)

Checking on the possibility of Sabah-1475 in Miami, the signal must pass north of the Bearing Straits to get here & several high mountain ranges in Alaska & Siberia. But I had traces of VOA-1178 here once, so I can't rule it out completely.

Trans-Atlantic DX Roundup

Comments from Peter Scarlett in NEWFOUNDLAND:

"Have recently moved here from Calgary, and am finding the DX to be extremely good. TA's are easier to hear than US stations, though Latin America seems also to be quite tough. Mainland loggings are slow primarily because nulling one station in all but a few cases leaves the desired station partially nulled as well due to the low angular difference inherent in being at the very corner of the continent".

Peter: The cardioid array is meant for situations like that. And we'll be looking forward to your TA reports, especially after you "log up the top layer of TA's" so to speak (RFS - SE corner of

Note: Reports for GREENLAND appear in the Pan-Am. R'up. Thule-1425 is definitely NOT a TA! (RFS)

51 items from Markewicz (FQ), Oldfield (AT), Sc lett (NF), Shaftan (NYC), and Stanbury (ON):

ALGERIA, Ain Beida fairly regular here w/AA singing, etc. Noted S9+ 2240-46 11/10 //548. ALGERIA, Oran as above, these two always appear together about S4 every night ca. 2200. EIRE, Athlone. No ID except in Irish but frequent mention of cities. Irish talk pgm till 2300, then EE C&W pgm till past 2330 11/10. GERMANY-W, Berlin tentatively heard in GG talking, fading u/Athlone 2300-03 11/10. No intelligible ID. (all above - Scarlett) UnID. Strong het noted 12/1 around 0430 wiping out semi-local CFRA-580. Heard on car radio while coming back to the station (M'wicz)

more fair to good 2130-35 11/30. No discernable ID on half hour (Scarlett)

nable 1D on half hour (Scarlett)
ENGLAND, Daventry, European Svce in RR 0345+.
0350-45 holding tones (IS? -RFS). Fairly regular here, w/little QRM from local CEN-640.
PORTUGAL, Lisboa very good every night w/MoR
E easy listening US mx mostly (abv 2 - Scarlett
§ Lisboa II assumed 11/11 0530-0600 strong
het. 0600-18 chimes & into talking in PP...
def. not SS. Weak w/fading of 40 sec. (0'fld)
SPAIN Sevilla very good after 0000 size 11/

het. 0600-18 chimes & into talking in PP...
def. not SS. Weak w/fading of 40 sec. (0'fld)

87411, Sevilla very good after 0200 since 11/11. Mor & US R&R. ID as RNE. (Scarlett)

UnID. Strong het noted while listening to CFTR-680 around 0400 12/1. As a result I started to check the bands & found 1586, etc. (M'wicz)

ENGLAND, Moorside Edge, Radio 4 fair to poor noted in passing 2336-38 11/10. Usual pgmg.

710 FRANCE, Rennes (pron. "wren" -RFS) ORTF very good 0530-47 w/FF mx hall "Casino de Tôn Tôn" // 836, 1205, etc. Good night for France 12/2.

PORTUGAL, Porto I fair to good every night after 2300. PP singing, little or no talking noted (above three to Scarlett, NF).

ENGLAND, London. "News Radio 417"... This is the London B'casting Company. 24 hours. Britain's 1'st commercial station is on - using mostly Canadian eqpt - 30% owned by Selkirk Bostg (Canadian). No freq mentioned by our local CJCA-930 (Selkirk). Maybe you know, Ron? (Oldfield) Yep - 719. Also: Capital Radio on 557, on since October (RFS)

GERMANY-W, München sent lice blue & white card for report on 10/8 0020-50. They were relaying VOA (Scarlett).

737 SPAIN, Barcelona, RNE poor w/US & GB R&R 2245 -2300 11/9. Usually better after 0200.

EGYPT, Asyût very very poor fading u/RNE. Tentative, but AA signing & talking. Not Moçambique? 2255-2300 11/9 (Scarlett)

PORTUGAL, Lisboa, International Service very, very good. S/off to EE txmsn at 2335, then GG. EE is Mor mx & YL 11/13 amused to note tape played too fast, then sea type theme mx 2344-46 11/10 (Scarlett)

played too fast, then sea type theme mx 2344-46 11/10 (Scarlett)
UnID R&R in PP or SS. Very poor 2350-54 f/out.
Maybe Dakar, tho I would expect FF 11/10.
(Scarlett) Possibly RSR Sottens?? (RFS)



SPAIN, San Sebastián, RNE, European R&R 2343-0020 11/13. ID as RNE (Scarlett) SCOTLAND very good w/Scottish service, nx, wx, etc. Radio 4 2330-45 11/17 (Scarlett) ANDORRA very good half the time & u/o/AA half the time. Regular every night in FF. ID as Sud Radio. Cuckoo on the hour (Scarlett)

Sud Radio. Cuckoo on the hour (Scarlett)

... UnID AA, Morocco or Egypt, singing & chanting, etc. How can I differentiate between AA stations? I can't understand their ID's, if they appear on the hour (Scarlett)

Break: Arabic stations tend to ID with the word "Huna ..", their equivalent to "aqui, ici, hier", etc. Egyptian stations usually ID: "Huna Qahira". There are many variations in pronunciation in Arabic: The definite article "'al" is "'el" in Egypt, but "'al" most elsewhere.

 $\underline{\text{SPAIN}},$ Barcelona, EAJ1, Radio Barcelona is ID. $\overline{\text{Very}}$ good w/US & SS R&R 0030-0112 11/14. On-

Very good w/US & SS R&R 0030-0112 11/14. Only ID was on hour (Scarlett)

ITALIA, Roma fairly regular after 0100 w/classical mx until 0130, then MoR after FF nx at 0135. EE nx is from 0200-05 after which more MoR mx. All songs are unID w/no announcers at all apart from nx on hour & half-hour. Nx at 0230 is in SS or PP. 0130-0232 12/4

FRANCE, Nancy ORTF // 710, not as good tho, 0547-49 12/2 (Scarlett - above 2)

SPAIN, Zaragoza, EAJ101 very good w/R&R. ID as Radio Zaragoza 0135-37 11/14. ID noted later on the hour at 0200 u/lots of static.

SPAIN, Madrid, EAJ2 poor-fair w/SS songs 0310-14, then faded 11/21 (Scarlett - above 2)

FRANCE, Toulouse MoR inst. mx 0448-53 11/24.

Surprisingly bad considering power. Faded out. NEDERLAND, Lopik I fair-poor w/US MoR mx. No ID, but def. in Dutch 0200-20 11/26. 0050-0130 11/27 much better than 11/26 (Scarlett +) SPAIN, San Sebastián, EAJ8 very good w/discussion in SS 2338-40. Frequent mention of SS cities, etc. (Scarlett)

PORTUGAL, Porto, CSB2 poor w/R&R 0030-37 11/11. ID was on hour (Scarlett)

836

cities, etc. (Scarlett)
PORTUGAL, Porto, CSB2 poor w/R&R 0030-37 11/11.
Very good 0140-50 w/R&R 11/12. Very good 05550600 w/play 12/2 (Scarlett)
GEORGIA, Tbilisi tentative. Very poor w/OM in
RR faded out 0443-47 11/24. It also seemed to
loop correctly tho I have no quadrant fitted
for exact degrees (Scarlett)
UnID. Strong het noted on CHUM 0550 12/2.
(Markewicz, PQ)
PORTUGAL, Norte II, CSA8 assumed here in PP
w/singing, etc.usually very poor. 2356-59
11/14 faded out quickly (Scarlett)
EGYPT, Batra tentative, very poor w/AA singing
& chanting 0045-46 11/11 (Scarlett)
PORTUGAL, Porto, CSB30 fair. I didn't catch 1043

1052?

1061

1106

1169

EGYPT, Batra tentative, very poor w/AA singing & chanting 0045-46 11/11 (Scarlett)

PORTUGAL, Porto, CSB30 fair. I didn't catch ID, but assumed from loop & lgg. 4 pips on hour. 2357-0005 11/17-18 (Scarlett)

GERMANY-W, München very good relaying VOA in RR & Slovak until 0430 when carrier cut 11/24 (Scarlett) \$ BBC w/Italian tentatively logged here 2155 12/3. According to my Copenhagen correspondent, this one becomes VOA again at 2200, & VOA EE nx was definitely heard at 2205. Re Hauser's comment (12/1) on BBC's World Radio Club not announcing this location, almost all SW DX pgms are subject to various kinds of censorship for political reasons - reasons which are often intricate & not apparent to the casual listener (Stanbury)

ENGLAND, BBC Radio One 10/27, some poor audio 0613 lasting 6 minutes (Oldfield)

SPAIN, Madrid RNE good to very good noted in passing w/singing 0007-10 11/18 (Scarlett)

LIBYA, Tripoli never very good even w/cardioid considering 1 MW, but always there after 2300. News on the hour (Scarlett)

ENGLAND, Crowborough, VOA has EE to Europe here at 2100-2200 according to my Copenhagen correspondent, altho for some reason VOA does not list it in their official winter freq schedule. This is the first time (at least since WW2) that VOA has b'cast on MW from England (Stanbury)

ITALIA & PORTUGAL both very poor & mixing bad-lv w/Italv usually on top 0025-40 11/15. 1196

1214

1223

1.250

1295

1331

since WW2) that VOA has b'cast on MW from England (Stanbury) /(Scarlett) 2: ITALIA & PORTUGAL both very poor & mixing badly w/Italy usually on top 0025-40 11/15. FRANCE, Lille II, ORTF quite poor // other ORTF outlets except for local news 11/11. UnID. Het noted 0410 12/1, no slop (M'wicz) LUXEMBOURG very good every night after 2000 w/harddriving R&R & EE (I like R&R but this is sickening - the DJ's I mean) (Scarlett) § Noted w/SAH 0547 11/18 (Shaftan) 1376 1394[?] 1439

1493 FRANCE, Ajaccio very weak but dominating freq. w/MoR mx, many references to Ajaccio & Corsica Ol15-25 11/19. Tentative since noise

was very bad & I might have misheard (Scarlett) GERMANY-W, Langenburg WDR very good w/talk show & MoR inst. mx 0145-50 12/1, Usually audible every night (Scarlett)

So much for this being a TP-heavy column, hi.

Pan-American DX Roundup

55 items from 14 reporters.

A listen across the dial reveals that both Honduras and Nicaragua are now observing CDT (GMT $-\ 5).$

A listen across the dial reveals that both Hons and Nicaragua are now observing CDT (GMT - 5).

COSTA RICA, Cartago, R. Rumbo, TICAL 11/30
1024-30 w/singing, mucho guitar mx. Good signal (Flegle, Tampa)
COLOMBIA, Bogotá, HJKA, Radio Horizonte 12/3
1010 ID'ed w/LA mx. Even most of time w/
Nacional (below) (Cartwright, PA)
UNID. Something heard here even w/& c/HJKA
0955 12/3 w/LA mx. ID 0959 as Radio Nacional,
& mention of Puerto Rico. Only Nacional is
Argentina & no PR's. Around 0510 was a mention of "Dominicana". Looped about 150°.
Any ideas? (Cartwright) This could mean that
R. Nac. de Venezuela en Maracaibo has reactivated. R. Perijá (Machiques) is normally
dominant here. There's also a Radio ABC in
Santo Domingo (RFS)
MEXICO, Cuauhtémoc, Chih., XEPL presumed the
one in SS w/mention of Chihuahua 12/3 1237.
Gone by 1241. Last heard in early 1971 on
545, 551, & 555, kHz (Pejza, San Diego)
COLOMBIA, Bogotá, HJND, Radio Nacional 12/3
0950 good w/WKBN nulled w/SS talk. 2'nd time
heard (Cartwright)
COLOMBIA, Cali, HJHG, Radio Nacional 12/3.
FBIS lists as CP, but heard w/fast mx. Weak
0905 t/in, built up to 0915 when coming in
exc. Mentions of Colombia & Nacional between
records (Cartwright) First time reported to my knowledge (RFS)
VENEZUELA, Puerto la Cruz, YVQO, Ondas Portenas tentative here thru CMQ superpest w/LA
mx & talk, but no readability due to Cuba.
Looped about 165° 12/3 0935 (Cartwright)
PARAGUAY, Coronel Oviedo, ZP19, Radio Caaguazú
reported by tape a week after 0830 2/8/75 ID.
Still waiting - & not too hopeful (Schatz)
COLOMBIA, Bogotá, HJJX, Em. Monserrate in poor
thru WSM OC 12/3 0925 w/MoR LA mx. Fairly
regular (Cartwright)
HATTI? 11/11 1035-40 quickly faded. Calypso
mx & FF ann. Week on a clear channel (O'fild)
mEYICO D F YEFDER B Juventud good. 0220

regular (Cartwright)

660 HAITI? 11/11 1035-40 quickly faded. Calypso mx & FF ann. Weak on a clear channel (0'fld)

... MEXICO, D.F., XERPM, R. Juventud good 0930

11/24 w/R&R & ID as "R. Juventud, Canal 66"
(Portzer, Seattle) /(Sundstrom, nr. Phila.):

660.8 NICARAGUA, Managua, YNAM, Mi Preferida 12/3 noted 0630-0700+ in & out of noise level o/2

-3 minute intervals. When up, really good w/ Q-M taking out het on 660. ID's seemed to be mostly voiceovers, pop mx. Was my unID of a couple of weeks ago, much better this time.

mostly voiceovers, pop mx. Was my unID of a couple of weeks ago, much better this time. VENEZUELA, Caracas, YVLL. ID as R. Rumbos. Fair-good w/SS singing, etc. 0300-15 11/24 (Scarlett, Nfld.)

CUBA, Habana, CMBC doing very good o/u semilocal CBF 12/4 0330 (Markewicz, PQ)

MEXICO, Tijuana, XETRA noted for contest 1220 11/21, usual "Extra Music" ID (Portzer)

COLOMBIA, Ibagué, HJFT, Ecos del Combeima 12/3 poor u/WOR w/talk 0941, mentions of Colombia, etc. (Cartwright)

VENEZUELA, Maracaibo, YVNC, Radio Maracaibo

VENEZUELA, Maracaibo, YVNC, Radio Maracaibo 12/3 good thru unID OC w/LA mx 0950, R. Maracaibo ID's, very steady signal (Cartwright) NED. ANTILLEN, Bonaire, PJB w/story of J.C. &

NED. ANTILLEN, Bonaire, PJB w/story of J.C. & how space flight relates to religion in time. Rel mx in bkgd. Good signal 12/3 0415 (Lobel) & Bonaire w/SS pgmg till 0230. Exc. 0330 w/exc. cx to Americas. 0230 EE pgmg w/"Your Wor-ship Hour" 11/9 (Shafton, NYC) COLOMBIA, Bogota, HJCY, R. Sutatenza 11/30 at 1015 w/many chimes & Radio Sutatenza ID's. Good signal (Flegle) & ID & chimes & "Buenos Días". 2 0M's, one sounding like he was speaking SS w/a JJ accent, 12/3 0915 (Lobel, nr. San Diego) & Bogotá w/SS pgmg & LA mx at 0302 11/19 (Shaftan)

COLOMBIA, Cali, HJED, La Voz del Río Cauca 12/3 fair w/WBAP nulled w/end of record & CARACOL jingle 0930. Not heard too often here. GUATEMALA, TGX. Suspect it's this one heard w/CA mx 0950 12/3. Mx & many Fresca spots (At least that's what the spots sounded like they were for) (Lobel)
MEXICO, Celaya, Gto., XEFG 1226 12/7 OM SS, Radio Juventud ID. Good o/WHAS (Sanserino) MEXICO, Chihuahua, Chih., XEM &
MEXICO, Hermosillo, Son., XEUS mixing 12/3 1247-1300. XEUS w/ranchero, XEM w/smoother MOR-type mx (Pejza)
NED. ANTILLEN, Curaçao, PJC2 11/30 from 1000-/(Cartwright) NED. ANTILLEN, Cureçao, PJC2 11/30 from 1000-1010 w/US pop mx & Dutch announcements (My WRTH doesn't show them on at this time) (Fle-855 Curom expanded its schedule (RFS) DOMINICAN REP., Santo Domingo, HILR noted good some AM's after CJBC s/off. Lots of Radio : Clarin ID's. 11/29 - seems to be the only one on 860 at this time of AM (Markewicz) UnID 12/3 0920. Something def. there but unintelligible u/WWL w/mostly talk noticed. Unstalk to get a hearing but only thing SS in able to get a bearing, but only thing SS in that direction would be Cuba & SA (Cartwright) COLOMBIA, Bogotá, HJCE, La Voz de Bogotá 12/3 was fair w/LA mx & chatter between records w/WLS nulled 0917 (Cartwright) w/MLS nulled 0917 (Cartwright)
BELIZE, Punta Gorda, repeater mentioned at
0400 c/down anmt on 834 (Schatz, Miami)
BELIZE, Belmopán, repeater as above. Tried
for both 0400 12/11 - not a trace (Schatz)
COLOMBIA, Maicao, Radio Península is here from
1170. This solves several reporters' mystery
in past DXWW's (Schatz)
PERU, Lima, OAX4U, R. América was beating the
door down to get in at 1050 12/3. Extraordinary signal!!!! Freq at same time was 1009.995 kHz (Peterson, nr. San Francisco) 1010 995 kHz (Peterson, nr. San Francisco)
BAHAMAS, West End, GBI, ZNS3 (Still is -RFS)
Fair thru KYW OC & Cuban het w/MoR mx. Has-Fair thru KYW OC & Cuban het w/MoR mx. Hasn't been heard in a while, but then KYW hasn't been off for a while, hi (Cartwright)
Date & time on this local?? (RTS)
COSTA RICA, San José, TISHRB, 0545+ 12/4 OM
SS, TD: "Esta es Radio Capital de Costa Rica".
MoR LA mx, good (Sanserino, Orange County)
COLOMBIA, Bogotá, HJCV, R. Cordillera 12/3
good when WOWO OC was on blocking out WHAM.
Lots of good LA mx. R. Cordillera ID heard
C550 (Cartwright)
VENEZUELA. Caracas, YVOZ, Radiotiempo good as 1125 1190 VENEZUELA, Caracas, YVOZ, Radiotiempo good as usual lately w/LA mx & frequent R'tiempo ID's. No splash from WCAU (Cartwright)
COLOMBIA, methinks HJBE, as this is the only one listed on at the time per WRTH, but no het & this is rep. Off. At 0540 12/3 (C'wright UnID. Called this definitely Venezuela last week, but came to realise that Cúcuta is right 1211? week, but came to realise that Cúcuta is right on the border - & quite capable of guoting prices in Bolivares, so dang me. Still dunno if YV or HJ, but R. Internacional in Cúcuta, normally here in the past, is warm (Schatz) \$ 0710+ 12/7 OM SS, swinging LA mx, good. Very small het against 1210 (Sanserino) MEXICO, D.F., XEB exc. w/WGAR off! ID's between every record as "X-E-B, La Vez del Jerande" 12/3 0520 (Cartwright) Should be "La 'B' Grande" (RFS) 1220 rande" 12/3 0520 (Cartwright) Should be "La

'B' Grande" (RFS)

VENEZUELA, San Fernando de Apure, YVRD 12/3

unID here thru CHSC, XEB w/SS Frank Sinatra & other records of the same type. ID consists of whistles like on XEOY (4), & then "La Voz ..." something. This around 0530-40 (C'wright)

ST. KITTS, Basseterre, Radio Paradise weak

0905 (shortly after s/on) w/rel pgm & mx in

EE. F/out 0920 11/26 (Daplyn, Ont) § Full

verie signed by Randolph Edmead, I think. Received here Dec. for report of 1/18/73. 10.5

months, give or take a few days (Sanserino)

CUBA, Cruces, CMHK down here from 1308 as of 12/9 or so (Schatz)

ST. PIERRE ET MIQUELON, ORTF. Weak signal w/
classical mx 12/3 0030. Back in NS ex-semilocal ORTF had classical at this time (M'wicz)

GREENLAND, Thule 10/8 1055-1104 nx via CBS & NBC, Weak, but who else has nx from 2 nets & plays soul mx? Page Taylor says they have moved (Oldfield, Alta) § AFRTS carrier in/out w/occasional touches of audio looping a little E of N between 0955 & 1005 12/3. No hope for a report yet (Peterson) § Thule was 1265 1307^{V}

probably the one here w/mixture of MoR & R&R oldies 1112-35 11/11. Weak & fadey but 1gg appeared to be EE. Spot or PSA of sorts 1130 w/YL singing w/guitar accompanyment, followed by what could have been an ID. Believe I caught the letters "...RTS", but that could just be the power of suggestion (Portzer) NICARAGUA, Chinandege, YNAG, R. Gonsiguina tentative ID of station revealed by Malaysia s/off, noted joyfully at 1200:30 12/3 & fading in & out until total demise by 1230. Took measurement of 1474.911 at 1215, which absolutely rules out an entenna pattern change by Malaysia. F/out time suggests a YN more than any other possibility. How about it, Ron? (Peterson) Very likely, tho seldom noted here often w/the Haitian dominant (RFS)

PUERTO RICO. I would swear that the announcer said several tx "Puerto Rico", e.g., "La Voz de Puerto Rico", but no station is listed there. Cx very poor, so I could be wrong. S/off 0301 after station ID in SS & EE, primary lgg is SS, & format is mainly talk shows & discussions. Little mx (Scarlett, Nfld)

There's a new one in Ponce, but I don't recall further info (RFS)

MEXICO, Texcoco, Mex. w/tropical mx & R. Onda ID's 12/3 1157-1215. Strangely enough, 1'st time heard ever (Pejze) Padre: See "Domestics" for your mystery (RFS)

MEXICO, Cd. Acuna, Coah., XERF 11/19 0400 noted s super power boost from S2 0400 to 40/S9 for "La Nacional" time slot (Oldfield)

NICARAGUA, Chinandega, R. San Cristóbal strong Took measurement of 1474.911 at 1215, which 1530 1570 NICARAGUA, Chinandega, R. San Cristóbal strong here eves. Calls its news b'casts "Radio Periódico Impacto" (Schatz) 1595

Foreign Domestic DX Roundup

ARIZONA, Flagstaff, KCLS in the past has carried Navajo pgm, as I recall, around 1300. Haven't heard this station in a long time, so am not sure of time or if pgm still carried. But it could sound like one heck of a wierd TP: (Peterson) § I picked this one up back in '67 while in Vallejo, & I thot "What the ."

TEXAS, Harlingen, KGBT is our snswer to XERF & XEG, pgmg almost all SS into México. No-1530 ted here some late AM's, & likely Pejza's mystery (Schatz) § UnID SS u/XEUR poor at 1157, but on top at brief intervals. Heard one "Your Pan-American Station" slogan in EE, but don't know wether it was XEUR or the unID. Same w/brief chimes at 1230 (Pejze)

Merry Christmas (or Happy און (בון בוו from:

Credo BISQUERA; Waianae, HI (ARB w/HQ-140X)
Brian CARTWRIGHT; Johnstown, PA (Ch. Master 6463-A)
Paul DAPLYN; Ottawa, ON (HRO-500, 4' box loop)
Larry, FLEGLE; Tampa, FL (R-388/URR, SM-2)
Albert LOBEL; El Cajon, CA (DX-150A, IRCA loop)
J.A. MARKEWICZ; Argenteuil Co., PQ (receiver?)
John OLDFIELD; Edmonton, AT (Trio-Kenwood 9r-59D)
Father Jack PEJZA; Sam Diego, CA (HQ-)
Art PETERSON; San Pablo, CA (EQ-180, SM-1)
Bruce PORTZER; Seattle, WA (NC-120/183 hybrid)
Ralph SANSERINO; Huntington Beach, CA (BC-946 & 453)
Peter SCARLETT; Torbay, NF (H'kit Mohican GC-1A)
Ron SCHATZ; No. Miami Beach, FL (R-388/URR, MPA-1)
Richard SHAFTAN; New York, NY (receiver?)
C.M. STANBURY; Crystal Beach, ON (receiver?)
Tom SUNDSTROM; Willingboro, NJ (HQ-150, SM-2)
Charles A. TAYLOR; Indianapolis, IN (receiver?)

5 5 5 5 5 5 5 5 5 5 5 5 5 5 5

GEOMAGNETIC INDICES

Nov. 28-Dec. 4 4 4 1 2 1 3
Dec. 5-11 14 8 6 5 12 8 CONDITIONS ARE EXPECTED TO BE MODERATELY DISTURBED AFTER



CLUB NEWS

President's Report

Recent	Board	of	Directors	Activity

Proposal	RLF	NG	PRK	EK	BN	FJP	JZ	Result
6.1- 1	0	F	F	F	A	0	0	DEFEATED
6.1-38	F	F	F	F	A	F	F	PASSED
6.1-39	0	0	0	0	A	0	F	DEFEATED
6.1-40	F	F	F	F	A.	F	0	PASSED
6.1-41	F	F	F	0	A.	F	F	PASSED
6.1-42	F	F	F	F	Α	F	F	PASSED
6.1-43	0	F	F	0	Α	F	F	PASSED
6.1-44	F	F	F	F	A	F	F	PASSED
6 .1-4 5	F	F	F	F	Α	F	F	PASSED
6.1-46	0	F	0	0	A	0	F	DEFEATED
6.1-47	F	F	F	F	A	F	F	PASSED
6 .1-4 8	F	F	F	F	A	F	F	PASSED
6 .1-4 9	F	F	F	F	A	F	F	PASSED
6.1-50	F	F	F	F	Α	F	F	PASSED
6 .1- 51	F	F	F	F	A	F	F	PASSED
6.1-52	F	F	F	F	A	F	F	PASSED
6.1-53	F	F	F	F	Α	F	F	PASSED
7								

Tie vote broken by President. Key to symbols: F#Favor O=Oppose A=Abstain Board of Directors: Robert Foxworth (RLF); Nancy Gantzer (NG); Percy Kesteven (PRK); Ed Krejny (EK); Bill Nittler (BN); Father Jack Pejza (FJP); John Zondlo (JZ).

6.1- 1 A board resolution confirming tape veries.

Submitted by Larry Godwin.

Submitted by Larry Godwin.

6.1-38 Close Savings Accounts at Midland Savings and Majestic Savings and opening new accounts at Union Loan and Savings and First Federal Savings and Loan in Lincoln. Submitted by Carl W. Dabelstein.

6.1-39 Authorize Richard C. Evans (President), Father Jack Pejza (Editor in Chief) and Carl W. Dabelstein.

Carl W. Dabelstein (S-T) to withdraw money from the savings accounts in the new accounts authorized by 6.1-38.

6.1-40 Raise the maximum amount on club checks to \$50 before requiring two signatures. Submitted by Carl W. Dabelstein.
6.1-41 Abolish the Foreign Membership Fund. Submitted by Carl W. Dabelstein.
6.1-42 Abolish the third class dues structure.

Submitted by Father Jack Pejza.

6.1-43 For each two bulletins on which a member works as a member of the publishing com-mittee, he will be credited with one additional bulletin on his subscription, to compensate for the unneeded postage.

Submitted by Father Jack Pejza. Submitted by Father Jack Pejza.

6.1-44 The cost of a surface overseas subscription to DX Monitor be raised to \$7.50 for IRCA members and \$10.50 to non-IRCA members.

Submitted by Father Jack Pejza.

6.1-45 Approve the 1973 financial report.

Submitted by Carl W. Dabelstein.

6.1-46 Reword the last sentence of proposal 6.1-1 to read: "We extend the scope of that decision to include the DX Records column, and all award competitions based on verifications, other than those based on time

contests." Submitted by Richard C. Evans.
6.1-47 Abolish the Offset Study Committee, as
established by proposal 5.1-105.
Submitted by Richard C. Evans.
6.1-48 Abolish the By-Laws Study Committee, as
established by proposal 5.1-100.
Submitted by Richard C. Evans
6.1-49 Confirm the appointment of Karl Forth as

Submitted by Richard C. Evans
6.1-49 Confirm the appointment of Karl Forth as editor of the "Veries" column, as established by proposal 5.2-33.
6.1-50 Confirm the appointment of David Schmidt, as editor of the Veries Signers List.
6.1-51 Amend By-Laws Article V, Section 2, Part 3(c) by striking out the term contest manager. Submitted by Richard C. Evans.
6.1-52 Amend By-Laws Article V, Section 2, Part 1(j) to read: "Shall be responsible for reporting the results of voting by the Board of Directors in the DX Monitor as Board of Directors in the DX Monitor as soon as possible after the votes have been counted." Submitted by Richard C. Evans

counted." Submitted by Richard C. Evans. 6.1-53 Reconfirm Tom Hartloff as Chairman of the New Member Welcoming Committee.

COMMENTARY:

I neglected to mention it last month, but the Chairman of the Board is Father Jack Pelza. As such, he is the official spokesman for the board, and also doubles as the replacement for Carl Dabelstein or myself should the need arise.

Since 6.1-1 did not pass the board, I see little reason to print it in <u>DX Monitor</u>. If you wish a copy of it, just drop a card to me at Box 2048, Gary, Indiana 46409.

The Foreign Membership Fund was originally set up to contain donations for providing free

set up to contain donations for providing free memberships to foreign members. As of now, there is only about \$4.00 in the fund.

Two new editors have been confirmed. Karl Two new editors have been confirmed. Karl Forth will be doing a wide-ranging column on veries, but is restricted from printing lists of veries received. Dave Schmidt, 42 Chelwynne Road, Castle Hills, New Castle, Delaware 19720 will be doing a list of veries signers. He hopes to run this about every three to four weeks. He will very much appreciate your help with names. By Laws Article V, Section 2, Part 3(c) already includes contest manages as a committee chairman. This. the double inclusion now present

chairman. This, the double inclusion now present is not necessary. Article V, Section 2, Part 1(j) clarifies the wording over what is now present.

Respectfully submitted.

11 December 1973

Cidenal C. Com Richard C. Evans, President

IRCA Financial Report
(Unaudited)

BALANCE SHEET AS OF AUGUST 31, 1973 Assets

Cash			\$ 832
Savings accounts			1,840
Advances to Publis	her for postage and supplies		189
Accounts receivable	e		427
Interest receivable	e		2
Publishing, admini	strative and editorial supplies		376
IRCA foreign logs			36
	icates and supplies		104
Total curre			\$3,806
	s, less accumulated depreciation of \$541		806
Total Asset			
IUCAI ASSEL			\$4,612

Defermed week-weld	Liabilities and General Fund Balance		40.000
Deferred membershi	ps		\$2,328
Accrued expenses			15
Accounts payable			24
	nt liabilities		\$2,367
General Fund Balance			
Appropriated for	r foreign membership fund		4
Unappropriated:	Balance, August 31, 1972	\$1,947	
	Net income, year ended August 31, 1973	294	2,241
General Fund	Balance		\$2,245
Total Liabi	lities and General Fund Balance		\$4,612
	-		
	INCOME STATEMENT		
		Fiscal Yea	r Ended
		August	
		1973	1972

THOUSE STREET		
	Fiscal Ye	ar Ended
	Augus	t 31
	1973	1972
Income		
Dues	\$4,476	\$3,930
Foreign Log Sales	656	
Auction proceeds	149	294
Interest on savings accounts	82	121
Achievement award sales	29	39
Excess of convention registration fees over expenses	58	85
Donations	13	7
Other	5	13
Total Income	\$5,468	\$4,489
Expenses		
Postage	\$3,184	\$2,808
Publishing supplies used	1,168	1,149
Cost of foreign log sales	363	
Depreciation expense, mimeograph machines	140	185
Editor's expenses	61	139
TVA expense	43	9
President's expense	39	- 50
Printing expense-commercial	35	
Cost of sales, achievement awards	21	29
Devaluation charge on sale of World Radio TV Handbook		13
ANARC expense	14	14
Secretary-Treasurer's Expense	16	9
Other	90	11
Total Expenses	\$5,174	\$4,416
Net Income	\$ 294	\$ 73

account description is used instead of "Retained Earnings". This is consistent with proper reporting standards for a non-profit organization.

The above statements were prepared from the books of account of the International Radio Club of America.

Respectifully submitted,

Carl W. Dabelstein Secretary-Treasurer



DX CONTESTS

7217 Creekside Drive Austin, TX 78752



(10)

Bruce Portzer - 1h056 5th Avenue South - Seattle, WA 98168

FOREIGN VERIFIED LISTING

1. Name, Location

CV TSV TFV NA SA EU AS AF OC YR Most Distant verie, location, dist. CV is countries verified, TSV is total stations verified, and TFV is total foreign veries. NA, etc. is the number of veries from each continent. YR is year began DXing.

	· · · · · · · · · · · · · · · · · · ·
1. C.M. Stanbury, Ont.	115 136h h71 203 73 115 7 25 h7 51
	5DR-1500 Darwin, Aust. 9750 mi.
2. Iarry Godwin, Golo.	63 1250 372 139 152 18 13 2 48 57
3. Bill Willis, Cailf.	55 952 135 39 20 17 34 1 18 60
4. Angel Garcia, W.Y.	50 341 109 14 17 42 6 64
	Odessa-51,8 7250 mi.
5. Art Peterson, Calif	h5 1h8 90 h8 1h 2 1h 12
,	VOFA-1580 Thailand 7867 mi.
6. Bill Raczko, Ohio *	hh 25h 71 38 13 16 3 1 65
7. Jim Poterba, Pa.	-0 (10)
8. Joe Fela, N.J.	28 648 41 19 11 8 2 1 71 26 370 38 19 4 13 1 61
9. R. S. Dildine, Va. *	25 170 31 18 5 6 2 71
10. Frank Wheeler, Pa.	2h 16h0 70 62 7 2 31
11. Bruce Portzer, Wash.	
in in the state of	
12.Ernie Wesolowski, Neb.	2NA-1510 Newcastle, Aust. 7590 mi.
13. Larry Abraham, Mich.	
The Bob Mond Codes	22 499 43 24 17 1 1 60
14. Bob Neal, Calif.	22 418 55 34 10 2 1 8 67
TE Cooper II I	42D-1550 Emerald, Aust. 7600 mi.
15.George W. Jensen, Md.	18 390 27 19 6 2 71
16. Randy Minnehan, Ohio	17 157 20 12 li li 70
17. Robert Kramer, Ill. *	15 835 25 19 6 70
30 3334 1 61	CBU-690 Vancouver, B.C. 2480 mi.
18.Elliot Strauss, N.J.	15 385 55 6h
	Monte Carlo-1466 3960 mi.
19. Richard T. Eddie, Mo.	1l ₁ 630 16 12 3 1 67
20. Welville Coffin, B.C. *	* 1h 182 20 6 1 6 7 69
21.JEP, B.C.	12 385 27 6h
<i>'</i>	SRS-725 Surinam 5615 mi.
22. Mike Hardester, Calif.	12 181 28 17 2 5 5 68
23. Morris Sorenson, Ont.	8 403 10 9 1 6h
24.Jeff Brasier, Calif.	8 262 11 8 2 2 3 72
25.Derek Ford, B.C.	8 170 12 6 1 3 2
26. Tim Saltmarsh, N.H.	6 220 8 5 3 71
27.Greg Hall, N.C.	8 103 10 9 1 61 8 262 11 8 2 2 3 72 8 170 12 6 1 3 2 6 220 8 5 3 71 5 115 3 2 1 58
28. John Johnson, Mont.	5 145 3 2 1 58 4 620 8 5 3 62
	KAIM-870 Honolulu 3960 mi.
29. Howard Mayerson, Mo.	4 332 6 5 1 72
31. Thomas White, Va.	L 107 2 2 68
<i>y=</i> , <i>y=-</i>	KSL-1160 Salt Lake City 1842 mi.
32. Rich Segalas, Calif. *	lı 62 2 1 1
33.Brian Cartwright, Pa. *	
34.Allen Denny, Wisc. *	3 93 1 1 72
35. Mark L. Fisher, Ind.	$\frac{3}{3}$ $\frac{72}{72}$ $\frac{1}{1}$ 1 72
36. Kevin Braun, Mich.	HJDK-750 Colombia 2539 mi.
37. Frank McCoy, Ia.	CK/X-1130 Vancouver, B.C. 2200 mi
30.John Keleher, Ind.	KWK-1070 Los Angeles 1850 mi.
30. John Keleher, Ind.	KNX-1070 Los Angeles 1850 mi.
39. Mike Hogan, Ind.	KNX-1070 Los Angeles 1850 mi. KFI-6hO Los Angeles 1815 mi.
	KNX-1070 Los Angeles 1850 mi.

An asterisk after your name means it's time to update. The mileages for the above were calculated using a world globe and a piece of string, unless the member himself submitted it. So if some of the numbers seem a little weird that's the reason why. The next few DX Records columns will be as follows:

- Domestic heard records featuring best Delaware, Georgia, and Hawaii. Deadline is three weeks from date of this issue.
- 2. Foreign heard records featuring most distant catch. Deadline is five weeks from date of this issue.

- 3. Domestic verified records featuring Maryland, Minnesota,
- and South Carolina. Deadline to be announced. h. Foreign verified records from North and South America.

Deadline to be announced later.
That does it for this go around. Herry Christmas, Happy New Wear and best of DX in 197h. Lets hope the energy crisis gets bad enough that stns have to drop AN programming but not so bad that we don't have any juice to operate our receivers, hi.

CONTEST STANDING FOR DECEMBER DOMESTIC CONTEST

PRO	AMA	NAME	TOTAL	S	В	3	2	1	P	Ĺ
1.		Abraham, Mich.					15		1	2
2.		Keleher, Ind.	103	40	8	22	11	7	2	3
3.		Portzer, Wash.	95	37	21		13	15	2 3 4	7
-	1.	Mayhew, Que.	91	38	4	19	11		4	4
	2.			36	3	17	15	4	5 6	2 3 7 4 1 5
4.		Cowles, Ariz.	84	39	12	11	11	17	6	5
5.		Daplyn, Ont.	70	36	1	11	11	14	7	15
	3.	Myer, N. S.	70	35		11	7	17	8	6
6.	_	Seaver, Cal.	63	34	11	4	10	20	9	9
7.		Flegle, Fla.	62	30	3	8	13	9	10	10
8.		Mallon, NY.	60	32	3	9	7	16	11	8
	4.	Hogan, Ind.	56	28	2	8	10	10	12	12
	5.	Hendricks, Ill	• 53	33	1	3	13	17	13	13
		Mount, NJ.	51	28	3	7	6	15	14	11
9.		Gantzer, Wash	. 44	26	5	5	3	18	15	-
-	7.	Boyd, Okl.	40	21	3 5 3 6	6	4	11	15 16	16
10.		Wheeler, Pa.	37	22	6	2	5	15	17	14
11.		Horne, B.C.	36	24	0	2 5	2	17	18	17
12.		Buehler, Mo.	21	18	0	0	3	15	19	-
	8.	Gill, NY.	15	10	1	1	2	7	20	18
	9.	Fisher, Ind.	11	8	0	0	3	5	21	-

PRO, AMA refer to the present position in the Professional and Amateur Contests resp, S = states and provinces heard, B = bonus points, 3,2,1 refer to the number of states with 3,2,1 stations heard. P is the overall position in the Domestic Contest, while L refers to the overall position during Nov.

FOREIGN CONTEST

Transatlantic

1. Minnehan, Ohio 6 stations, 6 countries Breger, Texas 2. Brown, Ont. 2

Transpacific:

1. Seaver, Cal. 6 stations, 4 countries 2. Portzer, Wash. 3

Amer

cica	<u>.S 1</u>				
1.	Minnehan, Ohio	24	stations,	16	countries
	Breger, Texas	23		14	
2.	Abraham, Mich.	19	*	14	M
3.	Flegle, Fla.	17		11	3 <u></u> t
4.	Parsons, Que.	6		6	
	Mayhew, Que.	5		5	
6.	Hogan, Ind.	5		3	
	Seaver, Cal.	4		4	
	Mount, N.J.	4		3	
	Boyd, Okl.	3		2	THE THEN THE THE
10.	Fisher, Ind.	2		2	

* The Foreign Contest remains open and DXers are invited to enter. Judging from the totals, you still have a chance.

* Deadline for updating is the 1st of each month.

DX FORUM -- CONTINUED FROM PAGE 4

next Mon. will be better. Time to wish a very Merry Christmas and a Happy, Prosperous and Healthy New Year with good DXing and verie-collecting to all members of the IRCA and Monitor readers.

Bill Hardy, 303 W. 10th St., Aberdeen, WA 98520 Part Three (hopefully the end!) of my continuing DXF rap on the "power shortage": Consider this: The IMPOSITION of DST upon us all wastes power to the extent that some 1650daytimers will operate one extra hour a day presunrise with up to 500 watts power apiece! Would manditory cutback in hours REALLY work? I doubt it; here's why. Broadcasters, being people, dislike being TOLD by government they must or cannot do something. If stns are forbidden to operate between 12 and 6 am, you'd better believe they'll all s/on promptly at 6:00 am Sun. and stay on till 11:59: 59 pm Sun. nite, so you might actually LOSE some silentperiod time! One DXer advocates another AM freeze. I say the more stns there are, the less revenue each has to op-erate. Look at Canada, with its tight allocations policy. Metro Vancouver has 9 stns; of them, every one except CBU

is NSP! Finally, let's stop writing letters advocating cutbacks in hours of the very stns we're all trying to log, and instead search our neighborhoods for power-wasting forms of QRM - AN neon signs, defective lighting, appliances w/noisy motors, TVI-causing TV sets. And blinking Christmas lights! hi. THAT'S IT!!! 73.

0245-0300 0400-0415 0415-0430 1450 1560 1340 1390 1370 WPAD ΚY (11)WVAK IN KPRK MT @:WANY KY 0430-0445 @:WGOH 0445-0500 @:WCYN KY 1/100 0500-0530 *KEIN 1310 0545-0600 **EKZNG** 1340 AR 0550-0600 KXIW 1320 MO - MM with week of 15th in it SECOND TUESDAY 0000-0015 1320 WEET VA 1240 @HWSFC WTHU MD 0015-0030 @#WFTG 1400 @#WANT 990 VA WHPT. 610 VA @WSN.T 1240 ΝJ @WR GM 1540 VA @WGAI 560 1240 VA 0030-0045 **CWFTM** KY 1340 1410 1590 1420 @WJMA VA @:WHLN KY @#WEEZ PA 0030-WEMB TN0045-0100 @WRSL 1520 KY 0045-0100 @#FTR VA 1450 *WHBG 1360 0100-0115 @WREL 1450 VA WMVB 1140 NJ@¤WKD0 1560 0145-0200 **≭KCHR** 1350 MO

All times are in Eastern Local Time, except checks with underlined times. In these cases, the check is run based on standard time throughout the year. This, of course, is subject to possible change if national daylight time is adopted.

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0230-0245	*KVSL	1450	AZ	T		WJJZ	1460	NJ	T%
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Tuesday after 1st Monday SECOND WEDNESDAY

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@×WATM 1590 0230-0245 @MMOX 1010 MS 0245-0300 WEEJ 1240 TN T 1230 1450 1250 1340 860 0300-0315 @WAUD ALt 0345-0400 WMOC TN t WNER 0400-0415 FL M WAML 0415-0430 0500-0515 0550-0605 MS t @#WAMI AL KARV 1490 T SECOND THURSDAY 0000-0015 **₩ID**G 940 1370 1550 T -0030 ₩WOTR PA 0110-0120 KEDD 1370 1430 1330 1410 0145-0200 WLOP GA. t **@**₩**W**PCF FLt 0210-0220 @KOVE WY TQ 0215-0230 @NONS FLT WYDE 850 AT. 0300-0315 0330-0345 0430-0445 0500-0515 1240 1570 1240 **@W**BHB GA Ī WMES GA t **ENPKE** Ť KY 1360 T **CWFIX** SECOND FRIDAY 1580

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SECOND SATURDAY 030-0045 WGHT 1380 NY TC -0100-0130 *KCHA 1580 IA T 0105-0130 KNLV 1060 NE T 0115-0130 *KCHE 1400 NE T 0130-0145 KJEF 1290 LA T -0145-0200 *KCHA 1580 IA T 0200-0215 KDCE 970 NM T 0200-0216 KFUN 1230 NM T 0230-0245 KBLE 1440 MT TQ1 0430-0445 **SEL 1240 MT TQ1 0430-0445 **SEL 1240 MT TQ1 0430-0445 **SEL 1240 MT TQ1 0430-0515 **SEL 1240 MT TQ1 0430-0515 **SEL 1240 MT TQ1 0530-0545 **SEL 1390 ND T 0530-0545 **SEL 1390 ND T 0530-0545 **SEL 1390 ND T 0530-0545 **SER 1550 KY T	0110-0120	THIRD SATURDAY 0030-0045 WGHT 1380 NY TC 0100-0115 @KNET 1450 TX T -0130 *KAMI 1580 NE T 0130-0145 *KEY1 1400 NE T 0130-0145 *KEY1 1400 NE T 0135-0200 KGNI 1280 NE T 0200-0215 *KAHL 1410 NE T KSRC 1290 NM T 0205-0220 @KALG 1230 NM T 0215-0230 @KALG 1230 NM T 0KRRR 1360 NM T 0500-0520 *WDDY 1420 VA T THIRD SUNDAY 0100-0115 WSYL 1490 GA T
SECOND SUNDAY 0110-0115 **KSCJ** 1360 IA T 0115-0130 **KCCR 1240 SD TQ3 0200-0215 **KALO 1250 AR T 0300- WGWR 1260 NC T 0545-0600 @WICK 1250 KY T 0650-0700 @WVJS 1420 KY T	0615-0630 @KIBL 1490 TX T 0645-0700 @KWMC 1490 TX Tuesday after 2nd Monday - Tuesday after 3rd Monday a - January and April b - March and September c - Tues. closest to 15th d - July and October	0115-0130 **KFPW 1230 AR T 0615-0630 @**KDXI 1360 LA T / 0640- @*KSYL 970 LA T / 0645-0700 @KINE 1330 TX T / - Sunday after 3rd Saturday FOURTH MONDAY 0000-0015 @**WCMS 1050 VA M @*WCBG 1590 PA TL
THIRD MONDAY 0000-0015 *WKSK 1600 NC T 0015-0030 *WVSS 1470 NC T @*WBEQ 1340 GA T 0040-0050 WDXY 1240 SC T 0040-0050 WDXY 1240 SC T 0040-0050 WTON 1450 GA T *KXEO 1340 MO T 0105-0120 *WGAU 1340 GA T 0115-0130 *WBSC 1450 SC T 0120-0135 *WWDIC 1430 VA T 0130-0145 *KWKY 1150 IA T *KWIA 1530 IA T 0135-0150 WJFF 1340 IL T 0145-0200 KHDN 1230 MT T *WNYR 680 NY Tb 0215-0230 KGFC 1340 ND T 0220-0230 *KKIM 1000 NM T 0230-0245 KRZY 1450 NM T *WAAO 1530 AL M *WHYD 1250 AL M *WAAO 1530 AL M *WHYD 1500 NM T 0315-0330 *WFD 1550 TN M 0315-0330 *WFD 1550 TN M *KUDI 1450 MT T *KWIA 1530 AL M *KUDI 1450 MT T *WAAO 1530 AL M *KUDI 1450 NM T *WAAO 1530 AL M *KUDI 1450 NM T *WAAO 1530 AL M *KUDI 1450 NM T *WAAO 1530 AL M *KUDI 1450 MT T *KWEDI 1450 AL M *KUDI 1140 NV M *KUDI 1250 CA T *KXXL 1450 AR T *WEST 1460 TX T 0545-0600 *WTZE 1470 VA T 0555-0600 *KRGV 1290 TX T 0645-0700 *KWKC 1340 TX T *WKXL 1570 IL T *WKXL 1570 I	THIRD WEDNESDAY 0000-0030 WMFT 920 MI T 0105-0115 @ KDLK 1230 TX T/ 0115-0130 @ KLIC 1120 LA T/ 0115-0130 @ KLIC 1230 LA T/ 0130-0145 @ KPEL 11450 TX T/ 0130-0145 & KZRK 1540 AR T 0200-0215 KZRK 1540 AR T 0215-0230	0000-0030
KOLS 1570 OK T	©*WWDR 1080 NC T/ *WVOS 1240 NY 0 -0020 WERA 1590 NJ TQ3 0015-0020 *WFOY 1240 FL T -0030 *WSKE 1050 FA T/ *WQDE 1260 GA T ©*WMDG 740 VA T/ 0045-0100 WRAR 1000 VA T	0¼40-0¼55 ©:WHUN 1150 PA T 0500-0515 @:WJDY 1¼70 MD T 0515-0530 @:WFLN 900 PA T 0525-0540 @:WANN 970 VA T 0530-0545 @:WHLW 1170 NJ T @:WEFD 1310 PA T *KTHS 1¼80 AR T 0645-0700 KCRV 1370 MO T
### 1510 VA T\$ #### 1510 PA T/ ##### 990 VA T\$ ##### 1510 PA T/ ##### 990 TN T 0030-0045 *##V0P 970 GA M ##### 1400 VA Tb/ 0045-0100	***WMNS 1360 NY T 0100-0115	FOURTH TUESDAY 0000-0010

FOURTH WEDNESDAY *WCFV 0000-0010 1480 0105-0105-0120 @KPS0 1260 TdT¢ @KDLK 1230 0100-0105 *KCOG 0110-0125 @*KPEL 1400 IA 11120 LA T⊄ T ₩C OW 1290 WI 0115-0130 1230 @KLIC LA Tø $\mathbf{X}\mathbf{T}$ **OKHEN** 1450 Tol 0130-0145 *WGEA 1150 AT. -0100-0130 *KRWB 1410 MN 1190 1240 1270 1560 WHMT TN0130-0145 KVRC AR 0200-0210 MRIW MS ¥KLTI MO -0215 WJHO AL 1400 t 0205-0220 @KPAR 1190 NM $T_{g'}$ 0215-0230 @#WFLI 1070 TNM 0230-0245 1300 32KHAC AZ TmWJAK 1460 TN t 山50 山50 山50 0330-0345 @WBSR FL0345-0400 @wsnt GΑ t 0400-0415 WROB MS t

FOURTH THURSDAY
0015-0030 *WAZA 1 **T**360 @#WNPV 0030-0045 @#WYNS 0100-0110 WKEN 1600 DE T 1290 1570 -0115 **@KWGH** TX \mathbf{T} 0110-@KLLA LA T 0135-0150 0145-0200 0150-0205 **₩DWS** 1/100 ΙL TQ1 WBCA 1110 AL*KRGI 1430 NE 1390 1480 0200-0215 WLAN PA *WJFC η'n 1450 1530 990 1420 0215-0230 @KOBE NM 0245-0300 @:WHIY AL0300-0315 @:WTCB ALTTMM 0315-0330 @:WAOC 0400-0415 @WBML 0430-0445 @:WRGS FL1240 1370 GA TN FOURTH FRIDAY 0000-0015 @#WCDL @:WWDR 1080 0015-0030 @#WSKE 1050 WRAR 0045-0100 1000 ٧A 1400 1450 1330 960 0130-0145 *KGVL TX*KS IW OK T 0200-0215 **≭KGAK** NM T KWYK NM0215-0230 *KPOS 1370 TX 0230-0245 0245-0300 ₩WPRN

- Friday after 3rd Thursday FOURTH SATURDAY 0100-0115 KTEE 7480 0115-0130 0130-0145 0140-0155 IA *KBTZ 1240 TIQI 1340 1370 1480 1270 ⊀KBRS T KY Ī *WA BD NM 0200-0215 *KWEW 0215-0230 *KIML WY TQ3 0230-0245 KNWS 1090 IA 0345-0400 690 KBBA AR *WPTN FOURTH SUNDAY 1480 1360 970 0100-0115 LA @KDXI 0615-0630 LA @KSYL 0650-0700 @KINE 1330 TΧ - Sunday after 3rd Saturday

1240

1340

1290

1420

1260

@WOKS

0300-0315

0315-0330 0645-0700

WSHF

WIGG

KWYR

AL

GA

AL

MS SD

T

26th of the Month 0145-0200 KOTS 1230 NM

27th of the Month 0345-0400 KWYS 92 MT TQ2 920

30th of 0100-0115 the KGMO MO KOUR 1220 IA 0115-0130

KEY TO SYMBOLS

DECEMBER 22, 1973

Regular check per monitoring company that contributed to list * Regular check per consistent reception and/or verie.

T Station checks with cycle tone

Station checks with dial tone M Station checks with music

M Station checks with music
O Station checks with unmodulated open carrier
C Station gives IDs in Morse Code
Q Quarterly check (every three months)
Q1 1, 4, 7, 10 months only
Q2 2, 5, 8, 11 months only
Q3 3, 6, 9, 12 months only
m bi-monthly, odd months (1, 3, 5, etc.)
m bi-monthly, even months (2, 4, 6, etc.)
L Check made the last week of the month
Other symbols are defined in the list.

Other symbols are defined in the list.

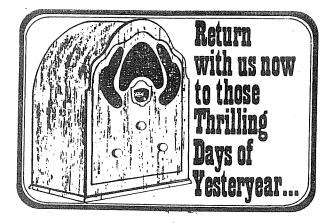
A word about quarterly checks..... With the new F.C.C. rules governing external frequency checks, at least two monitors have eliminated quarterly checks. Instead, their checks are now conducted every month. It would seem other monitoring companies will do the same.

Special thanks go to Russ Edmunds, Ernest J. Wesolowski, Tom Sundstrom, James E. Critchett, and Dave Schmidt for supplying information used in compiling this list. Information was also obtained from both DX Monitor and DX News.

Several monitoring companies also contributed their list of regular checks. Unfortunately, several monitors who have been helpful in the past failed to reply this year. Another monitor is currently re-scheduling all his checks and will submit his new schedule at a future date. If sufficent new information is received, an updater will appear.

Any corrections, additions, deletions, etc. should be sent to - Joseph Fela 150 Robert Place





Centlemen:

The programs being broadcasted by your station are IOWA MUTUAL LIABILITY INSURANCE CO. Complete Automobile Insurance Protection very much appreciated and I wish to express my appreciation of Dute Lespecially enjoyed (5:10P.M 8-30PM. TO TO 6 P.M. 9:30P.M

OLD TIME RADIO-- A TOPIC WHICH IS BECOMING AN EVER INCREASING SUBJECT. ANYONE KNOW WHAT THE CURRENT CALLS ARE FOR WKAA? THE VERIES FOR XER AND JOAK ARE FROM THE COLLECTION OF BILL RAY, PRESIDENT OF ASWLC. KRES IS NOW KKJO. THE CROSSWORD PUZZLE IS, I BELIEVE, FROM AN OLD COPY OF RADEX.

OLD VERIFICATIONS OR ARTICLES FROM OLD BADIO MAGAZINES WILL BE REPRODUCED HERE FROM TIME TO TIME. IF YOU HAVE ANYTHING WHICH YOU'D LIKE TO APPEAR IN OLD TIME RADIO, SEND US A GOOD XEROX COPY.

Station calls are to be filled in as shown so that the name of a state will appear reading downward in each of the four vertical columns.

(14)

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Radio entertainments.
On 1200.
Around zero.
A railway system.
City is a man's name.
On 1420.
Only chain station in the
Ditto.

Only chain as District of the Control of the Contro

A blue outlet.
Owned by a great store.
Owned by a problem (great store)
Commission is clearing wave for this.
A Columbia on the coast.
On 1000 (jumbled).
One of two NBC in the state.
A synchronized station.
A Catholic school.

level is the only incore ancesting to Best in the only incore ancesting to Best Res. System completely shielded.

6-EASE OF CONTROL

10-EASE OF CO

A Catnolic school.

101 watts.
Down but not out.

th 1370.
Only station beginning with these letters.
On 1310.
Last three of municipal station.
First three of six Canadians.

Correct calls all appear in the February RADEX. Get the answers to these three problems to us by March 20th and receive a copy of the April issue or the radio map free. Subscriptions will be extended one issue when request is made.

A Difference in Watts

A Difference in Watts
Rudolph Kure, 301 Warner St., Cincinnati, Ohio, reports that a verification
from KGGM, Albuquerque, N. M.,
shows an increase in power from 250 to
500. Many other readers call our attention from time to time to discrepencies
between the power shown in RADEX
and that shown by letterheads of stations. In their publicity matter, stations
invariably give their power at their
maximum, the daytime rating, while
this magazine uses the night rating with
the plus mark showing greater power
during daylight. Mr. Kure reports a new
police broadcaster in Shreveport, La.,
KGPY with 100 watts on 1574 kcys.
operated by the Louisiana State Bureau
of Identification.

Correos - México

X.
hine Station i
strs power. 662.
Villa Acuña, C.
Del Rio, Tes Mr. Bill Ray, 5811 College Ave. THE HERE LADO DOLO DEBE ESCHOMBE LA DIMECCION Oakland, Calif.

O MEXICO friendly people.

From to

/ E L C O M F The gateway Greetings fo

(Tokyo Central Broadcasting Station)

Tokyo, Dec.21,193

The Tokyo Central Broadcasting Station thank you for your kine communication, and take pleasure in confirming your reception of Station JOAK on the morning of Nov. 26, 1931.

Hoping you will enjoy our future programs.

Yours sincerely TOKYO CENTRAL BROADCASTING STATION

SPECIAL DX OSL

1965 ANNUAL CONVENTION

INTERNATIONAL RADIO CLUB OF AMERICA

1360 Kilocycles

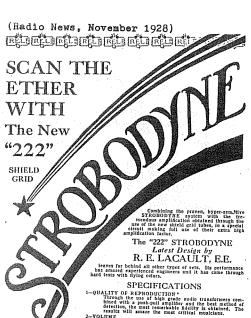
5000/1000 Watts

SAN DIEGO, CALIFORNIA

This Will Verify Your Reception Of Our Station On God 7,19034185651910 PST Signed C. 71 Duncone C.E







4-SINGHIVERESS of this receiver is so much greater than the similar or calling that it is beyond comparison. There is not in the specific production and the similar or calling that it is beyond comparison. There is not like that it is beyond comparison. The la not like that it is beyond comparison. The la not like the late of th

YETY WERE SIGNALS IN PROCESS.

TERRIAL

Only the very best of tested parts are used in the entire set, insuring permanent high efficiency. 5-DESIGN new "YET" STRONDDYNE is designed by R. E. Lacault, E.E. well under stretcher of several famous circular, whose reputation is read to the bigh grade radio engineering incorporated in this set.

Long Distance Phone SUSQUEHANNA 2095

Read how to build it in the September issue of Radio News and Blue Print No. 63

We are equipped to give you PROMPT MAIL ORDER SERVICE All genuine parts carried in stock ORDER DIRECT from R. E. LACAULT, INC.

116 West 65th Street, Dept. 405, New York City

Cable Address LACRAD NEW YORK say you saw it in RADIO NEWS

BRUCE PORTZER

Q&A 14056 5th Ave. South, Seattle, WA 98168

Q: How can I log every state and province?

- A: By knowing which stations to listen for at which time and on what frequency.
- Q: How can I find that out? Are there any lists or anything that can tell me where and when to listen?
- A: Not at the moment, but if Bruce gets his way there will be one beginning with the next O&A column. It will consist of a state by state and province by province listing of what club members feel are the easiest stations to hear in his area for the states and provinces listed.

Q: Great idea! How can I help?

A: By sending Bruce a list of the most regularly heard stas from each state and province, the best time to hear them, and reception quality (always good signal, hrd only when NSP local on same freq. is off, hrd only when the moon is In order to distribute the workload, states full, etc.). and provs. Will be listed a few at a time. The first batch will include Alabama, Alaska, Arizona, Arkansas, and Alberta. Deadline will be one month from the date of this bullctin. Subsequent listings will be in alphabetical order and you can either send your tips in one bunch at a time or by sending in each state, prov., D.C., and territory all at once.

Incredibly enough, this week's column is going to include a few questions and answers from members.

Paul Mount sends a number of questions, including the following:

What are the geomagnetic indices? How do they help DKers? And why are they listed for past dates? It seems like that would be as good as listing DK Tests after they were broadcast.

Geomagnetic indices are a way of measuring what's happening in the ionesphere, which in turn is a result of what's happening on the sun. If the index is low, under about 5 or so, for several days, there will usually be pretty good TP and TA ex. If the index is around 10 or 20, cx are usually average or blah. If the index is high, 30-10 or more, northern stations will be blocked out and stas in the southern U.S., LA, and DU will dominate. The indices are listed for past dates for the same reason weather ex are reported after your picnic is rained out. Science hasn't yet come up with an accurate way of predicting them. However, you can find out current cx by tuning to WW on 5, 10, and 15 MHz at 18 and M5 mins. after each hour. Among other things the guy will mention an "A index" or "Alpha index". This is what you want to know. Further info can be found on mg. 2 of the IRCA Foreign Log.

A het is a whistle or tone hrd when your rx is picking up two or more stns on different but close frees. The pitch of the het is the difference between the two freqs.; i.e., a stn on 1270 and one on 1269 will produce a 1 kHz tone in your rx.

Where have the IRGA conventions been held before 1972? Toledo in 71, Vancouver BC in 70, Chicago in 69, Los Angeles in 68, Denver in 67, Milwaukee in 66, San Deigo in 65, and Atmore, AL in 6h. Eight people were at the Atmore convention, the club's first!

Thomas White asks: How can I get more NY Records report forms?

> like beef, gasoline, heating oil, and long underwear, DK Records report forms are in short supply right now. However, this shortage is not a result of Phase IV and there is an easy solution to the problem. I've asked HO for some more. So those of you who have sent SASE's please hang tight a little longer. You'll be getting some forms shortly. As a reminder, anyone who wants DX Pecords rpt forms, send an SASE to myself or HQ.

Do you have a question about DXing, IRCA, broadcasting or receivers? If so, feel free to write. If I don't know the answer I'll find someone who does. Please enclose an SASE for a personal reply. 73 and gudx.

> WURL RADIO STATION CALHOUN CITY BROADCASTING COMPANY X P. O. BOX 605 CALHOUN CITY, MISS. 38916

Soviet scientists clear sunspots of disrupting radio

from DEV MURARAKA in Moscow

Two Soviet scientists, Y. Birfeld and A. Trantsov, claim that the sun is unfairly blamed for all disturbances in radio communications. They say the cause is right here on earth.

They make this claim after years of research on the state of the ionosphere at a Soviet scientific station in the Arctic Circle. Until now, it has been generally believed by scientists that the upper part of the earth's atmosphere, the ionosphere, was affected only by solar sunspots.

Light quanta from the sun strike the atoms of gases in the atmosphere and break them up into free electrons and positively charged ions. Thus an ionised layer, the ionosphere, is created from which radio signals can be bounced. Changes in the sun, shown by sunspots, would disrupt the ionosphere and hence make radio communications difficult.

But in recent years scientists have been puzzled by contradictions in this theory. For instance, there are long periods, sometimes lasting for several years, when solar activity is extremely low but contrary to the accepted theory disturbance in the ionosphere are great.

MERCURY"

A

Completely calm

On the other hand, sometimes the sun is covered by sun spots and shattered by explosions but the ionosphere remains

What then is the mystery? The Soviet scientists one day, took a radar picture of the ionosphere, where an electronic storm was raging. The sun was calm that day, but there was an earthquake in New Zealand. On another day, when the sun was calm but the ionosphere stormy, the Villarica volcano in Chile had begun to erupt. Thus, with the help of these and similar coincidences the scientists concluded that seismic processes inside the earth were powerfully affecting the upper atmosphere.

Their explanation for this is that during an earthquake the surface of the planet quakes and a light ripple, or wave, runs across it. These seismic oscillations give rise to acoustic waves which spread upwards in an almost vertical direction.

The higher the wave goes the louder the density of the atmosphere and this means that the velocity and amplitude of oscillations of the air particles caused by the acoustic wave grow. When these waves reach the ionosphere they cause the disturbances blamed previously on sunspots.

A-m stereo may get trial run

If the Federal Communications Commission gives the go-ahead, a New If the Federal Communications Commission gives the go-aneau, a New York metropolitan area radio station will test transmission of a-m stereo sound. By adding a special modulator to be supplied by Electrospace Corp., Westbury, N.Y., station WWDJ will be able to broadcast any stereo recordings in a format compatible with present a-m receivers.

Though a-m stereo is an old idea, it's never been tried. That's why any company to the transfer the state transfer to the processor.

expansion of this approach to other broadcasters will probably need FCC permission. Present rules do not ban a-m stereo; however, neither do they

According to Arnold M. Wolf, president of Electrospace, a broadcaster with a complete Im stereo studio and an a-m studio can equip his a-m side for stereo for about \$20,000. And a listener would need two radios, one luned slightly above the frequency and one slightly below. However, Wolf foresees a new market for a-m radios, should the stereo idea take hold. Such a radio would have two i-f strips and two audio channels.

CHRISTMAS -- A TIME FOR SOME TO TRY TO WHEEDLE A NEW RECEIVER OR PAIR OF EARPHONES FROM PARENTS OR WIFE-- A TIME FOR OTHERS TO HAVE THE OPPORTUNITY TO DX LATE INTO THE NIGHT WITHOUT WORRIES ABOUT SCHOOL OR WORK THE NEXT DAY-- A TIME FOR ALL OF US TO EX-TEND THE SPIRIT OF FRIENDSHIP TO ONE ANOTHER. THIS TIME OF YEAR GIVES EACH OF US THE OPPORTUNITY TO RENEW THE SPIRIT OF THE SEASON-- JOY AT BEING ALIVE AND ABLE TO ENJOY GOD SIFTS TO US-- THANKFULNESS FOR OUR FRIENDS-- SADNESS AT THE RECOLLEC-TION OF THOSE WHO ARE NO LONGER WITH US-- WILLINGNESS TO SHARE OUR KNOWLEDGE AND TALENTS WITH THOSE WHO HAVE COMMON INTERESTS. DESPITE OCCASIONAL ANIMOSITIES AND DISSENTIONS, MOST DXERS SHOW THAT THE IDEALS OF THIS CHRISTMAS SEASON MEAN SOMETHING TO THEM THROUGHOUT THE ENTIRE YEAR. ON BEHALF OF ALL THE SAN DIEGO PUB-LISHING COMMITTEE, ALL THE EDITORS OF DX MONITOR, AND ALL THE OFFICERS OF IRCA, MAY THE WARMEST GREETINGS AND BLESSINGS OF THE SEASON, BE WITH EACH OF YOU.

NATIONAL HRO 500 COMMUNICATIONS RECEIVER by Paul Daplyn

INTRODUCTION

This is a completely solid state rx using a phase-locked frequency synthesizer to produce 52 crystal-stable frequencies required to convert incoming signals in the 5 kHz to 30 MHz range to the tunable i.f. of 2.75 MHz to 3.75 MHz. An up conversion mixer is used to convert frequencies below 4 MHz to 26 MHz plus signal frequency to eliminate "holes" in the rx's coverage at the various i.f. frequencies. If the synthesizer was replaced by the Drake SPR-h's conventional HFO generation, 55 crystals would be needed! The HRO 500 uses only five crystals; two for the frequency synthesizer, the rest for the BFO, 50 kHz calibrator and 26 MHz oscillator. All the transistors and crystals plug into sockets and no printed circuits are used. Power requirements are 110 volts AG, 220 colts AG, or 11 to 16 volts DG (great for DXoeditions).

AF and RF gain Controls: self explanatory.

Randwidth: selects 500 Hz, 2.5 kHz, 5 kHz and 8 kHz bandwidths

Dial Lock: locks the VFO capacitor but allows main tuning

dial to move for calibrating rx.
Passband Tune: operates only in 500 Hz and 2.5 kHz bandwidths. Adjusted for best readability of desired signal when there's lots of slop. This control is effective on low pitched TVI. Tuning is not critical. However, on the 500 Hz bandwidth selectivity is so sharp that it normally cuts down on an AM signal's readability too much unless this knob's tuned to the station's upper sideband. If conditions warrant, I zero best the BFO with the station's carrier and tune in a portion of the USB or LSB for improved readability. The SPR-4 lacks passband tuning.
Rejection Tune: This control is used to reject hets from

adjacent stations. Also effective on high mitched TVI. When hets are a problem use this control to reduce them to a minimum, being careful not to reject your station also. Tuning this knob is extremely sharp and takes a while getting used to. Band M: selects tuning ranges of preselector and synthosizer. AGC Threshold: This selects AGC off, on and insertions of 10, 20 or 30 dB attenuation in the RF stage. This rx has minor cross modulation problems with strong locals on the BCB. When this problem occurs, using the attenuator will eliminate the problem. Also useful for extending S-meter readings to a maximum of 80 dB over S9, to make more meaningful comparisons between extremely strong stations and very weak ones. The AGC is on in all positions except "off." Function: This is used to select rx off, standby, SSB, AM, and calibrate. In calibrate, both the 50 kHz calibrator and BFO are on. Zero beat the BFO with the calibrator marker, using the main tuning dial. If the marker is not positioned using the main tuning dial. If the marker is not positioned properly use the dial lock, locking the VFO capacitor, and move the dial until it indicates the marker's frequency. Release the dial lock. When using the dial lock, there are stops to prevent the dial from being set to the wrong marker. Main Tuning: Consists of the 50 kHz per revolution dial and two concentric knobs. One knob's directly coupled to the dial; the other is a 5:1 vernier. This dial has five windows with numbers that indicate to the nearest 10 kHz. As the dial rotates the numbers change. There's also marking dial rotates the numbers change. There's also marking: every 1 kHz. This dial is far easier to read than the Drake SPR-4 because the bandspread is a inch per kHz and 21 feet per MHz. The dial rotates ten revolutions from stop to stop. Synthesizer Tune: This moves a cylinder behind a horizontal window indicating which 0.5 MHz tuning range the rx is at. To read the rx's frequency, simply add the frequency in MHz indicated in the horizontal window to the main tuning dial in kHz. If the synthesizer has not been tuned properly the rx's audio is muted and the red phase lock warning lamp will remain lit.

Preselect Tune: Basically, this control may be treated as a calibrated antenna trimmer. Care must be taken, particularcallorated ancenna trimmer. Care must be taken, particularly on the BCB, that the preselector dial roughly reads the incoming signal's frequency or you may have serious problems with images or cross modulation. This control is the most difficult to use properly. Several weeks' experience is needed to use it effectively on BCB. SW is much easier as the signals there aren't as strong. Tuning is quite sharp on the larger frequencies. on the lower frequencies.

SPECIFICATIONS The image rejection of this rx is good (minimum of 50 dB). Above 500 kHz, sensitivity is good (an optional preselector is required below 500 kHz). It always measured better than 2 uV for 10 dB S+N/N (signal generator set to 30% 1,00 Hz modulation connected to the rx's 50 ohm antenna input). I didn't check sensitivity using the rx's high imprdence antenna input, but LN's and loops usually worked better on this input than the 50 ohm input. Most rx's only have a low impedence input. Selectivity is excellent. The 500 Hz bandwidth (+250 Hz 3dB down) is 3 kHz wide (+1.5 kHz) 60 dB down and the 2.5 kHz bandwidth (+ 1.25 kHz 6 dB down is 6.5 kHz wide (+3.25 kHz) 60 dB down. The 5 kHz bandwidth (+ 2.5 kHz) 6 dB down) is 13 kHz wide (+9 kHz) 60 dB down and the 8 kHz bandwidth (+ h kHz 6 dB down) is 30 kHz wide (+15 kHz) 60 dB down. The 500 Hz and 2.5 kHz filters are tunable — a great feature when slop is figree. The rejection tune control (notch filter) with a + 10 kHz range around the 230 kHz i.f. is capable of rejecting hets with a minimum of 50 dB. Frequency stability of this rx is like the Rock of Gibraltar. National quotes a maximum drift of 100 Hz per day (including a +27% change in the AC mains voltage)! I didn't have a variable auto transformer to verify this snec but I believe Frequency readout accuracy is within 1 kHz over the entire 5 kHz to 30 MHz range (covered in sixty 500 kHz bands). The S meter is EXTREMELY accurate. It's calibrated with S units and dB above 1 uV. When the signal generator's output changed in 10 dB increments, the meter said so. This rx has mucho inputs and outputs for every conceivable use with any accessory equipment. To sum up, National's specs are accurate with one exception. The rx weighs 38 lbs., not 32. rate with one exception.
BASIC THEORY OF OPERATION

The RF stage has three tuned circuits instead of the usual two for better image rejection. Frequencies below 4 MHz are converted up to 26 MHz plus receiving frequency, then fed to the "first" conversion mixer. A 26 MHz crystal oscillator signal is fed into the up-conversion mixer while the "first" mixer is injected by the frequency synthesizer in 500 kHz increments. The variable i.f. (2.75 to 3.25 HHz) from the "first" mixer is amplified by a tunable i.f. stage (four typed cleanity) tuned circuits), then mixed in the "second conversion mixer with a VFO having a 500 kHz tuning range, giving a fixed i.f. of 230 kHz. This i.f. goes through selectable fixed or tunable passband filters and rejection filter, then amplified by three i.f. stages. AM signals go via the AM detector while CW, RTTY, and SSB signals are mixed with the crystal controlled BFO via the product detector. These detected signals are finally audio amplified. The rx has reduced sensitivity and image rejection below 500 kHz because the r.f. stage is bypassed. Frequencies above h MHz bypass the up-conversion mixer and go to the "first" mixer.

The HRO 500 sells for \$2800 in Canada. Obviously it's meant for the serious SW or BCB DKer or ham for whom price is no object. However, Mark Twain's old cliche "you get what you pay for" still rings true. I think this ruggedly built rx is one of the best and most versatile available. National has manufactured this rx since 1961 so some second hand rx's may show up in the next few years. For more info write Max J. Fuchs, National Radio Company, 18 Stone Place, Melrose, MA 02176.



Long Island Press NOVEMBER 30, 1973

DST NO BOON TO LI RADIO

Hour earlier KOs 3 in morning

Year-round daylight savings time will knock three Long Island radio stations off the air for an hour every morning and will limit the broadcasting of some others.

The bill approved by the House authorizes the Federal Communications Commission to grant a special exception authorizing most of the nation's 'sunrise-to-sunset stations to go on the air one hour before sunrise hour before sunrise.

But there are 243 stations, including three on Long Island, which are on the same frequencies as stations in Canada, Mexico or Bahamas . . and international agreements block Congress from changing

The three are: WGSM in Huntington, which shares a frequency with a Toronto station; WSUF in Patchogue, which shares one with Montreal, and WLIX in Islip, which shares one with Sasktchewan.

Another 125 radio stations, including WHLI in Hempstead and WTHE in Min-

eola, are on the same frequencies as other stations in the United States — WHI.I with Cleveland and WTHE with Buffaio. "I'm sure the FCC will grant us some relief," said Jerry Carr of WHI.I. He said the FCC may permit them to go on the air an hour before sunrise with less power during that hour.

The only 24-hour AM station on Long Island, WGBB in Freeport, will not be affected by daylight time. FM stations also are unaffected by the new time.

There are 1,650 daytime-only AM stations in the United States which are al-

tions in the United States which are allowed under present rules to go on the air an hour before sunrise. They are not affected by daylight time.

Although the stations which lose an hour in the morning recover it at the end of the day, the operators are concerned because their largest audience is during the morning computer hours and listances. the morning commuter hours and listeners who turn to a 24-hour station may not come back.



Part II § Cardioid Theory and Propagation © by Ronald F. Schatz, 1973

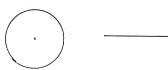
All rights reserved § LCCC No. 73-169984 § § § § § § § § § § § § § §

In Part I of this series we found out that cardioid arrays are not unidirectional loops, rather they are an old idea widely used in marine direction-finding equipment. Empirical research has demonstrated that these versatile, but tempermental, instruments can, at least in theory, permit the DX'er to hear almost anything on the dial strong enough for his receiver to detect. They feature wide nulls that can block a continent of stations, especially on "graveyard" channels, and can even make signals audible "through" interfering locals - the "transparent tower" effect. Cardioid arrays can and will do things that the impossible unidirectional loop was never expected to accomplish.

We also hinted in Part I that the proud owner of a cardioid array, unlike most loop users, must have some idea of how it works, since it is much more complicated than the simple "turn-&-tune" loop. Cardioid users ignorant of theory may have success with the device, but it will be a matter of blind luck and little else. For this reason we are hitting theory at this time - before we build any cardioid arrays.

Again, a cardioid array consists of two separate antennas, a loop and a vertical whip. By electrical mathematics the patterns of both aerials are combined in a certain way to form the cardioid pattern.

The reception pattern of the vertical whip is omnidirectional - a circle. Its pattern on a polar graph is a circle, and a straight horizontal line on a cartesian graph. Since its pick-up at any horizontal direction from the antenna is the same, its mathematical representation is "K" - a constant:



The loop exhibits the familiar "figure-8" pattern on a polar graph and a "cosine wave" on a cartesian graph, thus the term "cosine loop". Naturally, its mathematical representation is the cosine function, "cos0":



Now we have the pattern formulas for the whip and the loop, K and cos0. K is constant; cos0 varies from plus one to minus one (actually: +1 ... 0 ... +1).

Wherever $\cos \Theta$ equals zero, there is a null in the loop pattern. $\cos \Theta$ = O twice, thus two nulls; +1 and -1 give the two peaks.

Problem: What value(s) of K will combine with ccs0 to produce a pattern with only one null - the cardioid pattern? A little high-school algebra will show two values - +1 and -1.

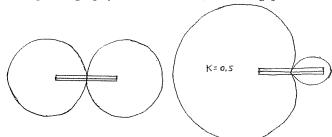
The cardioid formula, then, is either $1-\cos\theta$ or $\cos\theta-1$. The patterns given by both formulas are identical, except that they point in opposite directions (east or west). For our purposes in this article we will concentrate on $1-\cos\theta$.

If the cardioid pattern can be represented by 1 - cos0, then any off-cardioid shape has the formula K - cos0; by varying the value of K from zero to infinity various "sub-cardioid" patterns can be created. First, let us prepare a table for different values of K - cos0:

DECEMBER 22, 1973

000°	<u>-cos9</u> -1	<u>K=O</u> -1	<u>K=.5</u> -0.5	<u>K=1</u> O	<u>K=1.5</u> 0.5
030°	-0.866	-0. 866	-0.366	0.134	0.634
060°	-0.5	- 0.5	0	Q.5	1
090°	0	0	0.5	1	1.5
120°	0.5	0.5	1.	1.5	2,
150°	0.866	0.866	1,,366	1.866	2.366
180°	1	1	1.5	2.	2.5
210°	0.866	0.866	1.366	1.866	2.366
240°	0.5	0.5	1	1.5	2,
270°	0	0	0.5	1	1.5
300°	- 0.5	-0.5	0	0.5	1
330°	-0.866	-0.866	- 0.366	0.134	0.634
360°	-1	-1	-0.5	0	0.5

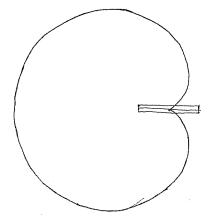
Now, by plotting the values of K - cos0 above on a polar graph, we derive the following patterns:



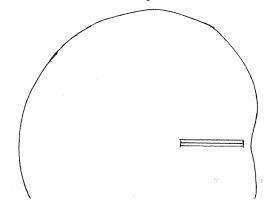
When K=0, the vertical whip is out if the circuit and the loop acts alone. The classic figure-8 pattern with its opposing nulls is the result.

When K = 0.5, the nulls appear at 60° and 300° with a 120° separation between them. There is now a 9.54 dB difference between the two peaks.

When K = 1, the two nulls combine at $000^{\circ}/360^{\circ}$ and we have the classic cardioid pattern:



When K = 1.5 the null disappears, and a 9.54 dB difference remains between the peak and where the null used to be. Further increases in K will produce patterns approaching the omnidirectional circle of the vertical whip:



Yet another condition must be met to form all these patterns: There must be a 90° phase difference existing between the loop and the vertical signals ($0 = 90^{\circ}$). Failure to achieve this 90° difference will result in a variety of useless peanut-shaped patterns:

d patterns.

It is extremely difficult to explain this 90° phase difference in simple terms, so we ask the reader to accept our theorem without proof from us.

To summarise, the basic cardioid pattern is effected when the signels of the loop and vertical whip are equal at the points of maximum pick-up (K = \cos 0°/360° or K = \cos 180°) and their relative signal phases are 90° apart (α = 90).

So far, the theory being presented considers cardioid arrays only on the horizontal plane, but the LSCA has a vertical pattern as well. This vertical pattern is of extreme importance:

The vertical pattern of the vertical whip is not omnidirectional; there is a sharp null directly overhead. Thus, signals coming in at low angles are best received:



... while the vertical pattern of the loop antenna, under average ground conditions, may be described as "semi-omnidirectional":

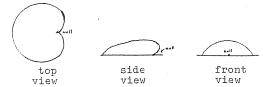


As the illustration above suggests, the loop is most sensitive to signals arriving at low angles; otherwise, it can be said that the horizontal reception pattern of one antenna is the vertical pattern of the other, notwithstanding the fact that the vertical patterns are half-above/half-below ground.

The vertical cardioid (or semi-cardioid) pattern is created according to the same conditions as its horizontal counterpart – signals must be equal in maximum strength and 90° apart in phase:



Falling between the horizontal and vertical planes are an infinite number of diagonal planes. Together they form a solid, three-dimensional reception pattern which the author terms a "melonoid" (Greek: "apple-shaped"). Of course, it is difficult to illustrate such a pattern on flat paper, but the following three figures give a general idea of its solid shape:



Even though our device is called a "cardioid array", it is more precisely a "melonoid array". Although we will keep the traditional terminology by necessity, the reader will be wise to think "melonoid" and "apple-shaped" and picture the pattern in his mind whenever ISCA's, MPA's, etc., have his attention.

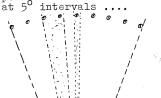
Now that we are familiar with the melonoid pattern, we can study its reaction and orientation to incoming signals.

First of all, we mentioned in Part I the fact that the LSCA pattern has a relatively wide null. This is true for the most part, but an attempt to null out a super-local will give the impression that the null is quite sharp. This phenomenon is somewhat of an illusion; it affects figure-8 loops, but it is far more pronounced on the LSCA.

E.g., the standard loop will null out a signal with the strength of 10 dB over S-9 when the null is only a small fraction of a degree wide. A 4° null, however, will be sufficient to handle a signal strength of S-5. On the ISCA, the maximum null width that will eliminate a 10dB/S-9 signal is 7° , but a wide 41° for the S-5 signal!

In the case of a multitude of stations, the number of stations that can be nulled simultaneously depends upon their angular separations and their various signal strengths.

In the hypothetical case of nine stations aligned in an arc at 5° intervals



... if all the stations were 50-kilowatters coming in with 10dB/S-9 signals, the LSCA could null out no more than two adjacent stations at a time.

If all the stations were 250-watt graveyarders with S-5 signals, the LSCA could null out all of them!

In both cases the figure-8 loop could null out no more than one station at a time! No wonder the LSCA is such a boon on crowded graveyard channels!!

Now let us examine melonoid behaviour under more general cases:



Illustrated above is the "Miami-940" case mentioned in Part I. WINZ is a 10-kw (night) super-local only four miles NW of the author's location. Inter-station propagation, of course, is via the ground wave. WMAZ and YVNN are heard in Miami via the sky wave only.

Almost everybody thinks of the ionosphere as some gigantic mirror. It should be viewed as more like a transparent, turbulent, upside-down ocean. If you could see the ionosphere and the signals refracting through it, it would resemble the reflection of the sun or the moon on the ocean; the reflected image would not be clear but would look like a sparkling path. A signal leaves the ionosphere from several points at once - and from each point only briefly. Fortunately, the ionospheric turbulence is in relatively "slow motion".



The arrows seen in the Miami-940 illustration are really the statistical means of many separate signal paths. These means shift relatively slowly but constantly.

In the same illustration, the melonoid null is aimed directly at WINZ's powerful ground-wave signal. WINZ cannot be heard, but YVNN gets through - as expected. After YVNN closes down, leaving nothing powerful to the SE, WMAZ becomes the only station heard. WMAZ's signal enters above the melonoid null, so it is received with still no WINZ! That explains the so-called "transparent tower effect".

When dealing with sky-wave signals, we must resort to a "sub-melonoid" pattern, as illustrated below:



One of the drawbacks of the LSCA is that the controls must be adjusted often in order to keep the null and the incoming signal in line. Stronger signals require more frequent and delicate adjustments.

That completes basic theory and propagation, but there is one more slight controversy to put to

A few years ago, when cardioid arrays were given renewed popular attention, an unfinished article appeared in the National Radio Club's "DX News" entitled "Pattern-Controlled Loops". In it author Gordon P. Nelson took a generally pessimistic view of cardioid arrays and gave emphasis to the project of their being able to null out any two stations of any angular separation - just by employing the appropriate sub-cardioid pattern. Let's lock into this a bit further: this a bit further:

In order to be truer to theory, the sub-cardioid nulls mentioned by Nelson must be realised as a single sub-melonoid null. We will refer to it as an "arc-null":

According to theory the arc-null can be fit over any two signals with the proper electrical and mechanical orientation of the array. Under certain situations, even three or more signals may be accom-odated thusly. However, we must heed the laws of statistical probability

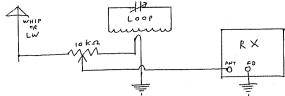
Let "Pd" be the degree of difficulty encountered in nulling out a given signal with the LSCA. A second signal will compound this difficulty, Pd x Pd = Pd. We regret to say that we have proven this fact empirically, and we have yet to waste our time trying to overcome three signals at Pd?!

Our empirical conclusion, then, is that, short wide null" feature of cardioid arrays, it is impractical to use them for simultaneously nulling out two or more stations.



This concludes Part II of this series. III, to appear in a few months, will cover the circuitry of cardioid arrays and their construction, and will supply sufficient information for the reader to design his own LSCA or MPA.

I note that more reporters are using cardioid arrays, useful for stations in a "straight line". To appease a lot of questions, I'll repeat the schematic below:



To operate: Aim the plane of the loop at the wanted or unwanted station, then detune the tuning capacitor and adjust the potentiometer for the clearest signal or the best null. More LSCA articles will follow shortly in DX MONITOR.

73 de RFS



BURT PRELUTSKY

Premise Comedy in Valley

• People who live in San Francisco have long been accused of being terrible snobs about their town. They love everything about the place, and never seem to weary of boasting of their requited love affair. It typhoid hit the burg tomorrow, Herb Caen would probably refer to it as quaint in one of his columns, and, within a week, San Franciscans would be staunchly defending the plague as exotic, amusing and, of course, that old standby, sophisticated.

(19)

and, of course, that old standby, sophisticated.
We in Southern California are just the opposite. If it's outs, we know there's something basically shoddy and second-rate about it. People who can find good things to say about even the likes of Yugoslavia and Portugal, will turn into Don Rickles when it comes to the San Fernando Valley. People who don't think twice about to the san Fernando Valley. People who don't think twice about venturing to the ends of the earth, who can spiel off the latitude of Tanganyika and the grossnational product of Nepal, seem to take inordinate pride in not having the foggiest idea where Tarzana is located or whether Encino is a place or a skin con-,

As a resident of Studio City, I As a resident of studio City, I am particularly aware of the way the rest of you regard my beloved Valley. There was, I must hasten to add, a time I felt as you do. There was a time when there were few sidewalks out here and, as far as the eye could see, nothing but weeds, Bob's Big Boys and those tow-headed tots Boys and those tow-headed tots who grow up to be surfers, TV cowboys and car thieves. Today, though, the Valley is a terrific place. We have nice shops, attractive neighborhoods, fine schools, first-rate delis and, so long as you avoid going west on the Ventura Freeway between 3 in the contractive means of the contractive property of th

the Ventura Freeway between 3 in the afternoon and midnight, few traffic problems. What's more, we have Dick Whittington. Whittington has a radio show on KGIL, the Valley station, between 6 and 10 five mornings a week. If you have never heard him it's hard to describe what he week. If you have never heard him, it's hard to describe what he does. He plays records, to be sure, but he isn't really a DJ. He conducts interviews, but he isn't, strictly speaking, an interviewer. He's funny, but he's not a comic. If he ever gets laid off, he'll have the devil's own time trying to explain to the denartment of emplayers.

the devil's own time trying to explain to the department of employment just exactly what sort of work he's out of.

It was Whittington, for instance, who, after a load of nerve gas had been dumped in the Atlantic, rented a helicopter in Miami, flew over the exact spot and dropped in two Alka-Seltzer tablets. The War on Catalina was another of his brainstorms. "I took 200 people over, dressed according to the war of their choice. Naturally, as we were invading from the sea, I went as Gen. MacArthur. The invasion was a complete success." was a complete success."

I asked Whittington what he'd been doing before coming to KGIL six years ago. 'I was a stand-up comic in clubs and on TV, and I did some comedy writing. Also, I had worked at KGIL once before. But they had fired me. The station, you have to understand, is a toilet out in the middle of nothing. Well, the station manager at the time wanted me to say, KGIL Valley Radio Park. He thought it gave us class. If that's a park, though, Siberia's a resort. I wouldn't say it, so they dumped me."

Whittington deals in premise comedy. He takes two seemingly unrelatable facts and fuses them into total absurdity. For example, the man who flies the KGIL traffic-report helicopter is none other than Francis Gary Powers, of U-2 fame. It is also a fact that there is a wheat shortage in America, thanks to one of the alltime dumb deals. That's all titook for Whittington to pick up the phone one morning and place a call to the Soviet Union's minister of agriculture, offering to swap Powers for 100 loaves of bread.

One of his more involved pre-

bread.

One of his more involved premises took place last season, when Roman Gabriel was undergoing acupuncture treatment and the Rams were suffering from a terminal case of ineptitude. "I was hung-over one morning, sitting at the mike, when I suddenly dreamed up this Texas tenant farmer named Earl, Lucraft, who could throw a pum-Texas tenant farmer named Earl, Lucraft, who could throw a pum-pkin 130 yards. Roman, for one, was pretty impressed. He told me he had once tossed a football 80 yards, but he couldn't imagine anyone's throwing a pumpkin 50 yards beyond that."

I am suddenly aware that I may have made the Valley sound too appealing. I wouldn't want all you foot-loose folks out there

too appealing. I wouldn't want all you foot-loose folks out there to get the idea that life in these parts is just one Earl Lucraft giggle after another. Life out this way can get pretty hairy. Even our hero, Whittington, opts to live in Orange County and commute 130 miles a day. We're crowded enough as it is without all you turkeys settling in.

Actually, the Valley leaves a great deal to be desired. We have all the troubles with dope, hot rodders and thrill-crazed matrons, that every other place has. But, maybe worst of all, it takes movies a good six months to get out here from Westwood and Beverly Hills. And then they're invariably double-billed with either "Skyjacked," "Planet of the Apes," "Soylent Green" or "The Omega Man."

In fact, in spite of Whittington's ceaseless efforts, such is the bleak state of culture in the Valley that if you drive three miles

bleak state of culture in the Val-ley that if you drive three miles in any direction on Ventura Blvd., Charlton Heston's entire career will flash before your very

Hos Angeles Wimes CALENDAR, SUNDAY, DECEMBER 2, 1973

AM - 1390 KC FM - 107.1 MC Studios Klein Road - P. O. Box 370 GULFPORT, MISSISSIPPI 39501

Back in the March 3, 1973, DXN, Don Erickson asked if I could say a few words about the purpose of hyphenated locations - that is, why WJAB Westbrook, Maine, changed their city of license to Westbrook-Fortland. In a nutshell, a station is licensed to serve its city of license first, and its surrounding area second. Westbrook has a population of about 14,000; fortland has a population around 65,000. would be best to serve the larger city alone; but WJAB probably figured the FCC would "buy" the change more if they retained their service to Westbrook while adding service to Fortland. This is important where a city is located near a larger city with a population more than twice its size. In the case of another Portland, the one in Oregon, KISN Vancouver, Wash. is licensed to a city of 40,000, but for all intents and purposes the bulk of its audience is in Portland, Cre., with a population of 380,000. KISN has had its wrist slapped for trying to identify with Portland, and why they don't get their city of license changed or at least hyphenated continues to puzzle me.

Note that the FCC only worries about smaller cities where the larger city is at least twice the size of the smaller (such as suburbs, where the station is supposedly intended for suburban or local service, but obviously the bigger advertising dollars are in the big city). Where you have "twin cities," such as the ones in Minnesota (Minneapolis at 435,000, St. Faul at 310,000), or the many smaller two-city markets such as mine (Aberdeen at 20,000, Hoquiam at 11,000), the FCC doesn't get too uptight as long as you don't deliberately lie on your ID.

You find that hyphemated locations are much more common in TV than in radio, since there is a requirement of certain minimum signal strength inside the entire city limits of each community a station is licensed to serve. This can be done simply in TV through locating the transmitting tower midway between both cities at a high-enough location, while in radio the station would have to deliver a strong-enough signal over all of the city-limit territory of both communities, including an increased signal strength over the factory area of both communities. This is often hard to do without a complicated directional array that provides unwanted deadspots in a station's coverage area, unless a station is lucky enough to be able to use 10 or 50 kw nondirectional! So most AM stations, and practically all FM's, are licensed to just one city. However, in TV, two-city locations are common. There are about a dozen three-city TV stations, and one TV station, KWRB-TV Riverton-Lander-Worland-Thermopolis, Myoming, is actually licensed to four cities.

One more thing about hyphenated locations: to maintain a studio in each city they are licensed to, and broadcast some programs from each studio regularly.



Peddling

the 'sail' of

the century

Biking is a breeze for Carl Ylvisaker, who last week had a little different idea for his Sunday drive. Though Ylvisaker's new mode of travel will soon hit the market, it may take some time before traffic no longer stops at the sight of sailing cyclists co-existing with horse-powered Cadillacs.

Listen to the Happy Sound of Radio Station KLID A KLID BUILDING - 11TH & VINE POPLAR BLUFF, MISSOURI 63901



② Black Urban Experience to Be Topic of Radio Soap Opera

BY FRANCIS WARD

CHICAGO-Plans for a 15 - minute, five - day - aweek radio soap opera dealing with black urban life have been unveiled here by a New York-based advertising agency, Uni-

World, Inc.
The show will be called Sounds of the City and it is expected to be alred on is expected to be alred on 25 black - oriented radio stations around the coun-try beginning March 1, said UniWorld president Byron Lewis. The series will be sponsored by the Quaker Oats Co.

It will be one of the first

dramatic series on radio or television with an allblack cast, dealing primarily with black experiences and produced and directed entirely by

blacks.
"We developed the idea for the show because of the need to portray black life and the black experience in a positive way, and do it on radio," said Lewis. "General media don't portray the positive don't portray the positive or total view of black life. We can attract black audiences, create a whole new value system for blacks, as well as an ex-

Kiisables

ceptional sales climate for major advertisers with this show."

Lewis will be executive producer of the show, and producer of the show, and will be assisted in production by Raymond A. League, a vice president of UniWorld. The series will be written by Shauneille Perry, a Chicagoan who has written television and stage productions in New York and Washington, D.C. Central figures in the series will be the Taylor family: Wipona a purse.

family: Winona, a nurse, married to Calvin, a policeman, and their three children, one of whom is a married schoolteacher.

Lewis said negotiations have been completed with 11 radio stations, including Station KBCA-FM

ing Station KBCA-FM (105.1) in Los Angeles which will air the program at 6:45-7 a.m. Monday through Friday.

The other stations are in Chicago, Atlanta, Buffalo, Boston, Baltimore, Kansas City, Mo., Detroit, Memphis and Pittsburgh.

"We're in various stages of negotiations" with another negotiations" with another 14 stations, said Lewis. He said he expected arrangements with them to be compléted before next

> Los Angeles Cimes Sat., Dec. 15, 1973

Rights Sold to Radio Theater

BY JAMES BROWN Times Staff Write

Hollywood Radio Theater, that bold attempt to revive live radio drama, is currently mired in a local state of suspended anima-

The 30-minute series. which had been airing on KGIL (1260) Monday through Friday, has concluded its 13-week contract with the San Fernando Valley station, and its distribution rights have been sold by the program's creator, Jay M. Kohlos, to the Mutual Broadcasting System.

Mutual affiliates will begin breadcasting the neighbor of the same production of the same program of t

gin broadcasting the original shows Monday, but its Los Angeles outlet, KBIG (740) has no plans to carry Hollywood Radio Theater.

Hollywood Radio Theater.
Negotiations are underway between KGIL, which wants the program back on the air and Mutual.
Of Even so, the programs would be repeats—although packaged in a different format for hourlong weekend presentation.

"KGIL is making every effort to get Hollywood Radio Theater back on the air," said Bert Pegram, ac-count executive at the station."The response to the program, gauged by letters from listeners and countless phone calls, has been phenomenal."

A spokesman for Mutual Broadcasting System con-firmed that KGIL is bargaining to retain the series, indicating that advertising was the only hurdle.

heard everyday on Kijs 1150 on your radio 2

Kiis Radio Kiisables 1973

hurdle.

Kohlos, who remains in charge of the program's production, thinks the hiatus is only temporary.

"We have to await official word from Mutual," he said, "but expect to resume production on new cheever in Language.

sume production on new shows in Jaurary.

"I am sorry there has been an interruption, but tall able to reach many more markets than our original syndication, it should work to the program's advantage."

Meanwhile, CBS starts a

Meanwhile, CBS starts a new radio drama program series on Jan. 6 titled Mystery Theater. It will be heard locally on KNX (1070), from 9-10 p.m. seven nights a week.

Radio Station Tower Falls

> (The Tribune's Iowa News Service) IOWA FALLS, IA .- The 230foot transmitting tower of radio station KIFG collapsed during Tuesday's snowstorm. No one

was injured.

The tower was situated 11/2

PM·PM MULTIPLEX TELEPRINTER SYSTEM BARRY RESEARCH CORP. Palo Alto, CA

The Barry Research PM-PM system allows the multiplexing of a teletype or low speed data channel of up to 100 wpm below a normal AM broadcast program without interference to the listener; it allows the provision of broad-cast news, data, or financial service over wide areas without the need for wire lines or special radio transmitters needing their own frequencies in congested bands. In addition to these applications, the system is suitable

for the provision of coded signals on broadcast band sta-tions for disseminating traffic information, safety announcements, emergency information services, or for civil defense; all without requiring any signal audible to the normal listener or requiring additional spectrum width or power. Simple transmit equipment generates a special phase modulated sub-carrier which is placed on the broadcast station's master oscillator. The sidebands extend less than 50 Hz and cannot be detected by the envelope detector of normal broadcast receivers. A special limiter and phase detector separates the teletype signal from the radio program and converts it to DC pulses to operate the teletype machine. Once set up, the receiver needs no adjustment or tuning.

Radio Team Sets Record

Sets Record

HQ ADC, ENT AFB, Colo. —
Two ADC men stationed at
Thule AB, Greenland, have set
an Armed Forces Radio and
Television Service record for
continuous broadcasting.
In tandem, Capt. James Miskimen and TSgt. Donald White
completed a marathon radio
show lasting 112 hours.
The two used both of the
base's local AM stations, and
broadcast simultaneously for 72
and one-half hours. At that point
Miskimen bowed out and White
carried on, simultaneously on
both stations, for another 40
hours.

The marathon was designed to The marathon was designed to help raise funds for the base's annual two big charity drives — the Combined Federal Campaign and Operation Julemand, an annual campaign to raise money for Christmas gifts for Eskimo children throughout Greenland Greenland.

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47	R.	7 42 4 14	7 45 4 22	7 44 4 32	7 41 4 39	7 37 4 46	7 33 4 52	7 29 4 58 7 32	7 24 5 03	7 20 5 09 7 22	7 15 5 14	7 10 5 18	7 06 5 23	7 01 5 27	6 56 5 31	6 52 5 36	6 47 5 40	6 42 5 44	6 37 5 48	6 32 5 52	6 27 5 56	6 22 5 59 6 22	6 17	6 12 6 06 6 12	6 07 6 10 6 07	6 02 6 13 6 02	R. 8.	47
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50	S. R. S.	4 06 7 55 4 01	4 14 7 58 4 10	4 24 7 56 4 20	4 32 7 52 4 28	4 39 7 48 4 35	4 45 7 43 4 42	4 52 7 38 4 49	4 58 7 33 4 55	5 03 7 28 5 01	5 09 7 22 5 06	5 14 7 17 5 11	5 19 7 12 5 17	5 24 7 07 5 22	5 28 7 01 5 26	5 33 6 56 5 31	5 37 6 51 5 36	5 41 6 45 5 40	5 46 6 40 5 45	5 50 6 34 5 49	5 54 6 29 5 53	5 58 6 23 5 57	6 02 6 18 6 01	6 06 6 12 6 05	6 10 6 07 6 10	6 13 6 01 6 13	S. R. S.	50
51	R. S.	8 00 3 56	8 02 4 05	8 00 4 15	7 56 4 24	7 51 4 31	7 46 4 38	7 41 4 45	7 36 4 52	7 31 4 58	7 25 5 03	7 20 5 09	7 14 5 14	7 09 5 20	7 03 5 25	6 58 5 30	6 52 5 34	6 47 5 39	6 41 5 43	6 35 5 48	6 30 5 52	6 24 5 56	6 19	6 13 6 05	6 07	6 01 6 13	R. 8.	51
52	R. S.	8 05 3 51	8 07 4 00	8 05 4 11	8 00 4 19	7 55 4 27	7 50 4 35	7 45 4 42	7 39 4 48	7 34 4 55	7 28 5 01	7 22 5 06	7 16 5 12	7 11 5 18	7 05 5 23	6 59 5 28	6 54 5 33	6 48 5 38	6 42 5 42	6 36 5 47	6 31 5 52	6 25 5 56	6 19	6 13	6 07 6 09 6 07	6 01	R. S. R.	62
53	R. S. R.	8 11 3 46 8 16	8 13 3 55 8 18	8 10 4 06 8 15	8 05 4 15 8 09	7 59 4 23 8 04	7 54 4 31 7 58	7 48 4 38 7 52	7 43 4 45 7 46	7 37 4 52 7 40	7 31 4 58 7 34	7 25 5 04 7 28	7 19 5 10 7 21	7 13 5 15 7 15	7 07 5 21 7 09	7 01 5 26 7 03	6 55 5 31 6 57	6 49 5 36 6 51	6 43 5 41 6 44	6 37 5 46 6 38	6 31 5 51 6 32	6 25 5 55 6 26	6 19 6 00 6 20	6 13 6 04 6 13	6 07	6 01 6 13 6 01	S. R.	53 54
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57	R. S.	8 36 3 20	8 37 3 30	8 32 3 43	8 26 3 54	8 19 4 03	8 12 4 12	8 05 4 21	7 58 4 29	7 51 4 37	7 44 4 44	7 37 4 51	7 30 4 58	7 23 5 05	7 16 5 11	7 10 5 18	7 03 5 24	6 56 5 30	6 49 5 36	6 42 5 41	6 35 5 47	6 28 5 52	6 21 5 58	6 14 6 03	6 07 6 09	6 00 6 14	R. S.	57
58{	R. S. R.	8 44 3 13 8 52	8 44 3 23 8 52	8 39 3 36 8 46	8 32 3 47 8 39	8 25 3 57 8 31	8 17 4 07 8 23	8 10 4 16 8 15	8 03 4 25 8 08	7 55 4 33 8 00	7 48 4 41 7 52	7 41 4 48 7 44	7 83 4 55 7 87	7 26 5 02 7 29	7 19 5 09 7 21	7 12 5 16 7 14	7 05 5 22 7 07	6 57 5 28 6 59	6 50 5 34 6 52	6 43 5 40 6 45	6 36 5 46 6 37	6 29 5 52 6 30	6 22 5 58 6 22	6 14 6 03 6 15	6 07 6 09 6 07	6 00 6 14 6 00	R. S. R.	58
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