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We are looking for a new editor for DXWorldWide-West, DX Test Coordinator and backup Editor-in-Chief. "DX Monitor" deadline - every Monday 6 PM PLT.

2017 CONVENTION

The 2017 IRCA Convention will be in Reno NV on August 17-19 2017 hosted by Mike Sanburn. If you are interested in helping Mike, contact him at mikesanburn@hotmail.com.

World Radio TV Handbook 2017

Published 5 December 2016 - Order your copy today! We are delighted to announce the publication today of the 71st edition of WRTH. For full details of WRTH 2017 and

to order a copy please visit our website at www.wrth.com where you can also order the B16 WRTH Bargraph Frequency Guide on CD and Download.

WRTH 2017 is also available for pre-order, for readers in the USA, from Amazon or Universal Radio in Ohio. I hope you enjoy using this new edition of WRTH and the new CD. Best regards, Nicholas Hardyman, Publisher

CALL FOR NOMINATIONS – Nick Hall-Patch – 1538 Amphion St – Victoria BC Canada V8R 4Z6 E-mail: nhp@ieee.org

Nominations for the IRCA 2017 Elections.

IRCA members, it is time to think about who you would like to represent you as the next club President, Secretary-Treasurer and Board of Directors. Their terms will start on September 15th 2017 per the IRCA Constitution, Article III, Section 5, Part 2. Nominations will be open for President, Secretary-Treasurer, and seven members of the Board of Directors from December 15 2016 through January 31 2017. Only one nomination each for President, Secretary-Treasurer, and only seven nominations for the Board, shall be allowed each IRCA member. An eligible member may nominate his or herself. All nominations must be submitted in written (e-mail) form to the ECC by January 31st, 2017. ten (e-mail) form to the ECC by January 31st, 2017. IRCA's Election Committee Chairman (ECC) is Nick Hall-Patch, who can be contacted via email at: nhp@ieee.org

Nominations Are Open for the TVA and RHA for 2016-2017

Ted Vasilopoulos Award (TVA) Ted Vasilopoulos Award (TVA) Ted Vasilopoulos and contributions to the club. This award in his honor is presented to the IRCA member who has contributed the most to IRCA and the DX hobby during the past several years. The following persons have won the TVA in the last five years and are ineligible this year: Gary DeBock, Eric Bueneman, Nick Hall-Patch, Lee Freshwater and Richard Evans. **Ric Heald Award (RHA)**

Ric Heald was an enthusiastic IRCA volunteer and contributor. In 1995, after his passing, the RHA was created to recognize the IRCA member who most benefited the club in a particularly noteworthy way during the previous year. The following persons have won the RHA in the last three years and are ineligible this year: Ernest Wesolowski, Phil Bytheway and Mark Connelly.

All nominations, including a brief statement supporting the nomination, should be sent to Nick Hall-Patch, at nhp@ieee.org

All nominations must be received no later than January 31 2017.

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Call for Nominations...

Western DX Roundup...

Central DX Roundup...

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DX WorldWide - West...

Special Feature...

WESTERN DX ROUNDUP – Nancy Johnson – 2922 S Olivewood – Mesa AZ 85212-2923 E-mail: NancyJohnson@prodigy.net

WDXR DEADLINES: Each Friday. Please use Eastern Local Time. **REPORTERS FOR THIS ISSUE:** Bill Block-Prescott Valley AZ billblock@cableone.net (BB)Drake R8, Wellbrook ALA1530LNP (GH) Glen Hansen-64985 Olson Road-Deer Island OR 97054 Hammarlund HQ 180A, HQ 145A, JRC NRD 545, various longwires, Kiwa loop John Johnson-2922 S Olivewood, Mesa AZ 85212 John_Johnson@prodigy.net (JCJ) Icom IC-R75, Wellbrook ALA1530LNP Nancy Johnson-2922 S Olivewood-Mesa AZ 85212 nancyjohnson@prodigy.net (NJ) Drake R8B, Wellbrook ALA1530LNP Mike Sanburn-PO Box 1256-Bellflower CA 90707-1256 mikesanburn@hotmail.com (MS) Sangean DT 160 (TW) Ted Wendland-Pitt Meadows BC tedw1953@telus.net Sangean HDR-18 ~ **OF SPECIAL INTEREST** 1330 KYOZ WA, Spokane 11/27 1630 strong signal dominating 1330. First heard on the car radio ('15 VW Beetle) while driving home from a visit with Dan Sys. It was just as strong on the Sangean when I got home. "Classic Rock OZ 95.7." Legal ID was KYOZ Spokane and 95.7 translator calls. Ex-KMBI. (TW-BC) 610 KVNU UT, Logan 11/28 1900 For the People show, ID KVNU 610 AM/102.1 into news. Strong atop CHNL and KONA. (TW-BC) AB, Edmonton 11/27 1730 surprise mid-afternoon catch, Edmonton Oilers PBP dominating 630 with a signal stronger than local CISL 650! 630 CHED (TW-BC) AB, Calgary heard 12/4 at 0853 with weather report then "660 News." (BB-AZ) 660 CFFR 680 CJOB MB, Winnipeg 12/3 good in KNBR null 2350 with "Life of Riley" old time radio broadcast and a "680 CJOB" ID on the hour. New for me. (JCJ-AZ) +12/4 0800 "CJOB" ID heard after very weak talk with KNBR nulled. New logging. (NJ-AZ) OR, Sweet Home 12/9 1000 Laura Ingraham show, KFIR Sweet Home ID into news. (TW-BC) 720 KEIR 750 CKJH SK, Melfort 12/8 0145 "Classic Hits CK 750," no sign of usual pest KXTG Portland OR. (TW-BC) 1

760	CFLD	BC, Burns Lake 12/6 0200 nice surprise from Northern BC. Classic hits, "The Moose," Vista Radio and list of stations on ToH ID. Nothing else on 760 at the time. (TW-BC)	
770	CHQR	AB, Calgary heard 12/4 at 0900 with "Its -7 in Downtown Calgary" then news and at 0903 "AM 770 Calgary Weather." (BB-AZ)	
	CFPR	BC, Prince Rupert 12/7 0100 this has become a semi-regular lately. Nice to finally hear a local ID though, "CBC Radio One 860 AM Prince Rupert." (TW-BC)	
950	950 KKSE CO, Parker heard 12/8 at 1906 with "Altitude Sports Radio" and at 1910 "Altitude Sports Radio AM 950." (BB-AZ)		
	KDCE	NM. Espanola heard 12/3 at 0900 with "KDCE Real Country." (BB-AZ)	
960	KIXW CA, Apple Valley heard 12/3 at 2030 with "The High Desert Talk Station, Talk 960." (BB-AZ)		
	KNDN	NM, Farmington heard 12/3 at 2000 with "KNDN." (BB-AZ)	
	KGKL	TX. San Angelo heard 12/5 at 0706 with "Newstalk 960 KGKL." (BB-AZ)	
	KVOV	UT, Provo heard 12/3 at 2000 with "This is ESPN Provo." (BB-AZ)	
	CFAC	AB, Calgary heard 12/5 at 0729 with "Inside Hockey Sports 960" then at 0903 traffic report. (BB-AZ)	
970	KNIH	NV, Paradise 12/9 0900 ID "KNIH Paradise, Las Vegas" and mention of iHeart Radio, fair with Mexican nulled. New logging. (NJ-AZ)	
990	KRKS	CO, Denver heard 12/8 at 0830 with "KRKS." (BB-AZ)	
	CBW	MB , Winnipeg heard 12/5 at 0742 with weather report and winter storm warning. (BB-AZ)	
1010	CBR	AB, Calgary heard 12/5 at 0757 with weather report. (BB-AZ)	
	CHRB	AB, High River heard 12/9 at 0748 with "Southern Alberta's Community Radio Station AM 1140." (BB-AZ)	
	WOAI	TX, San Antonio 12/1 1815 ad for local real estate firm and Dallas Cowboys football. Weak but alone. Long time no hear! (GH-OR)	
	KOZI	WA, Chelan 11/5 1700 fair with ID at ToH. Gone as quickly as it came, on NRD with N-S wire. (GH-OR)	
	KCVL	WA, Colville 11/5 1745 ID with C&W music, unID football game under/over. Weak on NRD with N-S wire. (GH-OR)	
	KOUU	ID, Pocatello 11/29 1800 atop a mix of 4 or 5 stations, "Classic Country 1290, 102.9 FM, K-O-double U." (TW-BC)	
1310	KLIX	ID, Twin Falls 11/7 0000 "Newstalk K-L-I-X" ID at ToH then lost in the jumble. Weak on HQ 180A with E-W wire. (GH-OR)	
	KNPT	OR, Newport 11/25 0030 news in a fight with KLIX but mostly on top for a few minutes, on NRD with E-W wire. Seldom heard. (GH-OR)	
	KBBR	OR , North Bend 11/8 0000 talk show of some sort, ID at ToH with news. Lost in the static, very weak on HQ 145A and Kiwa loop. (GH-OR)	
	KIDD	CA, San Bernardino heard 12/9 at 0900 with "Fox Sports Radio KIDD San Bernardino." (BB-AZ)	
1380	KKOO	OR, Ontario 12/7 in and out on 1380. 1800 out of oldies with "Your Kool Oldies Station KKOO Ontario, Boise 1380 and 104 point 5," mention of	
1 400	KDDO	website going back into oldies. New for me. (JCJ-AZ)	
	KBRC CKJR	WA Mt. Vernon 11/6 1900 70's type music with ToH ID. Fair to poor but surprisingly alone on HQ 145A with N-S wire. (GH-OR)	
	KTZR	AB, Wetaskiwin 11/29 1900 all alone with nice strong signal. Oldies music, "W-1440" IDs. (TW-BC)	
1450	ΝIZΠ	AZ, Tucson 12/5 faded up over KNOT 1800 with "Your home for Roadrunner Hockey, this is KTZR Tucson and online at 1450ktzr.com an iHeart Radio station." New for me. (JCJ-AZ)	
1480	KGOE	CA, Eureka 12/4 1100 nice and clean for a minute or two over KBPS Portland, "Newstalk 1480, KGOE Eureka." (TW-BC)	
1660	KBRE	CA, Merced 12/3 0500 good coming out of Red Hot Chili Peppers song, ID/Non ID "Merced's Rock Station, The Bear 105.7." Ex-KTIQ and KAWX	

lerced's Roc Station, eppers song, i for me. (MS-CA)

+12/8 0100 classic album rock, "105.7 The Bear, Merced's Rock Station." Legal ID "The Bear, KBRE Merced and K289CB Los Banos." (TW-BC)

It looks like the Canadian radio stations have become Arizona snowbirds! - Nancy 12/9 1900

CENTRAL DX ROUNDUP – John C Johnson – 2922 S Olivewood – Mesa AZ 85212-2923 E-mail: John_Johnson@prodigy.net CDXR reports ONLY: cdxr@ircaonline.org

RIDING GAIN

[EB-MO] Eric Bueneman, Hazelwood MO NOUIHEric@aol.com GE Superadio III

DOWN THE DIAI

600 WSJS NC, Winston-Salem. 11/29 fair over WMT, WREC and Cuba. 0525 with "Six hundred WSJS and WSJS-dot-com" ID and local spots. [EB-MO] 690 KAFN AR, Benton. 11/29 fair signal over CKGM in KSTL null. 0422 noted with local spots. [EB-MO] 730 WUMP AL, Madison. 11/29 fair signal over KKDA. 0340 noted with local spots, "The Tennessee Valley's Home for Sports" slogan, "WUMP, 730 and 103point-Nine The Ump" ID into CBS Sports Radio. [EB-MO] 930 WLLL VA, Lynchburg. 11/30 good signal over WTAD and other stations. 0401 noted with local spots and an Urban Gospel format; apparently on day power. [EB-MO] 980 WBZK SC, York. 12/2 fair to poor signal, mixing with KSGM, WYFN. 0401 noted with "This is WBZK, Nine-80 AM in York, South Carolina" legal ID in English into promos in Spanish. [EB-MO] 1010 CFRB ON, Toronto. 12/5 fair signal with ACI from KDKA 1020; local KXEN off. 0429 noted with financial talk show promo, "In-depth radio, news, talk Ten-Ten" ID and local spots. [EB-MO] KY, Cannonsburg. 11/30 fair signal over KRLD. 0437 noted with a Contemporary Christian format, calls and Web site mention. [EB-MO] MO, De Soto. 12/5 very good signal, way over WOWO. 0352 with national spots, "11-90 KQQZ, proud to be broadcasting from the United States of America" ID into *Red Eye Radio*. This replaces the Classic Country format in the overnight spot. May be running 650 watts at night. [EB-MO] 1080 WONS 1190 KQQZ IN, Salem. 12/5 fair signal over XEB. 0350 noted with weather forecast, "My Country 12-20 WSLM" ID and local spots. [EB-MO] MO, Springfield. 11/29 good signal in a WSDZ null. 0433 noted with "104-point-One KSGF" ID, local spots into *Red Eye Radio*. [EB-MO] 1220 WSLM 1260 KSGF IN, Indianapolis. 11/29 good signal, dominating channel. 0315 with Christmas music selection, "Indy's 13-10 the Light" ID and local spots. [EB-MO] 1310 WTLC MO, Poplar Bluff. 11/29 fair to poor signal, mixing with other stations. 0324 noted with local spots. [EB-MO] 1340 KLID MO, Saint Louis. 11/29 very good signal. 1734 noted with Christmas music, "Your Family Christmas Station" slogan, national spots, SRN News, slightly weaker after 1745 pattern change, legal ID at 1800. Returns to the air after a one-year silence. [EB-MO] GA, Austell. 11/29 fair signal in KATZ null. 0302 with "La Mejor" ID in Spanish into a Regional Mexican format. Must be on day power. [EB-MO] 1380 KXFN 1600 WAOS

1700 WRCR NY, Ramapo. 12/5 good to poor, mixing with KBGG, KKLF and KVNS. 0450 noted with an Adult Contemporary format and local promo. [EB-MO]

FLASHBACK

December 18 1965 issue of "DX Monitor" ... Paul Emech was fond of the new "WPE" calls ... Randy Seaver created his own call letter service, his call being KRS4F ... Wayne McRae of Winnipeg MN logged WBT 1110 for a new state heard ... John Oldfield logged KTKN for this 7th Alaskan ... Bill Nittler received a verie from JOOR. // December 15 1990 issue of "DX Monitor" ... Rick Evans of Milwaukee WI logged 9 new stations in 4 days to bring his Milwaukee total to 200 ... RC Watts of Louisville KY told about new TIS stations on the air in his area.

OPEN MIKE

Thanks to Eric we have a column this week. This column was typed 12-9-16. 73, John

EASTERN DX ROUNDUP - Eric Bueneman (NØUIH) - 631 Coachway Lane - Hazelwood MO 63042-1347 E-mail: n0uiheric@gmail.com DEADLINES: Thursday 2000 EL

TUNING THE DIALS THIS ISSUE: Kraig Krist (KG4LAC), Manassas VA (KK-VA) Winradio G33DDC software-defined receiver, Wellbrook ALA1530S+ Imperium loop (PS-ON) Paul Snider, Welland ON, Canada ICOM IC-R75, Pixel RF Pro-1B loop, MFJ-1020C tuner, homemade loop

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ACR	OSS THE				
	WELO	MS, Tupelo – 11/24 0702 noted with an Urban Adult Contemporary format, mention of 104.3 FM by a male announcer. The signal was noted			
500	WLLO	mixing with WCHS, WHP, WHYM and WIBW. (KK-VA) (The 104.3 reference is to W282AS Saltillo MS, which relays WELO – eb)			
600	CKAT	ON. North Bay - 12/2 0621 noted with mention of "The wakeup call; we (make it) easy" by a male announcer, followed by a "Country 600" ID by a			
	-	female announcer. A male announcer was later heard with Ontario news. Note that CJWW also uses the "Country 600" ID. The signal was noted			
		mixing with WCAO and unidentified stations carrying rap music, talk, Oldies and Spanish language programming. (KK-VA) (Your Öldies station is			
		likely WVAR Richwood WV; your talker may be WMT Cedar Rapids IA, and your Spanish is CMKV Urbano Noris, Cuba – eb)			
620	WVMT	VT, Burlington – 12/2 0559 noted with "News/Talk 620 WVMT" ID by a male announcer. The signal was noted mixing with WHEN and unidentified			
		stations carrying ESPN, Oldies, and talk programs in English, Spanish and possibly Russian. (KK-VA) (Your Russian talker is likely WSNR Jersey			
0.40		City NJ; your Oldies station may be WAKY Louisville KY; your Spanish may be Cuba – eb)			
640	WMFN	MI, Zeeland-12/2 0616 noted with mention of "Michigan Business-dot-org go to Michigan Business-dot-org to learn more" by a male announcer.			
		The signal was noted mixing with CFMJ, WFNC, WHLO, WWJZ and Cuba. (KK-VA) (This is definitely WMFN; this station holds a CP to move to Peotone IL to serve either Chicago or that city's southern suburbs – eb)			
	WFNC	NC. Fayetteville – 12/2 0657 noted with a "Your Source, WFNC" ID by a male announcer. The signal was noted mixing with CFMJ, WHLO, WWJZ			
		and Cuba. (KK-VA)			
	CFMJ	ON, Richmond Hill - 12/2 0559 noted with an ad by a male announcer, giving the number as (416) 917-6466. Area Code 416 is the Greater			
		Toronto Area (GTA). The signal was noted mixing with WFNC, WHLO, WWJZ and an unidentified Spanish language station. (KK-VA) (Your			
		Spanish is from Cuba – eb)			
910	WAVL	PA, Apollo – 12/7 0031 noted with an ad for a cable system, clear "WAVL" ID at 0033, <i>The Jason Smith Show</i> , Fox Sports mentions, ad cluster			
		including one mentioning a number in Area Code 724, into a weather forecast from the PA Talk Weather Center. A poor to very poor signal was			
1100		noted, mixing with WFDF and other stations. (PS-ON) MA, Concord – 12/4 2040 noted with The Twiliaht Zone radio show, ad cluster, a promo for The Legal Exchange Show, "on 1120 WBNW" ID at			
1120	VVDINVV	2051. A very poor signal was noted under KMOX and sometimes WPRX; confirmed via Tune-In Web stream. (PS-ON)			
1190	KQQZ	MO , De Soto – 11/27 2328 noted with a Classic Country format, "The Patriot, KQQZ" ID at 2332, Christmas announcements from various Country			
		music artists, "1190 KQQZ" jingle into a Christmas tune by Tammy Wynette. A fair at times to very poor signal over WOWO; must be on day			
		power. (PS-ON) (They could be running 650 watts at night; I can put a tight null on this one at my location and pull in WOWO - eb)			
1200	WZPS	WV, Huntington – 12/4 1938 noted with talk by announcer with a "Home of Southern Gospel, WZPS" ID at 1940 into a Southern Gospel format,			
		"1200 WZPS, the Spirit" IDs at 1946 and 1950 between songs. A fair at times to very poor signal was noted, mixing with CFGO and other stations.			
1050					
1250	WARE	MA, Ware – 12/4 0138 noted with an Oldies format, "Real Oldies 1250" jingle at 0140, "WARE" ID at 0146. A fair to very poor signal was noted, mixing with CJYE and WPGP. (PS-ON)			
1270	WQTT	OH, Marysville – 12/4 0109 noted with an Oldies format, news promo and mention of WQTT Radio-dot-com. A poor to very poor signal was noted			
1270	WQII	under WHLD and WXYT. (PS-ON)			
1310	WDCT	VA. Fairfax – 12/4 0009 noted with continuous Christmas music, with long pauses between most songs. A poor to very, very poor signal was			
		noted, mixing with two Spanish language stations, including WDTW. Also heard an ID for WTLC Indianapolis, IN "1310 the Light" at 0047,			
		confirmed via Tune-In Web stream. (PS-ON)			
1370	KDTH	IA, Dubuque – 12/5 2322 noted with Christmas music, a pair of spots for Real Warriors, "Tri-State Weather" jingle, "KDTH" ID, weather forecast,			
		"1370 KDTH" ID at 2329, mention of the show's sponsor, Dubuque Vacuum, before going back to Christmas music. A poor to very, very poor			
1 4 0 0	WKVT	signal was noted, mixing with usual WTAB and other stations. (PS-ON)			
1490	VVICVI	VT, Brattleboro – 12/5 2232 noted with a spot mentioning "100.3 and 1490" very clearly, followed by a promo with a possible mention of "Talk" and a clear mention of Vermont before fading into the mess. A poor signal was noted briefly as a part of the mix. (PS-ON)			
UNIDENTIFIED					
640		12/2 0607 noted with a recording of "The Star-Spangled Banner"; the signal was noted mixing with CFMJ, WFNC, WHLO, WWJZ and Cuba. Who on 640 goes off for the night and would be signing on? (KK-VA) (This could also be a full-time station; my local KMOX 1120 plays this around			
		0658 ELT – eb)			

EDITOR'S NOTES

Once again, thanks to Kraig and Paul for their logs this week. 73 and good DX from NØUIH

DX WORLDWIDE – WEST – Temp: Phil Bytheway – 9705 Mary Ave NW – Seattle WA 98117-2334 E-mail: phil_tekno@yahoo.com all times UTC

Mondays 1201 PM PLT. All times UTC/GMT. We are looking for a new editor for this column, contact me if interested phil_tekno@yahoo.com.

567 UnID. Very weak audio at 1410 12/07. (BB-AZ)

- 594 JAPAN JOAK, Tokyo, NHK1. Man in Japanese at 1441 12/05, just above the IBOC noise. (NP-AB)
 - +Still only a weak carrier at 1400 12/06, but rose rapidly after 1410, up to fair-good level with woman in Japanese leading into Latin American music at 1450. (NP-AB)
 - +Heard at 1404 12/07. (BB-AZ)
 - +Man in Japanese at 1445 12/07. Fair strength, but much stronger US QRM from 590 today. (NP-AB)
- +Man in Japanese at 1447 12/09. Poor, but the best TP audio of the day. (NP-AB) 693 JAPAN JOAB, Tokyo, NHK2. Man and woman with language lesson at 1435 12/05. (NP-AB)
 - +Man/woman in Japanese at 1442 12/06 with language lesson. (NP-AB)
 - +Heard at 1405 12/07. (BB-AZ)
 - +Man/woman with English lesson at 1455 12/07. (NP-AB)
 - +Heard a few words, and then the time pips at 1500 12/09. (NP-AB)
- 747 JAPAN JOIB, Sapporo, NHK2. Language lesson at 1440 12/05, //693. (NP-AB)
 - +Language lesson at 1443 12/06, //693. (NP-AB) +Heard at 1406 12/07. (BB-AZ)
 - +Fair with language lesson at 1447 12/07. (NP-AB)
- 774 JAPAN JOUB, Akita, NHK2. The only one I would rate as good today, with language lesson at 1440 12/05. (NP-AB)
 - +Had a barely audible to poor signal at 1157-1221 12/06, fading away and not heard afterward. (RA-OK)
 - +Very faint audio from 1447 12/06 for a couple of minutes. (NP-AB)
 - +Fair at 1205 12/07 soon fading away. It faded in and out with brief barely audible traces afterward, last heard briefly at 1338 (LSR at 1330). (RA-OK) +Heard at 1407 12/07. (BB-AZ)
 - +Weak, but a bit stronger than yesterday with language lesson at 1448 12/07. (NP-AB)
- 828 JAPAN JOBB, Osaka, NHK2. Weak audio at 1438 12/05, with language lesson //774. (NP-AB)
- 1098 MARSHAL ISLANDS V7AB, Majuro. At very very listenable levels, all things considered (Hey, that's a show on the NPR station I work for!). (Recording was made at 0710 12/11). Anyways, I heard what sounded like island christian/religious music followed by an announcer talking and then more religious music https://www.youtube.com/watch?v=G1z3gPdsAac. (PW-AK)
- AUSTRALIA 4BC, Brisbane. Announcer gave phone numbers, then time check at 1351 12/07. (NP-AB) 1116
- +Usual talk show host noted at 1406 12/08, and hung around at a poor level (with the odd moment of fair) for the next 40 minutes. (NP-AB)
- REP KOREA HLKC, Kimpo, KBS. 12/11 was about the strongest, signal wise with music. https://www.youtube.com/watch?v=60HCHIsoIdM. (PW-AK) 1134 1188 JAPAN JOKP, Kitami, NHK1. 1188 12/11 was pretty good too, not quite as strong as 1134 KBS but there wasn't as much noise. I happened to catch the top of hour station ID on JOKP/NHK Radio into the NHK Newsdesk. Audio: https://www.youtube.com/watch?v=5vzPjr8j1M8. (PW-AK)
- 1548 AUSTRALIA 4QD, Emerald. Pretty strong 12/11. I've had it before, but it's not usually very strong. https://www.youtube.com/watch?v=11UwMyi_XI8. (PW-AK)

1566 REP KOREA HLAZ, Jeju, FEBC. Fair, with woman in Chinese at 1439 12/05. (NP-AB)

+With its 250KW and 6 towers was a bit fadey 12/11, which isn't usual here. It's usually pretty strong, solid and steady. Today, as usual when I catch it, it's a man talking in Russian. https://www.youtube.com/watch?v=RE0IqiSNm-s. (PW-AK)

PAN AMERICAN DX ROUNDUP

- 540 MÉXICO, XEWA, San Luis Potosi, SLP. 12/06 0503-0524 crisp audio u/CBK: continuous music, Spanish and English current Hot AC hits, then several minutes of 30 second recorded Spanish ads; no ID heard. (JP-AB)
- 1410 MÉXICO, XEBS, México, DF. 12/8 on top 1410. 1158 with Mexican National Anthem and "XEBS" ID. New for me. (JcJ-AZ)

ODDS AND ENDS

12/10 (via eGroup). Here is the Seoul AM band in the most condensed fashion possible: 90 stations in 10 minutes (edited down from 18 hours of recordings). Please feel free to share on any other e-mail lists as this is the only AM-related one I take any part in:

http://www.beaglebass.com/dx/audio/seoul/Seoul AM Radio in 10 Minutes.mp3

My very detailed audio bandscans will be released at the end of this month after 14 months of work. The audio-only one will run around 100 minutes and the one with commentary at over 2 hours, one frequency and station at a time.

So for the ADHD listeners among us, please enjoy this one in the meantime. There are plenty of radio stories, IDs, baseball, music, and more, including some English content, though all clips at 10 seconds or less. And kudos to anyone who can name at least 5 of the stations in the compilation (of which are in no particular order)! For many of you in the west, a good number of these are your everyday TP stations.

Chris Kadlec, Seoul AM Radio Listening Guide

12/11 (via eGroup). Though I realize perhaps only one or two people listened to more than one minute of this (ha!), for the previously posted recording of 90 stations from Seoul in 10 minutes, here is the station list:

06:50 - 1323 China Radio Int'l Korean (0:09)

07:18 - 1017 China Radio Int'l Korean (0:09)

07:38 - 1575 AFN The Eagle Iwakuni (0:08)

07:47 - 1323 China Radio Int'l Korean (0:07)

08:00 - 1566 Yanbian People's Radio (0:07)

08:13 - 1080 Echo of Unification Haeju (0:08)

08:29 - 1584 DPRK Helicopter Jammer (0:03)

08:21 - 1440 STV Radio Sapporo (0:05)

08:47 - 1422 CBN Radio Shanghai (0:08)

08:56 - 855 NIS Coastal Jammer (0:03)

09:10 - 1593 CNR1 Changzhou (0:10)

08:59 - 1170 KBS Hanminjok 2 Radio (0:06)

09:20 - 585 Jiangsu Finance Radio (0:07)

09:37 - 927 Liaoning Rural Radio (0:07)

09:27 - 657 NIS Jammer Hwaseong (0:03)

09:44 - 1080 AFN Daegu/NIS Jammer (0:07)

09:52 - 1170 KBS Hanminjok 2 Radio (0:08)

10:12 - 1179 MBS Mainichi Broadcasting (0:07)

10:19 - 873 NHK Radio 2 Kumamoto (0:09)

10:00 - 1566 DPRK Laser Jammer (0:05)

10:06 - 1350 RCC Broadcasting (0:06)

09:05 - 900 MBC Seoul/DPRK Jammer (0:04)

09:31 - 1233 NBC Nagasaki Broadcasting (0:06)

07:27 - 882 Shenyang Life Radio (0:07)

07:00 - 666 NHK1 Osaka (0:05)

07:06 - 684 NIS Jammer Seoul (0:03)

07:09 - 1314 Radio Osaka OBC (0:09)

07:35 - 711 DPRK Jammer (0:03)

07:55 - 837 CBS Seoul (0:05)

08:07 - 945 CNR1 Jiaohe (0:05)

08:27 - 756 CNR1 Laiyang (0:02)

08:33 - 1440 AFN Daegu (0:05)

08:38 - 1566 FEBC Jeju (0:08)

03:21 - 792 SBS Love FM Seoul (0:04)

03:33 - 1557 Taiwan Int'l I Love Music (0:07)

04:03 - 801 Pyongyang B/NIS Jammer (0:06)

04:11 - 1467 KBS1 Mokpo/DPRK Laser (0:10)

04:27 – 1575 Voice of America Rasom (0:09) 04:37 – 1098 KBS1 Radio Jinju (0:07)

04:44 - 1242 NBS Nippon Broadcasting (0:07)

05:08 - 1242 NBS Nippon Broadcasting (0:05)

05:20 - 1530 Zhejiang News Radio/AFN (0:08)

05:50 – 918 Shandong People's Radio (0:04)

05:54 - 738 Jilin Comprehensive News R. (0:07)

06:04 - 963 Liaoning Comprehensive R. (0:07)

06:18 - 1476 Great Northern Wilderness (0:06)

06:32 - 972 KBS Hanminjok 1 Radio (0:09)

06:24 - 1026 Beijing Public Service Radio (0:07)

06:47 - 999 KCBS Hamhung/NIS Jammer (0:03)

04:56 - 657 NIS Jammer Hwaseong (0:03)

04:21 - 1206 Yanbian Comprehensive R. (0:04)

03:41 - 1305 Jinan Literature Radio (0:06)

03:47 - 1062 KBS1 Radio Cheongju (0:06)

03:25 - 981 CNR1 Changchun (0:08)

03:54 - 1305 CNR8 Helong (0:09)

04:09 - 747 NHK2 Sapporo (0:01)

04:25 - 1125 Hebei Story Radio (0:02)

04:52 - 1215 MBC Jinju (0:04)

05:00 - 1386 MBC Mokpo (0:08)

05:13 - 810 Voice of Zhejiang (0:07)

05:29 - 1269 China Radio Int'l (0:06)

05:39 - 1143 DPRK Jammer (0:03)

05:43 - 819 KCBS Pyongyang (0:06)

06:01 - 1053 NIS Jammer Gimpo (0:03)

06:12 - 1458 Anshan Traffic Radio (0:06)

06:41 - 639 CNR1 Beijing (0:05)

05:35 - 792 SBS Love FM Seoul (0:04)

00:00 - 1251 Shandong Country Radio (0:05) 00:07 - 1332 Tokai Radio Nagoya (0:07) 00:14 - 720 KCBS Kanggye (0:06) 00:21 - 558 KBS2 Radio Daegu (0:03) 00:25 - 1188 FEBC Seoul (0:04) 00:29 - 1161 MBC Busan (0:07) 00:37 - 1134 KBS3 Radio Seoul (0:02) 00:39 - 1494 RSK Sanyo Broadcasting (0:07) 00:47 - 1188 VOA Seoul (0:06) 00:53 - 603 KBS2 Radio Seoul (0:04) 00:58 - 963 China Radio Int'l Russian (0:04) 01:03 - 1080 MBC Yeosu (0:06) 01:09 - 1143 Jilin City Story Radio (0:06) 01:15 - 1278 RKB Mainichi Broadcasting (0:07) 01:23 - 1179 Hubei Information Radio (0:05) 01:29 - 1143 Radio Free Korea (0:08) 01:37 - 720 CNR16 Beijing (0:04) 01:41 - 1278 RKB Mainichi Broadcasting (0:04) 01:46 - 1134 Nippon Cultural Tokyo (0:06) 01:52 - 864 KBS1 Radio Gangneung (0:06) 01:58 - 873 NHK2 Kumamoto (0:05) 02:04 - 819 KCBS/DPRK jammer (0:03) 02:07 - 1206 Jiangsu Story Radio (0:07) 02:15 - 621 Pyongyang Broadcasting (0:05) 02:20 - 1548 Shandong People's Radio (0:08) 02:28 - 1566 FEBC Jeju (0:08) 02:37 - 1431 Babcock Int'l Test (0:06) 02:44 - 1188 Radio Free Asia Seoul (0:05) 02:49 - 648 AFN Okinawa Surf 648 (0:03) 02:52 - 1296 NHK1 Matsue (0:05) 02:58 - 891 DPRK Jammer (0:03) 03:02 - 1395 Anhui Story Radio Hefei (0:05) 03:07 - 1476 Great Northern Wilderness (0:06) 03:14 - 657 Pyongyang Broadcasting (0:06) Chris Kadlec, Seoul AM Radio Listening Guide

THANKS TO THESE REPORTERS

BB-AZ	BILL BLOCK, Prescott Valley AZ Drake R8
JcJ-AZ	JOHN C JOHNSON, Mesa AZ
JP-AB	IC-R75, Wellbrook ALA1530LNP loop JON PEARKINS, Edmonton AB jon@pearkins.com
NP-AB	Sangean HDR-18 NIGEL PIMBLETT, Dunmore AB
NF-AD	Perseus SDR with a Wellbrook Phased Array
PW-AK	PAUL WALKER, Galena AK (via eGroup)
RA-OK	Grundig Satelit 750, Lowe HF225, 2 225 foot long wires, Wellbrook ALA 1530 LNP, DXEngineering HF PreAmp RICHARD ALLEN, near Perry OK
	WR-G313e, ALA1530LNP-NA. C Crane Skywave and Tecsun PL-380 with an 8-inch FSL antenna.

SPECIAL FEATURE

A few months ago (DXM Vol 53 Nr 35) we shared ideas on construction of a termination/reverser device for Flag antennas. Developments since that story was written would now suggest an update.

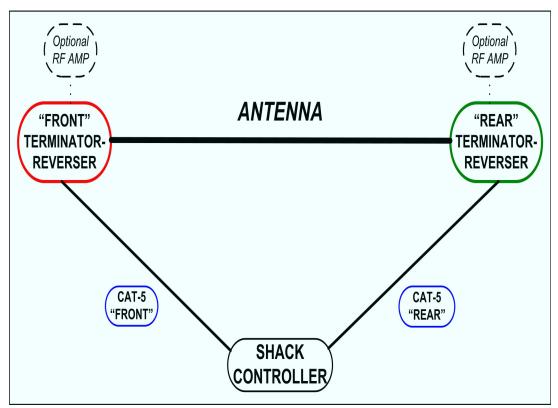
The engineering behind the original devices proved okay and circuitry outlined in the previous DXM article is still appropriate. However, some hardware concerns have emerged from "in-the-field' usage. They include:

- 1) The scarcity of the variable (opto) resistor ("Vactrol") at a reasonable price.
- 2) Concern about the contact reliability of relays used in the original devices.

3) The hard-knock lesson of using solid-copper Cat-5 for the lead-ins.

4) An interest in building any modified terminators in a weatherproof package.

BACKGROUND: Without reprinting all of the earlier discussion, we can revisit the basic concept of a remotely-controlled reversible antenna:



All three of the "nodes" will be simultaneously switch-reversed so the "Front" becomes the "Back." The "**Terminator-Reversers**" perform dual functions on the ends of the antenna. In mode "A" they terminate their antenna port and match it to the lead-in. In mode "B" they instead connect the antenna port to a remote-controlled variable resistance. The **Shack Controller** in mode "A" listens to the desired signal coming down one Cat-5 while sending Vactrol control voltage up the other. That's reversed when the antenna ends are switched from "A" to "B" by the relays.

Feedback from the earlier article included concerns about using extra-length lead-ins. We found over a summer of experimenting that there was no practical limit to lead-in length since we were using a balanced-pair lead-in (in this case Cat-5).

Now... of course there is a practical limit! We just haven't found it. We routinely used lead-in lengths of 400 to 600 feet, with no degradation in Carrier-to-Noise (C/N) at the shack, as compared to the C/N right at the antenna.

Just for grins, in the longer lead-ins we also tried common-mode chokes, and they made no measurable difference. (*Disclaimer*: There were no strong MW signals present. YMMV in different environments or with very long lead-ins.)

As to additional resistance in extra-length lead-ins affecting the DC path to the Vactrol: that's overcome by asking for a bit more energy from the Vactrol shack controller.

AMPLIFIER PLACEMENT: Commenters also suggested it was important to them to mount the RF preamplifier right at the antenna. These folks usually use the superb Wellbrook FLG100 and use coax for the entire lead-in. Some thoughts on this:

- The Wellbrook FLG100LN approaches 'perfection' and is an ideal match at the antenna. However, there may be some practical limit to the coax lead-in length (Wellbrook suggests 100 meters, though Bill Whitacre and others routinely exceed that limit). I'm just sayin.' Moreover, (nit-pickin?), coax is an inherently-unbalanced form of transmission line by virtue of its construction and as such... in theory... is more
- susceptible to Common-Mode Noise than a *balanced* twisted-pair. (Wellbrook has done a bang-up job of working around this....) 2) As noted above with the antenna signal-port *matched* to Cat-5 lead-in (9:1 transformer) and the Cat-5 *matched* to the amplifier sitting in the shack, *noise*
- and signal numbers at the shack are virtually identical to those measurements made directly at the antenna. (When we moved the amplifier to the shack we placed a 1:8 transformer at the shack, matching the Cat-5 to the 800-ohm FLG100 input.)
- 3) Finally, a *single amplifier at the s*hack makes switching/reversing simpler.

Having said all that, the Cat-5 has a spare pair for remote-powering of an antenna-mounted amp if you find a single, switched-input amplifier not a desirable solution.

PROJECT UPGRADES: Since the shack-controller section was discussed previously, we'll focus on the changes in components that address the hardware issues above:

First: **The availability of "Vactrols**" (VTL5C4s). They're getting harder to find and their price has doubled. At Mark Connelly's suggestion we're now evaluating a device by API/Luna (see parts list below). These seem readily available, at a fraction of the Vactrol costs. **TBD**: How they hold up in the field... and whether *the resistance drifts with warm-up*, as the Vactrols have been accused of doing. (Recent measurements suggest the drift performance of the API/Lunas might in fact be a tad tighter.)

Next was a concern about using "garden-variety" switching relays to handle the micro-current antenna signals. We've now selected a relay that manufacturers call a "low-signal device." These are miniature relays whose contacts are designed to reliably switch very low currents.

"Hard knocks" with solid-copper Cat-5. The original report blathered on about the low cost of pure-copper Cat-5 and Cat-5e and paid no attention to the mechanical aspects of continuous reconnection when using banana plugs. The wires broke! We solved that one by using *stranded* Cat-5 and added some insurance by hard-wiring the lead-ins to the antenna terminator units. (The other end of the lead-in still uses banana plugs but the stranded wire makes their connection much more solid.)

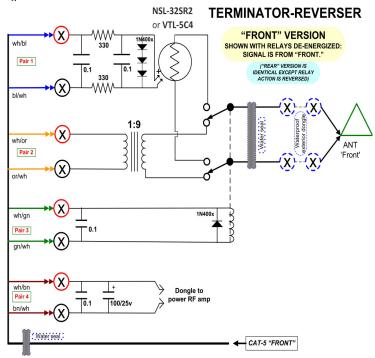
Stranded Category-cables cost about twice as much as single-conductor solid-copper types... but now and then you can get lucky on eBay. (I just scored a 944-foot 'construction remnant' spool of *stranded* Cat-5e for about \$35.) Stranded cable is mechanically superior; period. We've also done some research into the advantages of *tinning* these wires; the consensus seems to be that tinning any wire makes it mechanically tougher (YMMV). But as Nick Hall-Patch points out, "the interface between the tinning and the stranded wire becomes a new weak point if there is any flexing." He recommends the use of crimped ferrules for additional strength.

The "weatherproofing?" Addressed by paying attention to ingress/egress and by employing easy-to-procure weatherproofing parts. I'm a fan of Amazon... which means we pay slightly more... in exchange for a wide parts selection and easy ordering.

A project parts list is included below.

The weatherproof enclosures used below are just the right size and easy to work. Wire glands as listed below are popular and cheap. While the finished devices are not meant to be submerged, they will easily combat even torrential weather conditions.

Here's the revised floor plan for one of the two terminator-reverser modules from the original design. We added the weatherproofing and the hard-wiring of the stranded Cat-5, replacing the banana plugs at the terminator end of the lead-in:



"Water seals" are weatherproof glands; see parts list.

The only difference between "Front" and "Back" devices is: relay functions are reversed.

PARTS LIST: All but the T9-1 transformer are available through Amazon; we're providing their URLs as an example, so you can get a look at them for your own comparative shopping. (Other sources are Digikey, Newark, Mouser, Allied):

Opto-isolator: API/Luna NSL-32SR2 https://www.amazon.com/ADVANCED-PHOTONIX-NSL-32SR2-OPTOCOUPLER RESISTOR/dp/B00LQROW82/ref=sr_1_1?ie=UTF8&qid=1480969278&sr=8-1&keywords=NSL-32SR2+OPTOCOUPLER *Alternate*: Excelitas VTL-5C4 https://www.amazon.com/EXCELITAS-TECH-OPTOCOUPLER-RESISTOR-2500VRMS/dp/B011NAV2F2/ref=sr_1_1?ie=UTF8&qid=1480969278&sr=8-1&keywords=Excelitas+VTL5c4 Relay: Omron G6K-2P-Y (12v dc) (You may wish a different version) https://www.amazon.com/Low-Signal-Relays-ThruHole-NoLatch/dp/B00MEIC9UA/ref=sr_1_fkmr0_1?ie=UTF8&qid=1480969567&sr=8-1.fkmr0&keywords=Omron+G6K-2P-Y+%2812v+dc%29 Weatherproof boxes: Uxcell https://www.amazon.com/gp/product/B00E0H7HFK/ref=oh_aui_detailpage_o02_s01?ie=UTF8&psc=1 Weatherproof cable joints (Cat-5): Uxcell https://www.amazon.com/gp/product/B00841YDSM/ref=oh_aui_detailpage_o02_s02?ie=UTF8&psc=1 Weatherproof cable joints (ant feed): Uxcell https://www.amazon.com/gp/product/B00DREUQNM/ref=oh_aui_detailpage_o02_s02?ie=UTF8&psc=1 Weatherproof connector ("dongle"): https://www.amazon.com/gp/product/B00DREUQNM/ref=oh_aui_detailpage_o02_s02?ie=UTF8&psc=1

Matching Transformer: (9:1) MiniCircuits T9-1 http://www.minicircuits.com/pdfs/T9-1.pdf

Diodes: 1N4001 to 1N4004 or other "garden-variety" diodes.

Crimped Ferrules for wire termination can be found at http://www.mouser.com/catalog/645/usd/1718.pdf

The circuit board is often called a "prototype" or "perforated board" and is available from any supplier dealing in electronics parts.

The 6-pin terminal strip looks like this: https://www.amazon.com/gp/product/B00J8QV30I/ref=oh_aui_detailpage_007_s00?ie=UTF8&psc=1

All the parts come together in the small weatherproof box. The control stuff all mounts nicely on push-through pins on the prototype circuit board. The lowsignal relay is on the left; the opto-isolator is near the back of the board and the T9-1 transformer is at the front. The use of push-pins makes it easy to swap/replace parts.



This box is 3.9 x 2.7 x 2 inches and has mounting flanges top and bottom. There is no penetration of the enclosure; 6 raised "standoffs" accept #4 self-tapping screws for mounting stuff. Note the two side-mounted weatherproof glands; the one on the right will bring in the Cat-5 and the one on the left passes the cable to the antenna.



The Cat-5 pairs are terminated on a 6-pin terminal strip that's screwed to 1/4-inch standoffs. Standoffs are super-glued to the case (the strip mounting holes didn't coincide with those three raised box mounting pedestals). The external antenna wire is a piece of weatherproof telephone "quad" wire; 4 wires doubled up into two and terminated at the lower left. Externally this is connected to a weatherproof dongle for disconnect from the antenna. The fourth pair (white/brown) is available to power an antenna-mounted amplifier. If such external powering is used, there's room for another gland at the bottom of the case. The finished unit with Cat-5 entering at the bottom. Note the afore-mentioned weatherproof plug/connector dongle at the top. The tinned leads from that dongle

will be connected to the antenna via weatherproof splices.

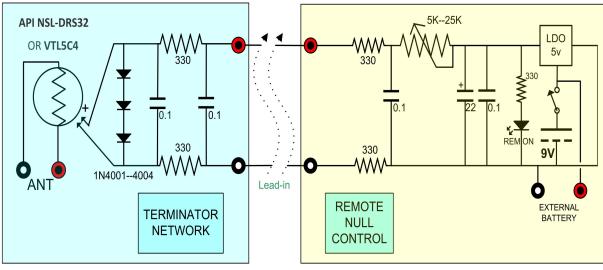


Someday we'll learn to put labels on straight ©

Another thread circulating among those with opinions on the subject is whether NEMA-seal boxes like this need a "weep-hole" to drain moisture. We went to Bud for answers. Their firm advice was that if you put the assembly together in a dry environment and close it properly, moisture will not get into the box. They suggested that a "weep-hole" is in fact a way for moisture to <u>enter</u> the enclosure. Before I could ask the question, they also advised that desiccants aren't necessary if the interior was dry when the cover was screwed on. But I guess if I lived

near Pat Martin I'd throw in some desiccant-packages just for grins.

Oh before we go: In case you can't lay your eyes on the original schematic, here's the entire layout for a *single-channel of remote-null control*. Our thanks to the spirited, knowledgeable and resourceful "wiki" group of IRCA-ers for this collaboration:



SINGLE-CHANNEL ANTENNA REMOTE-NULL CONTROL

One-click antenna-reversing may not be your cup of brew but it's certainly useful when a DX-target's co-channels surround you, or you're chasing sunset skip. Weatherproofing the terminators makes sense for antennas left up in the elements. (Rust around exposed antenna terminals may impact those tiny signal currents.)

With this upgrade behind us, the next project is the deployment of a directive 'noise antenna' to be phased with the reversible D-KAZ... to start looking for serious daytime DX. (Might as well... nighttime CX have been rather sucky these past weeks.)

Consider the merits of a well-spaced end-fire array. Hot stuff. But what if, by switching, we could reverse things so that two D-Kaz antennas had their nulls facing each other and the two individual antennas were phased

together?

Mad thought? Wouldn't be our first <g>

Hope this is useful information; as usual, please feel free to sass back.

Mark Durenberger, 12/05/16, Mark4-at-Durenberger-dot-com

Beverage and Longwire Antennas Design and Theory (BAM)

This manual is a compilation of numerous articles on the subject of design and theory of the beverage and longwire antennas that have appeared through the years in **DX News**. Some articles are available as reprints. This book gives details information on the theory of operation, construction and maintenance of a beverage antenna. Serves as an enhancement to Antenna Reference Manuals Volume 1 and 2. 8 1/2" X 11" booklet format.

BAM Contents: The Coolum Beach Beverage 1983

Beverage Basic Theory

The Florida Beverage

The Care and Feeding of the Wave Antenna

Analysis of the Beverage Antenna

Price: IRCA/NRC Member USA \$8.95, Non-Member USA \$12.95. Other countries write for quote sales@nrcdxas.org.

Loop Antenna Design and Theory (LAM)

Revised and updated in 1996, this manual is a compilation of numerous articles on the subject of design and theory of the loop antenna that have appeared through the years in DX News. This book gives detailed information on the theory of operation, construction and maintenance of a loop antenna. Serves as an enhancement to Antenna Reference Manuals Volume 1 and 2. 8 1/2" X 11" bound book format. LAM Contents:

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Two-Wire Phased Antennas

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Antenna Reference Manual Volume 1 (ARM1)

8th Printing Digitally Enhanced and Updated for 2005! This book features the plans for the original NRC 4' FET Altazimuth loop antenna. Revised in the Spring of 2005 with digitally enhanced drawings and updated material sources! This manual also contains other articles on the subject of antennas for medium wave DXers, most were originally published between 1969 and 1974 in **DX News**. Includes articles on air-core and ferrite core loops, antenna tuners for longwire antennas and antenna couplers. This is the original book which has been available for over 20years. 8 1/2" X 11" bound book format.

ARM-1 Contents: NRC FET Altazimuth Loop Thoughts on FET Loop Construction Tips on Loop Construction Balanced and Unbalanced Loops A 'Collapsible' Loop for Travel Antenna Tuning Devices for Longwires The Hawk Loop

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