



DX MONITOR

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International Radio Club of America

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Seattle deadline for our next issue (V56_N17) is Monday 12/24/18 4 PM PLT – pb

*** IRCA Mexican Log, 21st Edition (Winter 2018) *** NOW AVAILABLE ***

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The **IRCA MEXICAN LOG** lists all AM stations in Mexico by frequency, including call letters, state, city, day/night power, slogans, schedule in UTC/GMT, formats, networks and notes. The call letter index gives call, frequency, city and state. The city index (listed by state, then city) includes frequency, call and day/night power. The transmitter site index (listed by state, then city) tabulates the latitude and longitude of transmitter sites. This is an indispensable reference for anyone who hears Mexican radio stations. Size is 8 1/2" x 11", 65 pages. Pricing now at cost!

Prices: IRCA/NRC members – \$7.00 (US), \$8.50 (Canada), \$12.00 (México), \$14.00 (rest of the world). Non-IRCA/NRC members – add \$2.00.

To order, send the correct amount (in US funds payable to IRCA) to: IRCA GOODIE FACTORY, 9705 MARY NW, SEATTLE WA 98117-2334. Or, order through PayPal to Email: phil_tekno@yahoo.com (Phil Bytheway). Please state club affiliation when ordering.

World Radio TV Handbook 2019 – Published 7 December 2018 – Order your copy today!

We are delighted to announce the publication of the 73rd edition of WRTH.

For full details of WRTH 2019 and to order a copy please visit our website at www.wrth.com where you can also order the B18 WRTH Bargraph Frequency Guide on CD and Download.

WRTH 2019 is also available for pre-order, for readers in the USA, from **Amazon.com** or **Universal Radio** in Ohio.

I hope you enjoy using this new edition of WRTH and the new CD.

Best regards, Nicholas Hardyman – Publisher

2019 IRCA/DecalcoMania Convention

The 2019 IRCA Convention will be held on September 5, 6 and 7 at the Courtyard by Marriott Seattle Southcenter, 400 Andover Park West, Tukwila WA 98188. Registration is Free. Banquet (TBA) will be paid for individually by attendees. Guest room rate is \$109 plus tax. Guests are encouraged to share a room and save. Phone number(s) for room reservations are 800-321-2211 or 206-575-2500. You must mention International Radio Club of America Convention to get this rate. Hotel is 2 miles east of Sea-Tac Airport. There is also an Amtrak station in Tukwila just Northeast of the hotel. Parking at hotel is free. There are many restaurants and stores nearby and inside the hotel. Other amenities include business center, pool, free Wifi, etc.... Visitor's bureau is online at visitseattle.org. Your host for this event is Mike Sanburn: mikesanburn@hotmail.com

Here is the reservation link your guests can use to make online reservations: https://www.marriott.com/meeting-event-hotels/group-corporate-travel/groupCorp.mi?resLinkData=International%20Radio%20Club%20of%20America%5Eseasc%60IRCA%60109%60USD%60false%603%609/5/19%609/8/19%609/15/19&app=resvlink&stop_mobi=yes

If you have questions or need help with the link, please do not hesitate to ask. We appreciate your business and look forward to a successful event. Individuals may also call toll free, 1-800-359-8233, refer to group code "IRC".



IRCA PRESIDENT – Bruce Portzer – 6546 19th Ave NE – Seattle WA 98115
Email: portzerbt@gmail.com

Nominations for the IRCA 2019 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 2019 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 2018 through January 31st 2019. 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 (Email) form to the ECC by January 31st 2019.

IRCA's Election Committee Chairman (ECC) is **Nick Hall-Patch**, who can be contacted via Email at: nhp@iee.org.



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

Nominations Are Open for the TVA and RHA for 2018-2019

Ted Vasilopoulos Award (TVA)

Ted Vasilopoulos was a charter member of IRCA who died in 1965, and was known for his high DX standards 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: **Phil Bytheway, John C Johnson, Gary DeBock, Eric Bueneman and Nick Hall-Patch.**

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: **Brandon Jordan, Mark Durenberger, and Ernest Wesolowski.**

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

All nominations must be received no later than January 31 2019.

Medium Wave Circle Offerings

We now have available for purchase a downloadable zip file of Sony ICF2001D/2010 information, via our website shop at <http://www.mwcircle.org/shop.htm>.

We are now in the process of uploading volumes of Medium Wave News older than 3 years, in pdf format, to our archive at http://www.mwcircle.org/member_archive.htm. This information is publicly available at no charge – so far we've archived volumes between 2003 and 2011, although as time permits we hope to upload all the older copies we have on file, right back to 1953. Other freely available information are the UK All Time Lists at http://www.mwcircle.org/member_alltime.htm.

Our Facebook Group which can be reached here: <https://www.facebook.com/groups/mediumwavecircle/>.



BROADCASTING INFORMATION – Robert J Wien – 14051 Belle Chasse Blvd #415 – Laurel MD 20707
Email: wienbob@aol.com Phone: 301-477-3733 Column Deadlines: Saturdays

DATE OF COLUMN: December 15 2018 **Column data span:** December 01-15 2018, Data courtesy of **Stationintel.com**, FCC database and member contributions.

CALL CHANGES

FREQ	OLD CALL	CITY OF LICENSE	NEW CALL
950	WDIG	Steubenville, OH	WIXZ
1120	KLIM	Limon, CO	KGRN
1320	WICO	Salisbury, MD	WJKI
1490	KOMJ	Omaha, NE	KOBM

FORMAT, SLOGAN AND SILENT STATUS CHANGES

FREQ	CALL	CITY OF LICENSE	NEW INFORMATION
610	WXVA	Winchester, VA	old slogan: "The New 102.9 Valley-FM", new: "102.9 Valley FM"
660	KFAR	Fairbanks, AK	old slogan: "Heartbeat Of Alaska", new: "Heartbeat Of Alaska 97.5 FM and 660 AM"
850	WYLF	Penn Yan, NY	was adult standards, now classic hits
	WKVL	Maryville, TN	changes city of license from Knoxville to Maryville
880	KLRG	Sheridan, AR	now silent
890	KJME	Fountain, CO	now silent
	KTXV	Mabank, TX	was talk, now ethnic
930	KOGA	Ogallala, NE	was adult standards, now new unknown format
950	WDIG	Steubenville, OH	was urban adult contemporary, now new unknown format
990	WITZ	Jasper, IN	adds Juan FM Spanish adult hits, old slogan: "Tocando Lo Que La Gusta", new: "Juan 99.1"
	WNRV	Narrows-Pearisburg, VA	old slogan: "Bluegrass", new: "The Ridge AM 990/FM 97.3"
1020	KVNT	Eagle River, AK	now silent
1150	WCRK	Morristown, TN	old slogan: "Hometown Radio WCRK", new: "WCRK 105.7 FM Hometown Radio"
1170	WFDL	Waupun, WI	adds news as secondary format, old slogan: "Oldies FM 103.3 and AM 1170", new: "The Source"
1240	WPBQ	Flowood, MS	adds slogan: "WPBQ 94.3 FM and 1240 AM"
1280	KRZE	Farmington, NM	was regional Mexican, now Juan FM Spanish adult hits, old slogan: "Fierro 1280", new: "Juan 1280"
1290	KRUS	Ruston, LA	old slogan: "Rejoice 1490", new: "Rejoice 96.3 FM/1490 AM"
1300	WMTN	Morristown, TN	old slogan: "Country Legends 1300 AM", new: "Country Legends 93.3/1300 AM"
1340	WLSG	Wilmington, NC	was oldies, now new unknown format
	KSGT	Jackson, WY	was country, now Juan FM Spanish adult hits, old slogan: "KJAX Country 93.5", new: "Juan 1340 and 96.3"
1370	WIVV	Island Of Viques, PR	was silent, now religious teaching, adds slogan: "The Rock"
1450	WTCO	Campbellsville, KY	was sports, now classic rock as primary format, sports as secondary format, old slogan: "CBS Sports Radio 1450", new: "The Rock"
	WYNY	Milford, PA	adds slogan: "106.9 WYNY"
1470	KWRD	Henderson, TX	was Westwood One NBC Sports Network, now Westwood One Classic Country
1490	KOMJ	Omaha, NE	old slogan: "Boomer 104.1, 94.5 and 1490", new: "Boomer 104.1, 94.5, 93.7 and 1490"
1530	WYGR	Wyoming, MI	was urban adult contemporary, now classic country, old slogan: "1530 The Pulse Of The City", new: "Jethro FM"
	WZTE	North East, PA	was silent, back on with new unknown format
1570	WOKC	Okeechobee, FL	old slogan: "Okeechobee's True Country 1570", new: "True Country AM 1570 FM 100.9"

MEMBER CONTRIBUTIONS

Kit Sage of Arvada CO passes along the following dated 12/6/18 re KJME-890 Fountain CO silent status above:

I will try to remember to check when I go out in the car shortly. They were on a few weeks ago when I went to Kansas City and I did a band scan near Limon (CO-ye ed). Neither 780 (KCEG-ye ed) nor 890 (KJME-ye ed) were on as of a few minutes ago. I heard WBBM on 780 quite easily. **(Update sent 12/7/18):** I checked again today and 780 and 890 were silent. I checked the FCC DB and found that he requested a silent STA because his landlord at the transmitter site did not renew his lease. I also noticed he has a CP to drop to 3 towers from 6 day and night and reduce night power on 890. 780 remains the same, but he has the silent STA for both stations.

Kit also sends along the following re KCRN-1120 Limon CO (ex-KLIM) dated 12/9/18:

The former KLIM 1120 Limon is now KCRN as of yesterday. It stands for Catholic Radio Network, the owner. They are going to 50 KW daytime only with a two tower array that will give them Front Range coverage from Pueblo to at least Ft Collins. Their new tower site is along Hwy 86 between Limon and Kiowa. I haven't been down there to see if the towers are up yet, but they must be getting close by now. COL (city of license-ye ed) is still Limon.

10 days till Christmas, been cold here of late in the DC/Baltimore area. Planning a trip to Pennsylvania between Christmas and New Years, should be fun. My leg is getting better, and I've actually had pretty darn good DX conditions so sent a few tips to Eric. Follow my lead and send your DX tips to your respective EDXR/CDXR/WDXR column editors, or DXWW if you're hearing good stuff outside the USA. Hopefully 2019 will be a great year for everyone. Gotten all my Christmas shopping and Christmas cards out so done with that task! 73's. Bob Wien



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

WDXR DEADLINES: Dec. 21, Dec. 28, Jan. 4, Jan. 11, Jan. 18, Jan. 25, Feb. 1, Feb. 8, Feb. 15, March 1, March 15, March 29. Please use Eastern Local Time.

REPORTERS FOR THIS ISSUE:

- (BB) **Bill Block**-Prescott Valley AZ **billblock@cableone.net**
R8, Wellbrook ALA1530LNP
- (DG) **David Gordon**-Morgan Hill CA **dgordon1@hotmail.com**
HanRongDa HRD-104
- (JCJ) **John Johnson**-2922 S Olivewood, Mesa AZ 85212 **John_Johnson@prodigy.net**
SDRplay RSPduo, Wellbrook ALA1530LNP
- (JP) **Jon Pearkings**-Edmonton AB **jon@pearkings.com**
Sangean PR-D 15 on batteries with internal 200 mm ferrite bar

- 600 WMT **IA**, Cedar Rapids 12/14 weak but alone on 600. No usual KOGO, KROD or KCOL. 0000 out of Dave Ramsey Show with "This is news radio 6-hundred WMT Cedar Rapids. An iHeart Radio station" into news. New for me. (JCJ-AZ)
- 620 KIGS **CA**, Hanford heard 12/9 at 0900 with "?? KIGS Hanford." (BB-AZ)
- 1010 KIHU **UT**, Tooele 12/6 on top 1010, local KXXX null. 0000 with "Now with stations coast to coast, talk radio for Catholic life. KIHU Tooele, Salt Lake City. Relevant Radio AM 1010 an Immaculate Heart Radio station" legal ID into EWTN News. New for me. (JCJ-AZ)
- 1040 WHO **IA**, Des Moines 12/14 0300 heard station ID. I can pick up WHO on my other radios but I was pleased to pick up the station on this inexpensive little radio. (DG-CA)

- 1060 KRCN **CO**, Longmont 12/14 0054-0100 and also heard at 0256. Running 50kw day power non-directional with lots of Catholic Radio Network mentions and legal ID exactly at 0100 including "KRCN" call letters. Best signal slightly east of due south. Sometimes over CKMX, mostly just under, even though CKMX had stronger than normal night signal here. (JP-AB)
- ?KGFY? **SD**, Pierre 12/10 0010-0014 and times when both KDYL and CKMX could be nulled; heard nothing but C&W fading in and out but antenna was pointing in the right direction for KGFY. (JP-AB)
- KDYL **UT**, South Salt Lake 12/7 strong over local KDUS nulled. 0800 with Chinese programming, "KGYL AM 1060 South Salt Lake City" ID in both English and Chinese. New for me. (JCJ-AZ)
- +12/12 0100:44 "KDYL" ID was only English in long block of Chinese talk by female, though speech pattern changed just before, sounding like CHMB Vancouver when the announcer is reading local addresses or telephone numbers in Chinese. First ID heard despite KDYL appearing every night since 12/8 with a signal that is often so strong that CKMX completely disappears, even though both are due South. A Utah listener on Facebook mentions a 60 Hz hum but I only hear it in certain program segments, most notably starting after OC at 2359 12/9 then under male Chinese speaker (newscast?). (JP-AB)
- CKMX **AB**, Calgary 12/9 0033 under KDYL no matter which direction antenna was oriented. Edmonton appears to be just the right distance from Calgary so that skywave and groundwave arrive enough out of phase to significantly diminish signal. (JP-AB)
- 1360 KRKK **WY**, Rock Springs 12/6 well over local KPXQ. Most likely on daytime power. 2329 with oldies and Christmas music, "Unforgettable Memories 1360 KRKK" slogans. Then at 0000 "Unforgettable memories on 1360 KRKK Rock Springs, Green River. Online at 1360krkk.com" legal ID into news. New for me. (JCJ-AZ)
- 1400 KCYK **AZ**, Yuma 12/9 good with KSUN either completely off the air or nulled. 0000 with country music, "Outlaw Country 1400 KCYK Yuma" legal ID into news. New for me. (JCJ-AZ)
- 1410 KWYO **WY**, Sheridan heard 12/13 at 2101 with "? KWYO ??" (BB-AZ)
- 1430 KLO **UT**, Ogden 12/13 strong, 2300 noted with new format of standards and oldies (was news-talk). "This is Unforgettable KLO Ogden, Provo, Salt Lake City" into CBS News. (JCJ-AZ)

Thank you WDXR reporters for the tips that you sent for the column! – Nancy 1/15 1900



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

RIDING GAIN

- [EB-MO] **Eric Bueneman**, Hazelwood MO N0UIHeric@gmail.com
 CountyComm GP-5/SSB Ultralight receiver, Grundig AN-200 tunable loop, General Electric Superadio III, Yaesu FRG-7, Worcester Space Magnet II
- [GH-IL] **Greg Harris**, Park Forest IL wdx9khy@sbcglobal.net
 FRG100, Quantum Loop, SRF59
- [KDF-IL] **Karl Forth**, Chicago IL koolmotor@comcast.net
 Sangean ATS-909, DT-200VX

DOWN THE DIAL

- 570 WWNC **NC**, Asheville. 12/10 fair signal over WNAX. 0513 noted with local spots, "News radio Five-70 WNAX" ID into *America's First News*. [EB-MO]
- 600 CKAT **ON**, North Bay. 11/29 fair. 1755 with country music, "Country 600" slogan, and North Bay mentions. [KDF-IL]
- 710 WDSM **WI**, Superior. 12/7 fair signal over Cuba and WAQI in WOR null. 0459 noted with Green Bay Packers football promo, "W251CD Superior and WDSM Superior, Duluth" legal ID into Fox News Radio. [EB-MO]
- 730 WJYM **OH**, Bowling Green. 12/10 fair to poor signal, mixing with other stations, ACI from CFZM 740. 0507 noted with "Son Life Radio" ID into light Christian vocal music. [EB-MO]
- 910 WJCW **TN**, Johnson City. 12/14 fair to poor signal in KVIS null. 0155 noted with national spots, *Red Eye Radio*, local spots and legal ID. [EB-MO]
- 930 WGAD **AL**, Rainbow City. 12/10 fair signal over WTAD. 0417 with Oldies format. "This is WGAD" ID, "All oldies, all the time, WGAD" jingle. [EB-MO]
- 940 WFAW **WI**, Fort Atkinson. 12/11 good but mixed in with WMIX. 0155 with "...at 940wfw.com". [GH-IL]
- 980 WRNE **FL**, Gulf Breeze. 12/9 fair to poor signal over WYFN. 0423 noted with Urban Adult Contemporary format, "We're Nine-80 WRNE" ID. [EB-MO]
- 1030 WCTS **MN**, Maplewood. 12/12 fair to poor signal over KFAY in WBZ null. 0440 noted with Christmas music, promos and "WCTS" ID. [EB-MO]
- 1240 WTAX **IL**, Springfield. 12/13 fair signal, mixing with KBIZ, WENK, WHFA and other stations. 0259 noted with local spots, legal ID mentioning 93.5 FM into CBS News. [EB-MO]
- 1270 WWWI **MN**, Baxter. 12/3 good signal for a few minutes, later covered by WLIK. 1900 ID as "WWWI Brainerd, Baxter, (and a third city)" Westwood One Monday Night Football. Completely unexpected. [KDF-IL]
- 1330 WBGW **IN**, Evansville. 12/12 fair signal, taking out KNSS. 1759 noted with "This is AM 13-30 WBGW Evansville, Indiana" legal ID into *Adventures in Odyssey*. [EB-MO]
- 1340 KSMO **MO**, Salem. 12/13 fair to poor signal, mixing with other stations. 0618 noted with Country format and call letters. [EB-MO]
- 1370 KDTH **IA**, Dubuque. 12/13 fair signal over KWRT, WLTH, WSPD. 2235 noted with Christmas music, "AM 13-70 KDTH" ID into local spots. [EB-MO]
- 1400 WGIL **IL**, Galesburg. 12/6 weak in the mush. 0900 with "WGIL" calls. [GH-IL]
- 1450 KMRY **IA**, Cedar Rapids. 12/13 fair to poor signal over other stations. 2235 noted with Classic Hits format, local spots, "Classic Hits KMRY" ID. [EB-MO]
- WASK **IN**, Lafayette. 12/12 fair signal over WFMB, ACI from KHOJ 1460. 1729 noted with local spots. [EB-MO]
- 1520 WWKB **NY**, Buffalo. 12/6 good. 0115 with "ESPN 1520 Buffalo's home for..." [GH-IL]
- 1690 CHTO **ON**, Toronto. 12/12 fair to poor signal over WVON. 0539 noted with traditional Greek music and local announcements in Greek. [EB-MO]

FLASHBACK

50 Years Ago – December 21 1968 issue of "DX Monitor" ... **Tom Jasinski** aboard the USS Brumby mentioned he was 21 and didn't have much time to DX while in the US Navy ... **John C Johnson** in Rota, Spain mentioned this would be his last Christmas while in the US Navy ... **Patrick Martin** of Seaside OR logged WOKJ for state #33 ... **Percy R Kestevan** of Edmonton AB received a verie from HJDK 790 for country #9. // **25 Years Ago – December 18 1993** issue of "DX Monitor" ... **Shawn Axelrod** of Winnipeg MB along with **Wayne McRae** worked on their Valhalla Beach DX site to make the trailer warmer ... **Rick Evans** of Milwaukee WI received a verie from WOI 640 for their DX Test ... **Ernest Cooper** of Provincetown MA said his verie count was up to 4337.

OPEN MIKE

Thanks go out to Eric, Greg, and Karl this week. Christmas is close. Hope everyone is ready. This column was typed 12-14-18. 73, John



EASTERN DX ROUNDUP – Eric Bueneman (N0UIH) – 631 Coachway Lane – Hazelwood MO 63042-1347
 Email: n0uiheric@gmail.com DEADLINES: Friday 2359 ELT

TUNING THE DIALS THIS ISSUE:

- (JC-AL) **Jerry Cook** (N9GFV/4), Saraland AL
 Japan Radio Corporation NRD-525, DX Engineering Pixel RF Pro-1B loop
- (KK-VA) **Kraig Krist** (KG4LAC), Manassas VA
 Winradio G33DDC software-defined receiver, Wellbrook ALA1530S+ Imperium loop
- (PS-ON) **Paul Snider**, Thorold, ON Canada paulisnider@yahoo.ca
 Elad FDM-2 software-defined receiver, DX Engineering Pixel RF Pro-1B loop, MFJ-1020C as a tuner
- (RW-MD) **Robert Wien** (KG6RJW/3), DXing on the way from Laurel to Odenton MD wienbob@aol.com
 2011 Ford Fusion car radio

ACROSS THE DIAL

- 560 KLVI **TX**, Beaumont – 12/11 1810 noted with ads for Mutual Insurance and Tec Minutes Texas-dot-com, promo for the iHeart Radio Podcast award and a "KLVI" ID. A strong signal was noted with fair to good reception. (JC-AL)

- 580 WACQ **AL**, Tuskegee – 12/11 1819 noted with an ad for Prime South Bank, “WACQ, the Songs you Know” ID into a Christmas tune. A fair to good signal was noted. (JC-AL)
- 590 WVLC **KY**, Lexington – 12/13 1809 noted with a local talk show, mention of “Cruiser”, interview with Daniel Krauthammer, “News/Talk 590 WVLC” ID. A very good signal was noted; easy to listen to. (JC-AL)
- 630 WBMQ **GA**, Savannah – 12/12 1859 noted with a University of Georgia Bulldogs promo, many mentions of WBMQ at 1900 into Westwood One news. Fair to poor reception was noted; at times very strong and gone at times. (JC-AL)
- 680 WMFS **TN**, Memphis – 12/10 1850 noted with ads for Main Event Bowling and Arcade and a Memphis realtor. “92.9 ESPN Sports” ID followed by an ad for Dox Memphis-dot-com. A fair to poor signal was noted. (JC-AL)
- 770 WAIS **OH**, Buchtel – 12/5 1720 noted with “Classic Country Station, AM 770 WAIS” ID by a male announcer. The signal was noted mixing with WABC, WYRV and an unidentified Spanish language radio station. (KK-VA) (Could that foreign language you heard possibly be Bosnian? – eb)
- 780 WWOL **NC**, Forest City – 12/5 1715 noted with “This is WWOL Radio, Forest City, North Carolina” legal ID by a male announcer into sign-off announcement. The signal was noted mixing with WAVA, WBBM, WCKB and unidentified stations with Christian teaching and vocal music. (KK-VA)
- 800 WNNW **MA**, Lawrence – 12/9 0114 noted with dance music in Spanish. (This form is called “Tropical” – eb). A fair at times to very poor signal was noted, mixing with CJBQ and CKLW. (PS-ON)
- 810 WCKA **AL**, Jacksonville – 12/10 1805 noted with a Classic Country format, “WCKA, Legendary Country” ID. Mention of “Legendary Station Playing Legendary Country”. A strong signal was noted, but fair reception due to fading. (JC-AL)
- 930 WGAD **AL**, Rainbow City – 12/13 1721 noted with weather forecast, “Oldies 930 WGAD” ID into a Christmas tune. A good signal was noted with slight fading. (JC-AL)
- 1000 WKLF **AL**, Clanton – 12/13 1847 noted with *Homecoming Radio* program featuring Southern Gospel music. A fair to good signal was noted. (JC-AL)
- 1050 WFSC **NC**, Franklin – 12/10 1812 noted with a Classic Hits format, “104.9 and 1050 WFSC” ID. A fair signal was noted with a lot of interference. (JC-AL)
- 1070 WNCT **NC**, Greenville – 12/11 0803 noted with a traffic report for the Greenville area, weather forecast, reminder to be careful because of ice on the roads due to the weekend’s winter storm. The signal was briefly on top of the others on the frequency. (RW-MD)
- WKOK **PA**, Sunbury – 12/11 0758 noted with weather forecast, a nice “WKOK” ID just before 0800 before WFLI took over the frequency. The signal was noted briefly atop the frequency, with CHOK, WFLI and WKOK underneath. No trace of WFNI and, surprisingly, WINA. (RW-MD)
- WFLI **TN**, Lookout Mountain – 12/11 0800 noted with a Chattanooga traffic report and legal ID before starting to fade to three or four other stations, all coming in equally; a very interesting fading pattern, almost an hour after local sunrise. CHOK, WKOK and WNCT; I also heard a mention of another station. The signal was noted nicely atop the frequency. (RW-MD) (WKWN is on 1420 kHz in nearby Trenton GA; WKDA is on 900 kHz in Lebanon TN, near Nashville – eb)
- 1100 WHLI **NY**, Hempstead – 12/7 2312 noted with a Classic Hits format; songs matched the playlist on WHLI-dot-com. A poor to very poor signal was noted under WTAM. (PS-ON)
- 1110 WPMZ **RI**, East Providence – 12/12 2326 noted with Tropical music format, announcements in Spanish between songs, “1100 Power” ID in English at 2334. A fair at times to very poor signal was noted, almost over WBT at times. (PS-ON)
- 1150 WMNY **PA**, New Kensington – 12/9 0029 noted with Hindi music, ad for a financial service in English, spots in Hindi including one for Allstate Insurance, “Radio Dhoom” ID at 0033. A poor to very poor signal was noted under CKOC. (PS-ON)
- 1210 WTXK **AL**, Pike Road – 12/13 1737 noted with The Paul Finebaum Show, ads for Regions Bank and Crane Works, “107.5, 1210 AM ESPN, the Ticket” ID into a PSA read by Pike Road’s Mayor. The signal started at fair strength, then faded away. (JC-AL)
- 1250 WRBZ **AL**, Wetumpka – 12/13 1745 noted with a Classic Hits format, “95.5 WRBZ” ID, ad for State Farm Insurance and a weather forecast. A poor signal was noted with a lot of interference and fading. (JC-AL)
- 1300 WTLS **AL**, Tallassee – 12/9 1735 noted with Christmas music, “WTLS 1300 and 106.5” ID heard. A fair to poor signal was noted; often faded away. (JC-AL)
- WMTN **TN**, Morristown – 12/10 1719 noted with a Classic Country format, “Country Legends 93.3” ID. The signal started strong, then faded away. (JC-AL)
- WNQM **TN**, Nashville – 12/10 1723 noted with a fire and brimstone sermon from a preacher at a Baptist church in Nashville. A poor signal was noted; fading in and out with WMTN. (JC-AL)
- 1310 WJUS **AL**, Marion – 12/9 1720 noted with an Urban Gospel format, ad for a training program offered by Wallace Community College in partnership with AIDT, a program of the Alabama Department of Commerce. The signal started good but faded away. (JC-AL)
- WOKA **GA**, Douglas – 12/9 1727 noted with a discussion of the Atlanta Falcons, “Atlanta Falcons Football Network” mention into ad for American Family Insurance, mention of service to the Atlanta area. A fair to poor signal was noted. (JC-AL)
- 1440 WLWI **AL**, Montgomery – 12/13 1755 noted with *Savage Nation*, PSA for the *For Alabama Kids* charity, voiced by University of Alabama head football coach Nick Saban. “News Radio 1440 WLWI” ID. A fair to poor signal was noted with much fading. (JC-AL)
- 1520 KOKC **OK**, Oklahoma City – 12/11 1734 noted with a political talk show, ads for Ageless Male Max and an Oklahoma safety shoe business. A fair to poor signal was noted. (JC-AL)
- 1570 WUBG **MA**, Methuen – 12/11 0745 noted with local spot, traffic report, “Big 105.3” ID into an Oldies format. A good signal was noted on top of the frequency; pretty solid before fading to WNCA. (RW-MD)
- WNCA **NC**, Siler City – 12/11 0750 noted with several local spots. A fairly steady signal on top of semi-local WNST and other stations, including an unidentified Christian station with WUBG in the background. (RW-MD)
- 1630 KKGW **TX**, Fort Worth – 12/11 1724 noted with a long Southern Gospel tune, “1630 KKGW” ID heard. A poor signal was noted with much noise and interference. (JC-AL)

EDITOR’S NOTES

Thanks to Jerry, Kraig, Paul and Bob for their logs this week. (The DXtles? H! – eb) Have a very Merry Christmas... make sure you spend some time at the dials this Holiday season. I’ve logged some of my best DX around Christmas. 73 and good DX from NØUIH, the Florissant Valley Dial Twister



DX WORLDWIDE/TROPICAL BAND DX – Brandon Jordan – PO Box 338 – Rossville TN 38066
 Email: dxwww.irc@gmail.com all times UTC

Deadline – Monday 1200 UTC.

*** PAN-AMERICAN DX ***

- 530 **CUBA** Radio Enciclopedia, CMBQ, La Habana. DEC 11 1020 – noted with light instrumentals, “Enciclopedia” mentions in Spanish between selections. Good signal over CIAO. [EB-MO]
- 540 **MEXICO** XEWA, San Luis Potosi, SLP. DEC 12 0835 – noted with pop music, “Los Cuarenta” ID in Spanish. Fair to poor signal, mixing with CBK with no sign of WAUK. [EB-MO]
- 710 **CUBA** Radio Rebelde synchronos. DEC 13 0855 – noted with pop music, “Radio Rebelde” ID into news in Spanish. Fair to poor signal, mixing with WAQI and WOR. [EB-MO]
- 739.95 **MEXICO** XEQN, Radio Fórmula, Torreón, Coah. DEC 11 1300 – news/talkshow in Spanish, making terrible low bet against KRMG 740.00 Tulsa, which if carefully nulled, partially audibilizes the Mexican, which we know is XEQN. It has appeared on some official listings of stations which are “not” migrating to FM, unfortunately. It’s been off-frequency for years. [GH-OK]
- 900 **MEXICO** XEW, México, DF. DEC 11 1006 – noted with “XEW” ID in promo into Christmas music in Spanish. Good signal over CHML. [EB-MO]
- 950 **CUBA** Radio Reloj, CMBD, Arroyo Arenas, La Habana. DEC 13 0849 – noted with “RR” ID in CW, time signals, news items and “Radio Reloj” IDs in Spanish. Fair to poor signal, mixing with KXJK, WAKM and WWJ. [EB-MO]
- 1000 **MEXICO** XEOY, México, DF. DEC 13 1057 – noted with pop music and ID in Spanish. Fair to poor signal in WMVP null. [EB-MO]
- 1180 **CUBA** Radio Rebelde synchronos. DEC 11 1039 – noted with a discussion, “Rebelde” mentions in a promo into another discussion in Spanish. Fair to poor in WHAM null with splash from KQQZ 1190. [EB-MO]
- 1570 **MEXICO** XERF, Ciudad Acuña, Coah. DEC 11 2007 – on caradio, Spanish here could be groundwave from KTUZ Tulsa, but no, it’s already skywave from XERF, “La Poderosa” IDs associating that with FM 103.9 as much as with 1570, an IMER station in Ciudad Acuña, Coahuila. XERF really is powerful, allegedly 100 kW, while several peanut-power outlets also brand themselves as Poderosas; who’s to know any better? This is three hours and ten minutes before our earliest sunset at 2317 UT. XERF heard again the next day same time. [GH-OK]
- +DEC 14 0637 – noted with Norteña music, local announcements and “La Poderosa” ID in Spanish. Fair to poor signal, mixing with WBGZ. [EB-MO]

1620 **CUBA** Radio Rebelde synchros. DEC 13 1034 – noted with talk mentioning Cuba in Spanish, into up-beat instrumental music. Fair to poor signal, mixing with KOZN and WNRP. [EB-MO]

*** TROPICAL BAND DX ***

- 3320 **SOUTH AFRICA** Radio Sonder Grense, Meyerton. DEC 11 0230 – noted with discussion in Afrikaans. Fair to poor signal. [EB-MO]
3330 **CANADA** CHU, Ottawa, Ontario. DEC 11 0245 – noted with time signals, announcements in English and French, "CHU Canada" IDs on even numbered minutes in English and on odd numbered minutes in French. Good to fair signal. [EB-MO]
3375.47t **BRAZIL** Radio Municipal, São Gabriel da Cachoeira, AM. NOV 24 *0916 – weak carrier at *0916:10, threshold audio beginning 0959 then strong 200Hz hum audio issues until 1007. Rapidly rising to weak peak with music at 1011 sunrise at transmitter then slowly fading back down from 1015. Audio issues returned at 1018 when I tuned out. [BJ-TN]
4055 **GUATEMALA** Radio Verdad, Chiquimala. NOV 24 1000 – open carrier from 1000:10 until 6-tone IS (do-re-mi-fa-la-la) from 1021:37 until childrens choral National Anthem at 1025:52. Canned Spanish ID at 1031:20 followed by canned English ID 1031:20 then various Spanish talk. English language 'Spiritual Songs Program' program from 1037 featuring a US gospel program "Stroll Down Memory Lane. Perfect solid S8 signal and excellent modulation. [BJ-TN]
+DEC 13 1157 – noted with Christian music and ID in Spanish. Fair to poor signal. [EB-MO]
4765 **CUBA** Radio Progreso, Bejucal, La Habana. DEC 14 0230 – noted with pop music, promo, ID in Spanish. Fair signal with CODAR interference. [EB-MO]
4810 **PERU** Radio Logos, Chazuta. NOV 24 *1000 – poor signal at sign-on, level steadily increasing with Andean-flavored music. Much improved nice S7 signal by 1038 Chazuta sunrise, with full ID by man, Christian songs by Andean groups such as Siembra Andina. Salmos de David, Pacto de Dios. TC by children between songs, talks. Strong STANAG centered on 4812 easily avoided with AM Synch passband tuning to lower side, CODAR not much of a problem by 1038 the strong signal. [BJ-TN]
4885 **BRAZIL** Radio Clube do Pará, ZYG362, Belém. DEC 14 0258 – noted with promo, ID and news in Portuguese. Fair to poor signal with CODAR interference. [EB-MO]

CONTRIBUTORS

- EB-MO **ERIC BUENEMAN**, NØUIH, Hazelwood MO
CountyComm GP-5/SSB Ultralight receiver, Grundig AN-200 tunable loop, General Electric Superadio III, Yaesu FRG-7, Apex 303WA-2 vert. antenna
GH-OK **GLENN HAUSER**, Enid OK
DX-398 with internal antenna only or PL-880; NRD-545 with ALA-330S inside E-W or inside random wire N-S; Nissan stock caradio as specified; ICR-75, E-W long wire.
BJ-TN **BRANDON JORDAN**, KM4PBQ, Fayette County TN
WinRadio G33DDC, SAL-20

Many thanks for the week's contributors! 73 and Good DX, Brandon



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Hawaii Ultralight DXpedition – Exotic and Memorable MP3's (Gary DeBock via IRCA eGroup)

From November 3-8 my wife and I took advantage of an outstanding Costco Travel package to the Aston at Poipu Kai on Hawaii's Kauai island ("the Garden Island"), which included round trip airfare for two (nonstop from Seattle), six days in a new 2-BR condo right near the island's best salt water beach and a newer, full-sized rental car – all included in the \$2.3K cost. But the biggest value turned out to be the awesome ocean beach transoceanic DXing.

After two trips to Kona (on the Big Island) with Ultralights and a 5 inch "Frequent Flyer" FSL I did have some Hawaii DXing experience, but the transoceanic results during those trips were limited to East Asia and the Pacific islands. For this trip the 5 inch FSL would have an upgraded variable cap, and be boosted by a 4 foot PVC base. As it turned out, these modest improvements would transform the tiny ferrite antenna into the ultimate compact DXing thriller. MW stations in Oman, Egypt, Iran, India, Bangladesh, Myanmar, Cambodia, Vietnam and Thailand were all received, along with multiple stations in the Philippines and Taiwan. 800-PJB off the coast of South America also crashed one of the evening sessions. This was like the "final exam" of the Frequent Flyer Ultralight gear – which demonstrated the potential of this forward Pacific DXing paradise for both Ultralight and SDR-DXers alike. If anyone feels bored in their radio hobby, a quick trip to Kauai can provide the permanent cure!

- 621 **TUVALU** T2U2, Radio Tuvalu, Funafuti, 5 kW. The usual S9+ signal with female speech in the island dialect at 0928 on 11/3, with drums pounding for emphasis <https://dreamcrafts.box.com/s/5089jtrmpi5eajk330uwukvz4brqfoyk>.
630 **VIETNAM** Voice of Vietnam? Animated male-female speech in apparent Southeast Asian dialect dominant over CNR synchros at 1523 on 11/4; Jari S "guesses" this is Vietnamese, but no chance at the time to check the 675-711 parallels <https://dreamcrafts.box.com/s/k0ttlujgsp2p11817uhakkgrqwrzdlvj>.
675 **TAIWAN** Cheng Sheng BC, Peikang, 5 kW. Male-female call in talk program in a Chinese dialect at 1655 on 11/7; Hiroyuki Okamura says this is Taiwanese <https://dreamcrafts.box.com/s/aqd2vjmbcvofpsygksaqx4cqhc0nfbj>.
VIETNAM Voice of Vietnam, My Van, 500 kW. Female speech at very good level //711 at 1637 on 11/7 <https://dreamcrafts.box.com/s/9sg4yp7lfgob6e5hw1wphklnljvbwyyq>.
693 **BANGLADESH** Bangladesh Betar, Dhaka, 1000 kW. The super power exotic station finally broke through wicked 690-KHNR Honolulu splatter (10 kW at 113 miles) at 1639 on 11/8 with an apparent Islamic sermon (having mentions of "Allah" at 27 and 31 seconds) <https://dreamcrafts.box.com/s/haye98bfrypbt1cdb1wgm2mx01wskpx>.
702 **OMAN** BBC Arabic Service, A'Seela, 800 kW. One of the big surprises of the DXpedition, this station was amazingly strong for the 8,586 mile (13,818 km) distance at 1604 on 11/6. Thanks to Mauno and Mika for the language and station investigation <https://dreamcrafts.box.com/s/cwgqhp3hy0thmthw4o018i7c70y0b8i>.
VIETNAM Voice of Vietnam, Danang, 50 kW. Male and female speech at 1612 on 11/4 with announcers and format sounding very much like those on 675 and 711 (although not parallel); Jari L. says this is Vietnamese <https://dreamcrafts.box.com/s/idw17ybpwbsblr8evf440xnlr13z415c9>.
711 **VIETNAM** Voice of Vietnam, Thoi Long, 500 kW. Female speech at good level //675 at 1529 on 11/6; this station often had co-channel issues with Korea and Taiwan <https://dreamcrafts.box.com/s/j2vsyc02skttocssv3dpxpc6hknivx0s>.
720 **UnID-TP** Mystery Asian station (apparently not in any east Asian language) mixing with the Chinese opera station at 1536 on 11/4; Mauno and Jari S. mentioned VOIRI (Iran) as a possibility, but the Tajik and Uzbek languages being broadcast around that time are tough to identify <https://dreamcrafts.box.com/s/8l5utr5yxvybjzb2wrmavkxozuqmdf9>.
729 **MYANMAR** Myanma Radio, Yangon, 100 kW. Male-female speech in unique Asian language with clear mention of "Myanmar" at the 46 second point at 1541 on 11/4 (thanks to Chuck for deciphering). Unfortunately 576 and 594 were wiped out by Hawaii splatter <https://dreamcrafts.box.com/s/yq7uqray3bq93a6zu76kb92enk46wvq6>.
+Fading up all alone at 1625 on 11/4, this male speaker's language and voice sound a lot like the ones in the previous recording (thanks to Bruce for language suggestion, and to Ken Alexander, a Canadian retiring in Thailand, for the improved audio file) <https://dreamcrafts.box.com/s/24c46lrjmm2329x4e1h634u3m7swn3f5>.
VIETNAM Voice of Vietnam, Dong Hoi, 200 kW. Male speaker in Viet-sounding language at 1615 on 11/4 with apparent mentions of "Vietnam" at the 1 second and 32 second points; Jari L. says it sounds like Vietnamese <https://dreamcrafts.box.com/s/9va1h709ki2cqyaz0z7eg380w2k8xmcr>.
800 **NETHERLANDS ANTILLES** PJB, Bonaire, 440 kW. Hijacking the 801 frequency at 0921 on 11/3 with an S9 signal and "Transmundial" ID at 6 seconds, this signal was typical of powerful North and South American stations that would mix with the Asian and Pacific island stations each evening in a wild competition. 5.981 miles/9,627 km <https://dreamcrafts.box.com/s/wiotqzpyghyinwl4o1f0c3vw2s1brtbw>.
864 **REP KOREA/PHILIPPINES** HLKR/UnID, Gangneung/?. The Korean big gun is in a wild S9 snarl with a mystery Filipino station at 1539 on 11/3; this was a typical snarling Asian mix very common in the salt-water-boasted Kauai propagation <https://dreamcrafts.box.com/s/edbmedfeikjn85jvs9k21lwe8d89cxn>.

- 918 **EGYPT** ERTU, Bawiti, 10 kW. Some awesome investigative work by Mauno determined that this modest signal at 1628 on 11/6 was Egyptian Arabic – one of the biggest surprises of the trip (otherwise it would have remained an UnID). Thanks for the extra effort! (8,921 miles/14,357 km) <https://dreamcrafts.box.com/s/hhdwsw42ok5pcev41amx9i7ln3cxmag>
- KAMPUCHEA** RNK, Phnom Penh, 200 kW. One of the biggest stars of the DXpedition, with S9-level Kampuchean pop music almost every morning around 1630, burying Shandong in the dust. This music was at 1655 on 11/3 <https://dreamcrafts.box.com/s/wciwhvoeqasvojbifrg8x4u54bm6qshq>. Booming pop music at 1653 on 11/8 <https://dreamcrafts.box.com/s/yimn4viqpf60d85ek5cvt1yxe6d5orb>. Burying Shandong at 1635 on 11/8 <https://dreamcrafts.box.com/s/geenpiko5i7rkohvdxwhfnbkavb928fe>. Full National Anthem at 1700 sign off on 11/8 <https://dreamcrafts.box.com/s/wfcfv169exidtnflx3g0ikag1xdg7ql>.
- 927 **INDIA** AIR, Visakhapatnam, 100 kW. India news in English by female announcer at 1531 on 11/8 (mixing with China); with mentions of "also approved Indian..." at 9 seconds and "for India to express" at 25 seconds. Thanks very much to CK Raman of India for matching the recording to the AIR archives <https://dreamcrafts.box.com/s/ozrw09zrlayks7nt3dxt95zeabqmw7>.
- 1440 **KIRIBATI** Radio Kiribati, Bairiki, Tarawa, 10 kW. The usual female announcer speaking the island language got a boost from semi-auroral conditions at 0845 on 11/6 to thunder over JOWF's Japanese female announcer <https://dreamcrafts.box.com/s/cpgfb9jg414gez35y94k0aaghhh6ffcy>.
- 1575 **IRAN** jammer. Causing severe interference to VOA-Thailand's Bengali program at 1620 on 11/8, the "official" target of this prolific jammer is Radio Farda in the UNITED ARAB EMIRATES. The transmitter location is unknown, but likely distance to Kauai is around 8,000 miles/12,875 km <https://dreamcrafts.box.com/s/pn1iwgnxq3vzgf5tj9b2ek0pb6p14qg3>.
- 73 and Good DX, **Gary DeBock** (DXing in Poipu, Kauai, Hawaii from November 3-8; DXpedition setup photo at <https://dreamcrafts.box.com/s/w6ra0umwncy238cfzui8pxqetw8taare>. Antennas: 20 x 160 DKAZ and 2 loops about 18 x 18, all at 270 degrees.



DX FORUM – Richard C Evans – 3908 Grand Oak Ave Apt 4 – Indianapolis IN 46237
 Email: REvans5435@yahoo.com DEADLINES: Saturdays

Deadlines: 12/24, 12/31, 1/7, 1/14, 1/21, 1/28, 2/4, 2/11, 2/18 and 3/4 (Anniversary Issue)

Glenn Hauser, PO Box 1684, Enid OK 73702 wghauser@yahoo.com

Greetings. All times and dates strictly UT. Rx: mostly DX-398 with internal antenna only or PL-880; NRD-545 with ALA-330S inside E-W or inside random wire N-S; Nissan stock caradio as specified; or IC-R75 with E-W long wire.

800, Dec 13 at 1407, KQCV OKC is off! I hear an ID in passing sounding like "WBUL"; the closest fuzzy match in the NRC AM Log is WVAL, Sauk Rapids MN, 2600/850 watts U4. Credible, since 830 WCCO is still in. No sign of XEROK on 800 either.

Trying to pull more of WVAL or something in absence of KQCV, but it cuts on at *1415 JIP gospel huxter, as if 1415 were its proper sunrise in December, which is really 1330 UT (January: 1345 UT) – but KQCV is semi-local here day and night, 2500/1000, PSRA 38 watts (what's the point of a PSRA much lower than your night power?) IIRC, KQCV's pattern is out of whack with an STA.

1450, Dec 14 at 2207, Missouri Net News outro, and "Good Time Oldies, 1450, K-O-K-O, ko-ko", dominating for now this 1 kW graveyarder from Warrensburg MO, pre-sunset.

1520, Dec 14 at 2153 on R75 with E-W longwire, nearby KOKC OKC talk is hardly dominant; by 2155 sports talker is atop, so is it KOLM Minnesota? 2159 Fox Sports net ID, and then "1520, KSIB, Creston, Iowa", which is a 1 kW ND daytimer. There has also been a JBA 1 kHz het which at 2204 I pinpoint to 1521, not 1519, ergo a bit of the 2,000,000 watts out of Saudi Arabia, more than an hour pre-sunset here.

UnID. Trans-Atlantic JBA MW carrier search, Dec 11 at 0627-0633, in the order checked: 747, 729, 693(2), 639, 621, 531, 1089, *1215, 1575. *= strongest, Absolute Radio, UK; (2) = at least two carriers beating. See also Trans-Pacific.

UnID. Trans-Pacific JBA MW carrier search, Dec 11 at 0627: mainly Europeans, see Trans-Atlantic, but the first one I check is 846 which at this hour I expect to be from Radio Kiribati, Kiritimat.

UnID. Trans-Atlantic JBA MW carrier search, Dec 14 from 0645: 531, 549, 576, 585, 612, 621, 639, 666, 738, 747, 774*, 801, 837, 846 (2 – one of them Kiribati TP?), 882, 909, 936(2), 954(6 kHz from local), 999, 1017, 1026, 1035, 1044*, 1053, 1089, 1098, 1125(2). (By now it's 0708 as I doze off and undoze:) 1134(2), 1305(2), 1314, 1413 (2), 1485(2), 1503*, 1521, 1539(2), 1575, 1584(2), 1602. *=stronger ones; tried for audio on some but no go. (2)=at least two carriers beating. Quite a haul.

Then at 0715 I check LW to find: 162, 180, 198(2), 216, but some of those could be beaconish.

Until the next, best of DX and 73 de Glenn

Jon Pearkings, Edmonton, Alberta jon@pearkings.com

The 10KW signal at night from KDYL South Salt Lake UT has got a lot of us focused on 1060 over the last week. For me, it brings up three interesting questions. How long before KDYL gets caught by the FCC for running day power at night? How often does KDYL ID and is it being done correctly? Why does CKMX often disappear completely under KDYL here in Edmonton? I have long theorized that there is a ring, roughly in the shape in the station's directional pattern, a certain distance away from each station where the sky wave and groundwave are about equal strength, and often arrive at a radio's antenna out of phase, significantly reducing the signal strength. Edmonton is usually in that ring for Calgary's CKMX. And CFAC-960, when I've heard a very strong KNEW Oakland CA. 73, Jon.

Richard Evans, Apt 4, 3908 Grand Oak Avenue, Indianapolis, Indiana 46237-4694

Just a quick note to wish everyone a Merry Christmas and a Happy New Year. I've been too busy lately with changing work shifts and a new girl friend to try and listen but I hope I can do a lot more this coming year. 73.



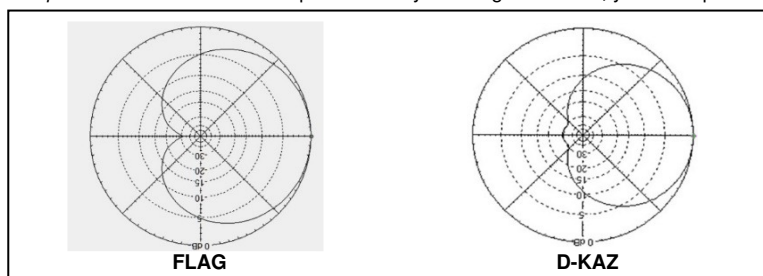
IRCA TECHNICAL COLUMN – Nick Hall-Patch – 1538 Amphion St – Victoria BC Canada V8R 4Z6
 Email: nhp@ieee.org

THE D-KAZ COOKBOOK

by **Mark Durenberger** – with input from **Neil Kazaross** and **Nick Hall-Patch** – 12/2018

SECTION ONE: Antenna Performance, Attributes, Operation, Construction – **SECTION TWO:** Measurements and Non-Traditional Applications

SECTION ONE—THE "SPECS": The "D-KAZ" directional Medium-Wave receive antenna has been rapidly gaining popularity among DXers. It's an exceptional device, delivering a substantially-narrower front-end beam-width and better side-suppression than a typical single-loop Flag. It also provides a clearly wider back-null aperture and does a good job of nulling over a broad range of elevation angles. As developer **Neil Kazaross** points out, "A double loop is electrically nearly the same as an end fire array of two single loops." The D-KAZ can also outperform many Beverage antennas, yet it occupies a fraction of the floor space.



Properly-installed D-KAZ antennas can provide Front-to-Back ("F/B") performance approaching and exceeding 30-40 db. Forward beam-width is approximately 100 degrees (Flags are about 135-140). Front-to-side ratio exceeds that of the Flag by about 5 db. Finally, the wider backside null area sets the D-KAZ apart from most Flag antennas:

There is a cost: The D-KAZ usually requires significant amplification. Construction is more exacting than with a single loop and, unsurprisingly, signal output is related to length.

FEED POINTS: The native impedance of the D-KAZ feed points at Medium-Wave is approximately 800 ohms.

On the "front end" of the antenna this impedance is matched to the *signal lead-in* via an RF coupling transformer. The antenna is then 'balanced' by a variable resistance at the opposite feed point. This resistance is adjusted for best antenna directivity on a given frequency. (See [Figure 1-1](#)).

D-KAZ ANTENNA SIZE: Experimenters have been trying various lengths, fitting available geography. Neil Kazaross' EZNEC program correctly predicted that shorter versions cause some degradation in low-end directivity. Longer versions, in turn, do not produce good F/B nulling at the high end of the Medium-Wave band. A good compromise turns out to be **140 to 160 feet, with a 20-22 foot apex**.

If band-wide directivity, not signal output, is the primary consideration, a practical length turns out to be about 140 feet, and a D-KAZ that strikes a balance between Medium-Wave signal-performance and respectable directivity need be no longer than 160 feet. In these dimensions "it's a darn good antenna," as Nick Hall-Patch might say. **SECTION TWO** compares performance between a 140-foot and a 170-foot D-KAZ.

ASPECT RATIO AND POLE HEIGHT: A D-KAZ support pole height is usually 22 to 23 feet, and the return-wires are often placed 2 feet above ground. This creates an apex of about 21 feet ([Figure 1-1](#)). Updated EZNEC inquiries confirm these dimensions are appropriate for good antenna performance.

Interestingly, a recent study suggests the D-KAZ may work equally well when the return-wire is placed at 6.5 feet above ground level – with some possible loss of directivity at the low end. (This height, if practical, would have obvious advantages for human traffic).

(In **SECTION TWO** we will compare the effects of various return-wire heights.)

[Figure 1-1](#) displays a 140-foot D-KAZ installation. Here the feed points are extended to the shack using electrical practices discussed below.

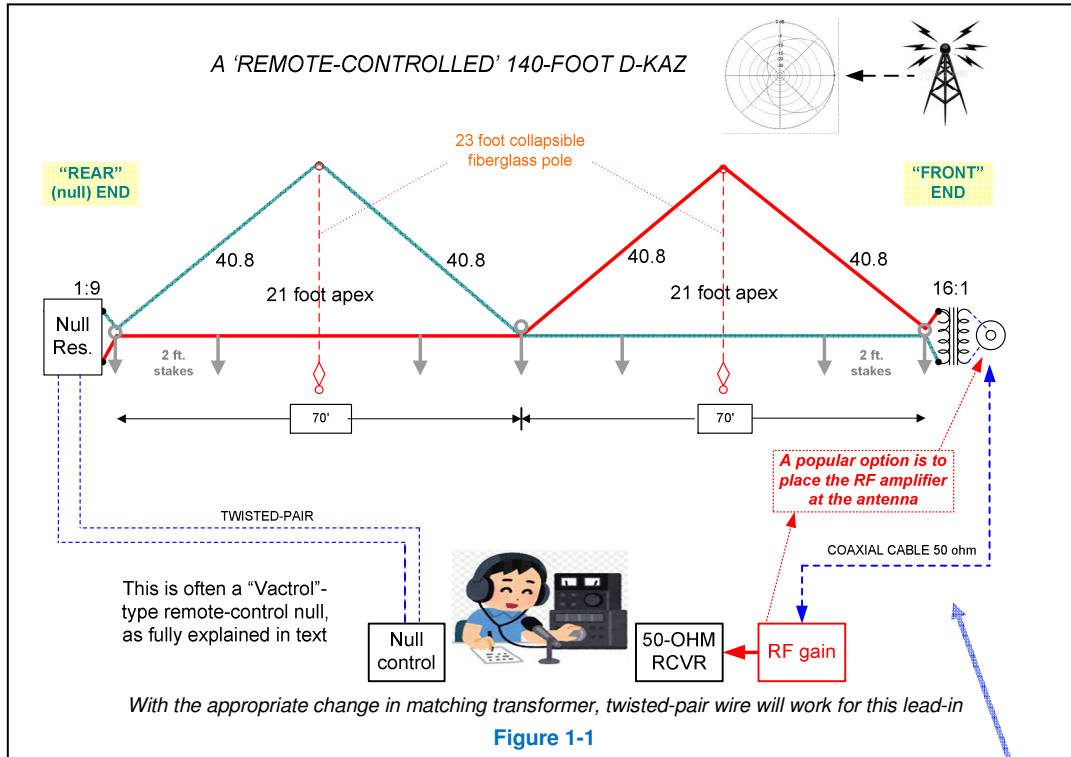


Figure 1-1

Each of the D-Kaz wires in [Figure 1-1](#) composes two-thirds of one loop ("Delta")... and then continues as the base of the other Delta (see color-coding). Crossfire phasing creates a 180-degree phase shift, so the resultant pattern is similar to *two loops in series fed with close to a 180-degree phase difference*.

THE LEAD-INS and THE AMPLIFIER: Some DXers will operate the D-KAZ right at the ends of the antenna; others will want the convenience of 'remote-control' in a warm shack. Lead-ins can be either coaxial cable or twisted-pair as discussed below.

Low-noise RF gain in the order of 15 to 20 db is necessary. Expect to invest a couple of hundred U.S. dollars in a good amplifier. This is one area where it won't pay to be too thrifty; amplifier noise degrades the RF environment in and around the signals you're trying to snag.

There are several ways to design lead-ins and add RF amplification. [Figure 1-2](#) examines some alternatives:

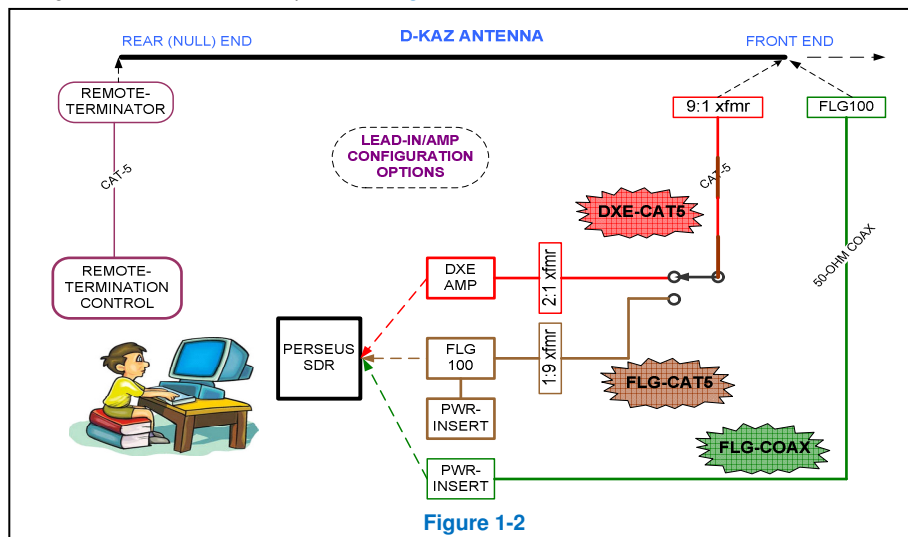


Figure 1-2

Remote Termination Control is discussed below. Note here the two signal-feed alternatives using the Wellbrook FLG100. When used at the antenna, the Wellbrook provides the impedance transformation to the lead-in and delivers 22 db RF gain. It's weatherproof so the amplifier can be installed at the antenna.

If 50-ohm coax is not your favorite candy, twisted-pair can be used for the lead-in and the FLG100 is then mounted in the shack. (Twisted-pair signal loss is one or two db more than coax, depending on distance.) A third approach is the DX Engineering DXE RPA-2. It can be fed by twisted-pair as above and it provides 16 db RF gain. Even with the slight twisted-pair loss, all three options performed identically in terms of signal-to-noise in the return-line.

When you're doing a temporary deployment you'll likely opt for the configuration of Figure 1-3. Here the receiver is extended to the null-pot end, using coax or twisted-pair:

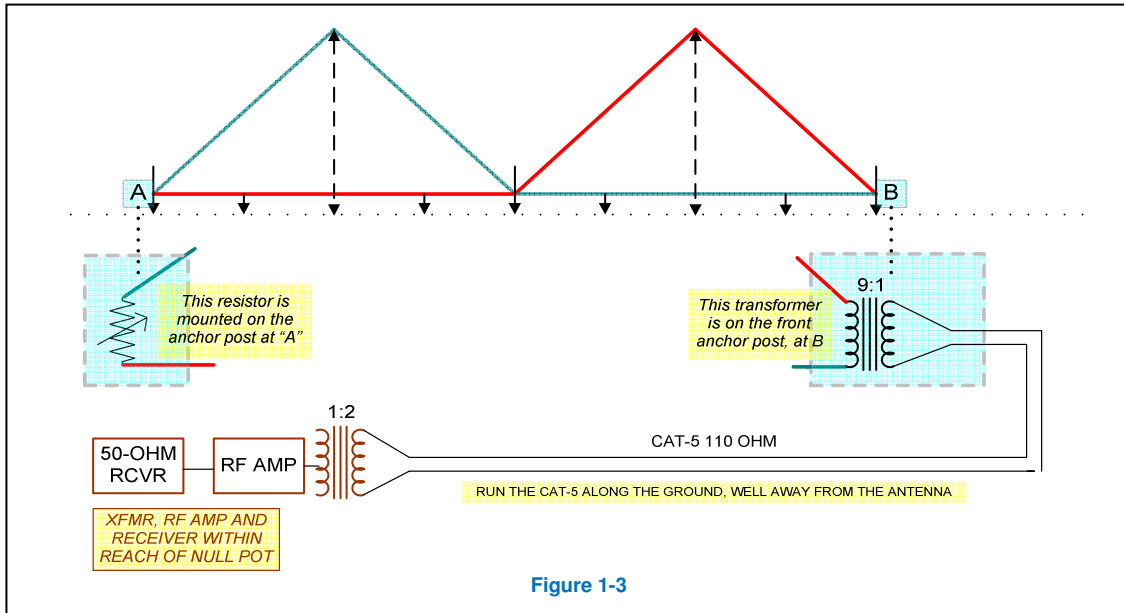


Figure 1-3

FINDING BEST F/B: The D-KAZ wants the two lower end corners to match electrically. The "impedance," if you will, at the null-end of the antenna should match the impedance at the receive end. The antenna is working top-notch when the ends are electrically matched across a couple of octaves of Medium-Wave frequencies.

For discussion, we define this impedance as a mix of capacitance, resistance and inductance, stirred together in some complex form. The receive node requires a transformer to match the antenna to the lead-in, and that transformer has its own complex mixture of these values. A simple resistor as the nulling component may not perfectly match the transformer's impedance, but it does a pretty fair job, so a simple non-inductive resistance has become the "go-to" device as the null component. (Some have suggested that perhaps adding capacitance and inductance to the null resistor in some fashion might do a better job, but so far no experimenter has yelled "Eureka!" And after all... 30-40 db with just a resistor is very fine. It may be that if you add reactive elements, you'd find that deeper individual nulls might be reached... to the detriment of overall broad-null performance.)

THE NULL RESISTOR: It's either a fixed resistor, a variable potentiometer or the remote-controlled resistance assembly discussed below. For best performance, the wire leads from the antenna end wires to the null resistor should be kept short. We've found that adding lengths of wire from the antenna null-end wires to get to a 'nearby' null-resistor can degrade the antenna's RF performance (you're actually skewing that "electrical corner" of the Delta). In strong-signal environments, this might also be adding interference.

Here's where we admit that, early on and absent good measurement methodology, we suggested you could extend that null resistor by wire a goodly number of feet from the antenna, without degradation. We were wrong.

NULL-ADJUSTMENT: To watch the radio while performing variable-resistance nulling means someone's on each end of the D-KAZ. But you might move the receiver to the null end (Figure 1-3), or extend both ends to the shack (Figure 1-1).

If you want null-control from the shack the 'remote-termination control' of Figure 1-2 is used. This may be either mechanical such as Bruce Conti's <https://www.bamlog.com/remotepotbox.htm> or electrical, using an 'optoresistor' or 'photoresistor' (https://en.wikipedia.org/wiki/Resistive_opto-isolator), https://oshpark.com/shared_projects/vc7FILVq and https://oshpark.com/shared_projects/ajPxAEY5.

In the "electronic" approach, an optoresistor assembly is mounted on the antenna end-post. A DC voltage is inserted at the shack control-point and sent to the optoresistor, using a wire-pair dressed away from the antenna. (The optoresistor is internally isolated from its control wire, so its control wire can be of any length without perturbing the antenna null or collecting external interference.) Again, Figure 1-1 illustrates.

The commonly-known name for this device is "Vactrol," after an early, widely-used version of optoresistor. (Vactrol prices have been skyrocketing and lower-cost substitutes have been found.)

Figure 1-4 illustrates a home-brew "Vactrol" remote-termination system. The 9-volt battery will power this for many DX days. Resistor "TBD" is dependent on control-wire length and device used.

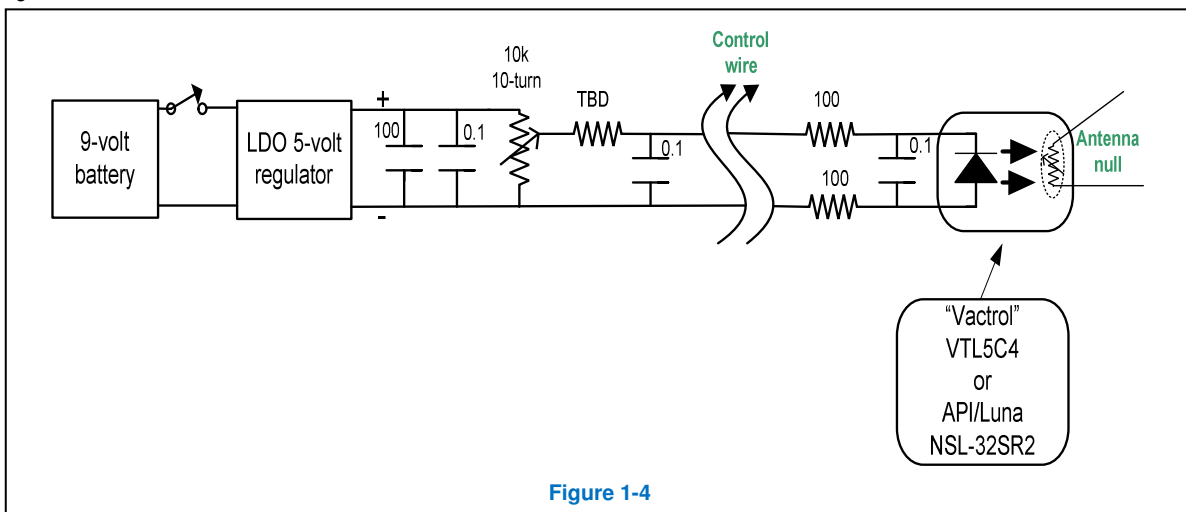


Figure 1-4

OR: If you're not into readjustments, you'll use a *fixed null resistor* and spend all your time on the radio dial. **An 820-ohm non-inductive resistor is a pretty good "fixed-R" for the Medium-Wave band.**

MEASURING: The "Figure-of-Merit" for a directional antenna is its directivity or "Front-to-Back" Performance ("F/B"). There's an informal convention that suggests this value be measured as follows: 1) Operate the antenna with nothing connected to the "null" end, and note the signal level of the signals you want to suppress; 2) Connect and adjust the null control for a minimum signal from that station. The difference between the two signal measurements is the Front-to-Back ratio, usually expressed in db.

SECTION TWO presents F/B numbers as "null-depth."

By the way, "null" as used in this document is a 'minima'... not necessarily the complete elimination of unwanted signals.

SPECS and PERFORMANCE SUMMARY: A good deal of learned information on these subjects has been shared on the IRCA Email reflector. It's all useful, and it's fun to read the posts, as folks far smarter than I challenge one another on their validity. But I'm a student of the experimental/empirical approach and I'm fortunate to work in antenna locations that allow a D-KAZ to 'stretch its legs' while we measure at leisure.

All of the above may be food for thought; especially given the notion that the D-KAZ is still a relatively-new player and might be subject to one of those "Eureka moments." Already, in preparing this paper, conversations with Neil and Nick have prompted a short list of new things to measure next summer.

What we measured in the summer of 2018 is presented in **SECTION TWO**.

Meanwhile, please find below one fellow's suggestions for building your own D-KAZ.

COMPONENTS FOR A "NON-REMOVED" D-KAZ ANTENNA

- **9:1 step-down transformer** (\$ 4 Mini Circuits T9-1 www.minicircuits.com)
- **2:1 step-down transformer** (\$ 4 Mini Circuits T2-1 www.minicircuits.com)
- **2500-ohm null-pot** (2000-ohm if you can find one)
- **Two 4-foot wood stakes and insulators for the two wire-ends**
- **Two pre-cut lengths of insulated stranded wire:** #18 or larger. If you're building a 140 x 21 ft. D-Kaz, the wires can be cut to 155 feet each; that'll give you a bit extra.
- **Center wire-crossover pole** you can use a drilled wood stake but we do it a little differently; see **Photo 1**.

We drive a short, small-diameter pole into the ground and slide a 1-1/4" PVC pipe over it, with holes drilled at the desired level for the wire-crossings. We use a four-foot length of PVC, for enough weight to put a small amount of tension on the wires; you'll note the bottom of the PVC resides slightly above ground, indicating that tension. The PVC can 'ride' up and down, and by its weight puts a soft tension on the wires, so the deltas keep their shape.

AT THE SAME TIME: Measurements in **Section TWO** suggest that maybe a firm crossover height is fine if you're not experimenting with return-wire height. **YMMV.**

- **Two support poles:** Telescoping fiberglass pole 23 feet: Two popular versions are by "In The Breeze" and Premier Designs (Walmart or Amazon), or Google: "telescoping support poles 22/23 feet."
- **Ground-movement anchors for these poles:** We suggest two or three pieces of cheap "re-bar," driven in together so the support pole will fit over this re-bar cluster. (**Photo 2**)
- **Lateral support guying for poles:** 1/4-inch or smaller rope and anchor stakes.
- **Eight Wire-support stakes for the bottom return-wires:** We use commonly-available push-in plastic fence posts plastic electric fence posts available at farm implement stores. (**Photo 3**)
- **Anti-strangle device:** Surveyor's tape tears into nice warning flags, hung on wires. (**Photo 4**)
- **Weatherproof boxes for antenna terminations:** Hammond 1554 or 1555 series (ABS) at Amazon (**Photo 5**)
- **And wire glands for these boxes:** Made by Heyco and others; from Mouser, Amazon; size depends on wire used. (**Photo 6**)
- **Finally: RF amplification of 15 to 20 dB.** (See text)



Photo 1

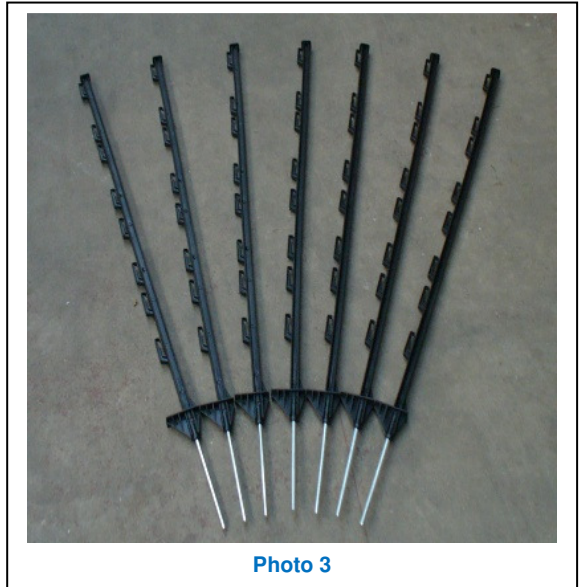


Photo 3



Photo 2



Photo 4

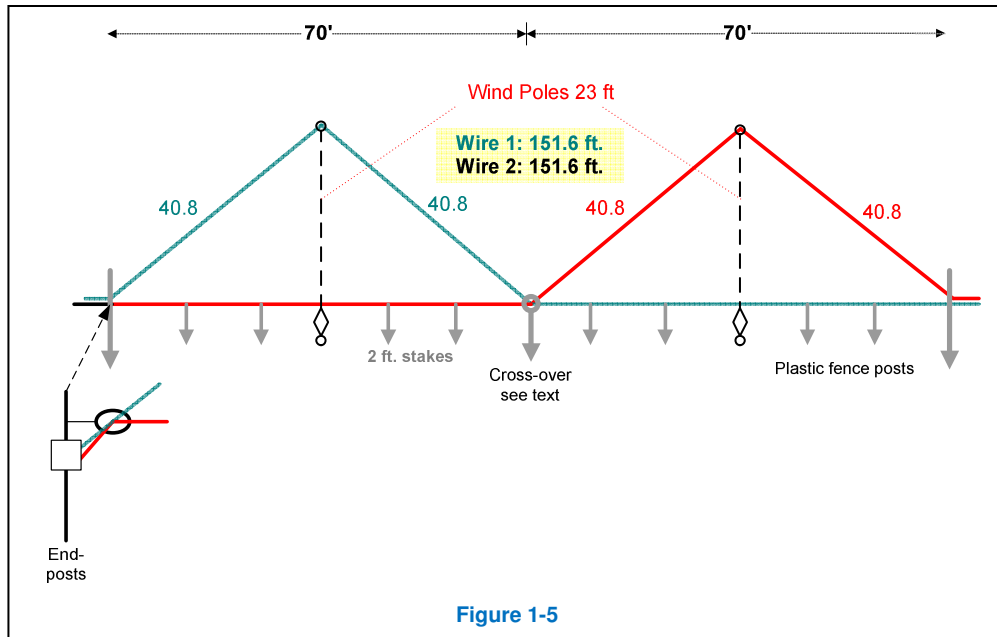


Photo 5



Photo 6

PHIELD PHOLLIES OR SIMPLE CONSTRUCTION? And that leaves one item: how to erect the antenna. We suggest you read **SECTION TWO** before construction. Below, one phellow's step-by-step recipe on how to build the D-Kaz of **Figure 1-5**. This version has the return-wire at 2 feet above ground and wind-poles of 23 feet total height (creating an antenna apex of 21 feet).



If you're pre-cutting the antenna wires it's wise to make each wire 155 to 160 feet in length, cutting off excess when you're through with the installation.

1. Using one of the intended antenna wires, lay out the desired *antenna azimuth*. Anchor the wire on one end and pull it tight so it describes a nice straight line. This becomes your baseline for lining up the supports.
2. At the intended center location, drive in the center support, on the line.
3. Anchor the tape measure at the center, and pull it out toward one end. At exactly 70 feet, drive one of the end-posts and install an insulator.
4. Find the exact 35-foot point on the tape and drive in the re-bar cluster on the line. (This is the base for one of the wind-poles.)
5. Swing the tape around and do the same in the other direction.
6. Now place the eight fence-posts along the wire line; equally spaced with the other posts.
7. Slip the (collapsed) support-poles over their re-bar mounts. Fish out the smallest-diameter (top) section of the pole; it has an eye loop.
8. With a piece of tape, hold enough of that top section extended out of the pole so you can get at the eye loop later. Do the same at the other pole.
9. Tie one end of one of the main antenna wires to the insulator on an end-post. (Leave a few inches for connection.) Walk the wire forward, threading it through the nearest support pole eye loop, through the center cross-over and along the ground to the far end-post. Drop the wire.
10. Still at the far end-post, attach the second wire to the insulator; thread that through its nearest support pole, through the cross-over, and on to the opposite end. Again, drop the wire.
11. Now begin to pull out sections of the support poles to their maximum height. If you're planning on providing additional pole-anchoring with tag-lines (to keep the poles from swaying 'sideways'), near what will be the upper third of the pole you'll attach the two **optional** tag-lines. As you pull out the pole sections the Deltas begin to take shape. From here on, it's simply a matter of threading the bottom return-lines through the plastic fence posts to create a uniform height-above-ground, and then pulling each wire tight while tying it off to its appropriate end-post insulator. You should find an equal amount of unused wire on both ends.
12. If you've added lateral-movement tag-lines, tie them to stakes so that there's no side-ways support-pole movement.
13. Re-eyeball the array for symmetry in all directions and connect the end equipment and remote-extensions, if included.
14. That's it! The DXing is up to you.



2018-2019 IRCA DX CONTEST – Manager: Nancy Johnson – 2922 S Olivewood – Mesa AZ 85212-2923
 Email: NancyJohnson@prodigy.net

December 15 2018 – Contest Standings

1. Greg Hall	208	3. Tim Noonan	179	5. Nancy Johnson	59	7. Larry Van Horn	29
2. John C Johnson	205	4. Dennis Vroom	113	6. Phil Bytheway	37	8. Nigel Pimblett	13

If you would like to enter the contest rules can be found in the August 18 2018 SDXM (Vol 56 #1). The contest will end 2359 on May 31 2019 so there is plenty of time left to enter. New catches are guaranteed! – Nancy

Note: Pricing has been revised for some of the following IRCA Goodie Factory Items – pb

Full Color IRCA Letterhead

Full color 8.5 x 11 MS Word 2007 file with the current IRCA logo. Send Email to phil_tekno@yahoo.com to get yours today! Great for verification requests.

IRCA Slogans List (October 2018)

This completely revised Slogans List includes radio slogans from the US and Canada (over 4500). The 2018 IRCA Slogans List is posted on the IRCA website for all to download. The link is: http://www.ircaonline.org/editor_upload/File/IRCA%20Slogans-Introduction.pdf

For those preferring a hard copy, one can be ordered from the IRCA.
 Prices: **IRCA/NRC members** – \$4.50 (US), \$5.50 (Canada) \$7.00 (México), \$7.50 (rest of the world). **Non-IRCA members** – add \$1.00.

IRCA TIS/HAR LIST (Summer 2018)

The **IRCA TIS/HAR LIST** lists all US and Canadian TIS/HAR stations, by frequency, including call letters, state (province), city, county, licensee, address, coordinates, expiration date and dates of DXM/DXN reports/sources. It has been updated with FCC data, DXM, DXN and DXer reports, and on-line listings through June 6 2018.

The 2018 IRCA TIS/HAR LIST is posted on the IRCA website for all to download. The link is: http://www.ircaonline.org/editor_upload/File/TIS_2018.pdf
 For those preferring a hard copy, one can be ordered from the IRCA.

Prices: **IRCA/NRC members** – \$5.00 (US), \$6.00 (Canada) \$8.00 (México), \$9.00 (rest of the world). **Non-IRCA/NRC members** – add \$1.00.

IRCA Mexican Log, 21st Edition (Winter 2018)

The **IRCA MEXICAN LOG** lists all AM stations in Mexico by frequency, including call letters, state, city, day/night power, slogans, schedule in UTC/GMT, formats, networks and notes. The call letter index gives call, frequency, city and state. The city index (listed by state, then city) includes frequency, call and day/night power. The transmitter site index (listed by state, then city) tabulates the latitude and longitude of transmitter sites. This is an indispensable reference for anyone who hears Mexican radio stations. Size is 8 1/2" x 11".

Prices: **IRCA/NRC members** – \$7.00 (US), \$8.50 (Canada) \$12.00 (México), \$14.00 (rest of the world). **Non-IRCA/NRC members** – add \$1.00.

A DXers Technical Guide, 4th Edition (Spring 2004)

In its nearly 200 pages you will learn about the principles underlying the design of successful receivers, antennas and receiving accessories, find reviews of the best commercially available DXing equipment in different price ranges, as well as detailed instructions for building one's own antennas and other DXing aids. Although it focuses on the technical backdrop to medium wave DXing, it will also be of interest to serious shortwave listeners and low band radio amateurs.

Prices: **IRCA/NRC members** – \$15.00 (US), \$16.50 (Canada) \$18.00 (México), \$20.00 (rest of the world). **Non-IRCA/NRC members** – add \$2.00.

Sunrise/Sunset Maps

12 maps showing 15 minute sunset and sunrise times for the US and 12 maps showing hourly sunset and sunrise times for the World. Explanation includes use of the maps and examples of DX made possible by knowledge of SR/SS times.

Prices: **IRCA/NRC members** – \$2.25 (US), \$3.00 (Canada) \$3.50 (México), \$4.50 (rest of the world). **Non-IRCA members** – add \$1.00.

IRCA Foreign Log

The IRCA has published nine volumes of the **IRCA Foreign Log** which are still available. Each volume contains the several hundred actual tips that were reported to the DXWW sections during an entire year, compiled and retyped in a book format. In addition, special features include articles on foreign DXing (volumes 6, 7 and 8), utility lists (volumes 7 and 8), shortwave parallels (volume 8) and BCB propagation (volumes 6, 7 and 8). The **IRCA** still has volumes 3, 4, 6, 7 and 8 of the **IRCA Foreign Log** available for \$2.50 each (overseas add \$3.00/book).

An Introduction to Broadcast Band DXing

This tri-folded brochure is ideal for explaining the Broadcast Band DXing hobby and the IRCA. It can be included with reception reports and given to other interested folks. Sub topics include: What is DXing?, Broadcasting's early years, The first DXers, Clubs helped listeners share, Our hobby today and DX clubs still unite listeners. It is two color printed on heavy stock. Price is \$0.35/brochure (US and Canada), \$1.00 (rest of the world). Minimum order is 10.

IRCA Reprints

The IRCA maintains a large file of articles that have appeared in past issues of **DX Monitor**. These articles cover a wide variety of topics, including: antenna theory and construction, tips for the foreign BCB DXer, how to improve your DXing skills, history of DXing and broadcasting, lists of stations by subject, construction projects and receiver modification, receiver reviews, medium wave propagation, and more. Copies are available for a nominal charge. Price for the complete list is \$1.00.

Also from the IRCA. "IRCA REPRINTS ON CD"!!! 648 Reprints. The entire set, now on one CD. Categories include: Antennas, Domestic, Foreign, History, DX Lists, Receivers and Receiver Modifications, and Technical. Check out the table of contents at: <http://ircaonline.org/2004ReprintList.htm>.

Prices: **IRCA/NRC members** – \$10.00 (US), \$11.00 (Canada) \$11.50 (México), \$12.50 (rest of the world). **Non-IRCA/NRC members** – add \$2.00.

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IRCA's regular bulletin "**DX Monitor**" Volumes 1 through **53** in .pdf format on 2 DVDs. Re-live the days gone by and re-introduce yourself to the former members who helped make the IRCA great!! NOTE: You will NEED a DVD reader to open the .pdf files. These files were TOO LARGE to use regular CD's.

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To order from the IRCA, send the correct amount (in US funds payable to **Phil Bytheway**) to: **IRCA GOODIE FACTORY, 9705 MARY NW, SEATTLE WA 98117-2334**. Or, order through PayPal to Email: phil_tekno@yahoo.com (Phil Bytheway). Please state club affiliation when ordering.

39th Edition of the National Radio Club's AM Radio Log

The **NRC's AM Radio Log** is a source for information on AM Radio Stations in the United States and Canada. The 39th edition of the Log contains approximately 302 pages of data and cross references and 12 pages of instructions in 8-1/2" x 11" size, 3-hole punched, US loose leaf format. This publication fits nicely into a 1" three-ring binder. 10,000+ updates since last year's 38th Edition of the log! New for this year is a cross reference by State/Province areas. Additional reference lists include call letters of FM simulcasts with the AM Stations listing, listings of regional groups of stations in the groups section (separate section of the log) and a cross reference of those stations that are licensed to use IBOC (In Band On Channel) digital audio and a comprehensive list of FM translators that are now simulcasting with AM broadcasters.

Price: **IRCA/NRC Member USA** – \$26.95 (Priority Mail), Non-Member USA – \$32.95, Canada (Member/Non-Member – Global Priority Mail) – US\$40.25, Outside US/Canada (Global Priority Mail) – US\$51.25

NRC County Cross Reference (CCR)

Compiled by Bill Hale. This handy reference has a complete list of counties in the USA and Canada. These are listed alphabetically and cross referenced by state.

Price: **IRCA/NRC Member USA** \$8.95, Non-Member USA \$11.95. Other countries write for quote sales@nrcdxas.org.

Order from **NRC, PO Box 473251, Aurora CO 80047-3251** or <http://www.nationalradioclub.org>. Colorado residents, please add 3.5% sales tax. Please state club affiliation when ordering.

The **IRCA** is a non-profit organization devoted to the hobby of hearing distant stations on the Broadcast Band (510-1720 kHz). **DX Monitor**, the official publication of the IRCA, is published in "soft" form 35 times a year (weekly from October through March, twice monthly from April to October.) **DX Monitor** contains members' loggings, articles on radio stations, receiver reviews, technical articles, DX tips, and other material of interest to Broadcast Band DX hobbyists.



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