



DX Monitor

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International Radio Club of America

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FROM THE EDITOR-IN-CHIEF

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If many of you are wondering, I'm doing fine. You may have heard about the unrest that has been taking place in Ferguson, MO over the past week and a half as this goes to press. I've been at the shack the last several days monitoring the police radio traffic. The new look DX Monitor is here! Our membership recently voted on a new format for DX Monitor; the results appear on the next page. The bulletin is now much wider so it can fit on a single page, instead of the two-per-page format I've been doing since I took on the duties of Editor-in-Chief four years ago. Let me or Phil know what you think of our new, single column per page format!

2014 IRCA 50th ANNIVERSARY CONVENTION – BILLINGS, MONTANA

The 2014 IRCA 50th Anniversary Convention will be held in Billings, Montana on September 19th and 20th. John and Nancy Johnson of Mesa, Arizona are your convention hosts and will arrive a couple of days before the convention. The convention will be held at the Lexington Inn & Suites by Vantage located at 3040 King Avenue West. IRCA members are eligible to receive a special room rate of \$95.00(US) per night plus 7% Lodging Tax & \$1.00(US) TBID fees. A limited block of rooms have been set aside so you will want to make your reservations early. Please mention "IRCA-International Radio Club of America" when making your reservation for the special IRCA member's rate. You may call them directly at 406-294-9090 or toll-free 1-877-488-4649. You will need to give them a credit card number and check-in and check-out dates. They do offer an airport shuttle. The parking area is quite large.

With this rate you will enjoy the following COMPLIMENTARY top quality amenities to enhance your stay

- A 100% SMOKE-FREE and PET FREE to ensure a healthy environment,
- Guest rooms featuring beautiful furniture, sitting areas, spacious bright bathrooms, pillow-top mattresses, upgraded bed and bath linens and exceptionally quiet rooms,
- New Panasonic flat-screen TVs, iHome radios
- Comfortable and well-lit workspaces with secure high-speed internet desk access,
- Voice mail and free local calls within the (406) area code,
- Free Internet – wired and wireless
- Indoor swimming pool with hot tub, changing room and outdoor patio, fitness center
- Hot continental breakfast. Some gluten-free items available for purchase.

For more information about Lexington Inn & Suites by Vantage go to LexingtonBillings.com

Radio station tours will be scheduled for Friday morning and afternoon. A tour of Connoisseur Media's stations is almost finalized. Stations include News-talk KYA-730, ESPN KBLG-910, Sky KRKX-94.1, The Zone KRZN-96.3, MY 105.9 KWMY, and KLPN-106.7 The Planet. Details will be updated as more tours are added. There will also be a tour of KTVQ 2.1 / Billings CW 2.2 on Friday evening to watch a live production of the 10 PM News. Tours are subject to availability of guides and may be subject to change.

Hungry? You'll discover Billings, Montana is filled with numerous places to eat. There is a Johnny Carino's adjacent to the convention hotel. A few blocks away there is a Pizza Ranch where we will gather on Friday evening. IRCA will pay for this event. Pizza Ranch is a buffet facility featuring pizza and broasted chicken. You can even ask for them to make a pizza your way. The Saturday night convention banquet will be held at the Montana Rib and Chop House.

Registration for club* members is just \$35.00(US) (Does NOT include the banquet – details of the banquet will be announced later). Non-club member's registration is \$50.00(US) which includes a one year membership in the IRCA. (Hint: Save money, a one year membership in the IRCA is less than the increased registration fee for non-members. Join the IRCA now.) You may pay in advance by check or PayPal. If paying by PayPal, please add \$1.00(US) to cover the \$1.34(US) additional charges added on by PayPal. Use this PayPal address: john@johninmontana.com and include a message that the money is for the IRCA convention registration. If paying via check, make that out to John C. Johnson and mail to 2922 S Olivewood, Mesa, AZ 85212-2923. *Club membership in IRCA, NRC, or WTFDA qualifies for the \$35.00(US) registration fee. Non club members are encouraged to join the IRCA.

More details about the convention will be announced later. Check out the IRCA Facebook site too! If you have any questions please contact John Johnson at john@johninmontana.com

FROM THE PRESIDENT (Phil Bytheway)

We are currently seeking a volunteer to compile the **IRCA Slogans List**. Contact me if interested in either position or have concerns about IRCA. Pb

WCHA | 800
MUSIC OF YOUR **Life**
Dame Broadcasting

From Nick: "Here are the results, better late than never. Given that the next DXM will be single column, I guess the outcome will be evident."

RESULTS OF THE IRCA SPECIAL ELECTION ON THE DX MONITOR FORMAT:

"Single column per page format" – 47 votes, as found at <http://www.ircaonline.org/DXM/single.pdf>

"Two column per page format" – 18 votes, as found at <http://www.ircaonline.org/DXM/double.pdf>

A BIG turnout, and pretty decisive result. Thank you to all who voted.

For July 2014 (August 1 2014 – next update September 1 2014)

PROPOSED NEW STATIONS

1280 ON Toronto College. 100 watts fulltime. Variety. Radio Ryerson. CJRN reserved for call letters.
 1350 ON Brampton Commercial. 450 watts (days) / 55 watts (nights). News-Talk (days)/South Asian (nights). Neeti P Ray.

PROPOSED AM TO FM CONVERSIONS

600 ON Bancroft CBLV Move to 99.3 with 269 watts.
 740 BC New Denver CBUI Move to 102.5 with 50 watts.
 810 NB Caraquet CJVA Move to 94.1 with 17,000 watts (28,000 watts Max ERP).
 1340 ON Temagami CBEU Move to 106.1 with 50 watts.

PROPOSED TECHNICAL CHANGES

1150 ON Hamilton CKOC Reduce night power from 50,000 to 20,000 watts. Day power will remain 50,000 watts.

PROPOSED OWNERSHIP CHANGES

900 SK Prince Albert CKBI From Rawlco Radio to Jim Pattison (includes CKBI-1 92.5 Big River & CKBI-FM 95.9 La Ronge).
 1050 SK North Battleford CJNB From Rawlco Radio to Jim Pattison.

(EDITOR'S NOTE: This edition of Broadcasting Information contains two columns. – EIC)

DATE OF COLUMN: August 02, 2014

Column data span: July 19, 2014-August 02, 2014

Data courtesy of Stationintel.com, FCC database and member contributions

Please send your tips to the Email address above only and no other.

CALL CHANGES

FREQ	OLD CALL	CITY OF LICENSE	NEW CALL
870	WSVZ	Assumption, IL	WTIM
1250	WKDL	Warrenton, VA	WRCW

FORMAT, SLOGAN AND SILENT STATUS CHANGES

FREQ	CALL	CITY OF LICENSE	NEW INFORMATION
680	KKGR	East Helena, MT	adds WW1 Good Time Oldies
850	WGKE	Johnstown, PA	was silent, now new unknown format
870	WTIM	Assumption, IL	was silent, now News/Talk (moved from 97.3 FM in Taylorville – EIC)
930	WDLX	Washington, NC	was Talk, now WW1 NBC Sports
930	WFMD	Frederick, MD	old slogan: "News Radio 930", new: "Free Talk 930"
930	WPAT	Paterson, NJ	was Spanish, now Ethnic
980	WJYK	Chase City, VA	adds Contemporary Christian as secondary format
1010	WCST	Berkeley Springs, WV	old slogan: "News Talk 1010", new: "Cat Country 1010"
1010	WCST	Berkeley Springs, WV	was Talk, now Country
1100	KAFY	Bakersfield, CA	was Spanish Christiann, now "La Favorita" regional Mexican
1130	WOIZ	Guaynilla, PR	old slogan: "Radio Antillas", new: "Radio Antillas 1130 AM"
1190	KPHN	Kansas City, MO	adds slogan "Catholic Radio"
1190	KPHN	Kansas City, MO	was silent, now EWTN Catholic
1230	KWG	Stockton, CA	new: "Immaculate Heart Radio"
1230	KWG	Stockton, CA	old slogan: "Sharing The Heart of the Christian Faith"
1240	KNSN	San Diego, CA	was Christian Teaching, now new unknown format
1250	WGHB	Farmville, NC	was Talk, now WW1 NBC Sports
1270	KBAM	Longview, WA	old slogan: "Real Country", new: "Now Country"
1270	KBAM	Longview, WA	was Classic Country, now Country
1300	KPMI	Bemidji, MN	old slogan: "News Channel 1300", new: "1300 The Sports Fox"
1300	KPMI	Bemidji, MN	was News, now Fox Sports Radio
1330	WCVC	Tallahassee, FL	old slogan: "WCVC The Rock", new: "WCVC Divine Word Radio"
1340	KOLE	Port Arthur, TX	now silent
1350	WHWH	Princeton, NJ	was Spanish Christian, now Spanish, adds slogan: "La Unika"
1360	KLSD	San Diego, CA	new: "Xtra 1360 Fox Sports San Diego"
1360	KLSD	San Diego, CA	old slogan: "Xtra Sports 1360"

1390	KLOC	Turlock, CA	was Spanish Christian, now "La Favorita" regional Mexican
1400	WJWF	Columbus, MS	now silent
1410	KDKT	Beulah, ND	old slogan: "Fox Sports Radio 1410", new: "KDKT Sports Radio 1410"
1410	KDKT	Beulah, ND	was Fox Sports Radio, now CBS Sports Radio
1450	WTOD	Hartsville, SC	adds slogan: "Glory 98.5 and 540 AM"
1450	WTOD	Hartsville, SC	was silent, now Urban Gospel //WYNN 540
1490	KIBL	Beeville, TX	was Spanish Contemporary Christian, now new unknown format
1520	WKMG	Newberry, SC	now silent
1540	WTXY	Whiteville, NC	adds slogan: "Sports Radio 1540"
1540	WTXY	Whiteville, NC	was Talk, now Fox Sports Radio
1600	WRJE	Dover, DE	now silent
1680	WTTM	Lindenwold, NJ	adds slogan: "La Unika"

MEMBER CONTRIBUTIONS

Dave Gordon of San Jose, CA sends along the following dated July 30, 2014:

I noticed today the station switched from oldies to Catholic programming. The same as 1260 San Francisco (KSFB), 1200 Monterey, etc. I heard the station was sold for \$50000. (I'm sure you mean KWG 1230 Stockton – EIC)

Flying back to Denver, CO today from Bowie, MD, spent week out here on work-related stuff and visiting family, spent a day up at a casino in West Virginia, did so so there. I will be back here permanently about August 23rd so the Denver address should no longer be applicable. I turn 54 on Tuesday, I don't look a day over 53 right now, you know I can't wait to look in the mirror because I get better looking each day (to quote a famous C&W song). Mike Sanburn hits the big 54 on August 15th, so a big happy B-day to him as well! IRCA convention is just a short time away, be sure to attend in Billings, MT, John and Nancy are great hosts! 73's. Bob Wien

(And now, here's Part Two. – EIC)

CALL CHANGES

FREQ	OLD CALL	CITY OF LICENSE	NEW CALL
890	KDPP	Olivehurst, CA	KMJE
970	KFTA	Rupert, ID	KZNO
1320	KYSM	Mankato, MN	KFSP
1350	KWMO	Washington, MO	KRAP

FORMAT, SLOGAN AND SILENT STATUS CHANGES

FREQ	CALL	CITY OF LICENSE	NEW INFORMATION
610	WPLO	Grayson, GA	was Regional Mexican, now Spanish Adult Hits
620	KHNU	Hilo, HI	adds slogan: "Honu 62"
620	KHNU	Hilo, HI	was silent, now Talk
770	WVNN	Athens, AL	now silent
840	KMPH	Modesto, CA	old slogan: "Graffiti Gold Radio", new: "Immaculate Heart Radio"
840	KMPH	Modesto, CA	was Oldies, now Immaculate Heart Radio Catholic Teaching
880	KHCM	Honolulu, HI	adds China Radio International network
910	WHSM	Hayward, WI	adds slogan: "Red Zone Sports Radio"
910	WHSM	Hayward, WI	was Westwood One Adult Standards, now Westwood One NBC Sports network
930	KKIN	Aiken, MN	adds slogan: "Red Zone Sports Radio"
930	KKIN	Aiken, MN	was Westwood One Adult Standards, now Westwood One NBC Sports network
960	WSBT	South Bend, IN	was ESPN Radio network, now CBS Sports network
960	WTGM	Salisbury, MD	old slogan: "Comedy 960", new: "Fox Sports 960"
960	WTGM	Salisbury, MD	was Today's Comedy, now Fox Sports Radio
970	KZNO	Rupert, ID	old slogan: "970 Juan", new: "ESPN Radio 970 The Zone"
970	KZNO	Rupert, ID	was Westwood One Juan FM Spanish Adult Hits, now ESPN Radio network
970	WERH	Hamilton, AL	now silent
990	WISK	Lawrenceville, GA	old slogan: "La Nueva 990", new: "La Brava 990"
990	WISK	Lawrenceville, G	was Spanish Christian, now Regional Mexican
1000	WDXZ	Robertsdale, AL	old slogan: "Gospel 1000", new: "Rejoice 1000"
1000	WDXZ	Robertsdale, AL	was Southern Gospel, now Urban Gospel
1050	KMIS	Portageville, MO	was Fox Sports Radio, now Yahoo! Sports Radio
1050	KVPI	Ville Platte, LA	old slogan: "Classic Country 1050", new: "The Legend 1050 KVPI"
1110	WCCM	Salem, NH	adds additional unknown primary network
1110	WOMN	Franklinton, LA	was silent, now Country
1190	KNEK	Washington, LA	now silent
1210	WLRO	Denham Springs, LA	old slogan: "Comedy 1210", new: "1210 The Score"
1210	WLRO	Denham Springs, LA	was Today's Comedy, now Fox Sports Radio
1220	WAYE	Birmingham, AL	old slogan: "Le Jefa", new: "98.3 La Jefa"
1230	KOY	Phoenix, AZ	old slogan: "Business 1230 KFYI", new: "KFYI2 The Next Generation Of Talk"
1230	KOY	Phoenix, AZ	was Business News, talk, adds Bloomberg Radio Network
1230	WAMM	Woodstock, VA	old slogan: "The Talk of The Valley", new: "WAMM Country"
1230	WAMM	Woodstock, VA	was Talk, now Americana
1260	KLGO	Elgin, TX	was Sports, now Southern Gospel
1260	WXCE	Amery, WI	old slogan: "WXCE 1260 AM", new: "Red Zone Sports Radio"
1260	WXCE	Amery, WI	was Westwood One Adult Standards, now Westwood One NBC Sports network
1290	WCCC	West Hartford, CT	old slogan: "Beethoven Radio", new: "K-Love"
1290	WCCC	West Hartford, CT	was Beethoven network (Classical), now K-Love Contemporary Christian
1290	WYEA	Sylacauga, AL	old slogan: "Yea! 106.3", new: "Yea! 106.5"
1320	KNCB	Vivian, LA	adds slogan: "The Sports Rebel"
1320	KNCB	Vivian, LA	was silent, now NBC Sports Network
1320	WJAS	Pittsburgh, PA	was Adult Standards, now Talk
1340	KRBT	Eveleth, MN	adds slogan: "The Fan 1340"
1340	KRBT	Eveleth, MN	was Fan Radio network, now Westwood One NBC Sports network
1350	WCMP	Pine City, MN	adds slogan: "Red Zone Sports Radio"
1350	WCMP	Pine City, MN	was Westwood One Adult Standards, now Westwood One NBC Sports network
1350	WNVA	Norton, VA	now silent
1360	WMOV	Ravenswood, WV	old slogan: "The Fun Station 1360", new: "The Voice of the Mid-Ohio Valley"

1360	WMOV	Ravenswood, WV	was Westwood One Good Time Oldies, now talk, WW1 NBC Sports network
1370	KRAC	Red Bluff, CA	was silent, now Talk
1370	WJIP	Ellenville, NY	old slogan: "Comedy 1370", new: "News Talk 1450 WKIP" (typo?-ye ed)
1370	WJIP	Ellenville, NY	was Today's Comedy, now Talk /WKIP 1450 Poughkeepsie
1420	WACT	Tuscaloosa, AL	old slogan: "Comedy 1420", new: "Hallelujah 1420"
1420	WACT	Tuscaloosa, AL	was Comedy, now Urban Gospel
1440	KFNY	Riverside, CA	was Comedy, now News/Talk
1450	WDYG	Dothan, AL	was Talk, now Oldies
1460	WHAL	Phenix City, AL	adds slogan: "Classic Country 1460"
1460	WHAL	Phenix City, AL	was Comedy, now Classic Country (Columbus, GA market – EIC)
1460	WJCP	North Vernon, IN	old slogan: "Classic Hits Radio 1460", new: "Classic Hits 1460"
1460	WJCP	North Vernon, IN	was Cumulus Classic Hits, now Westwood One Classic Hits
1470	WJDY	Salisbury, MD	old slogan: "Comedy 1470", new: "News Radio 1470"
1470	WJDY	Salisbury, MD	was Comedy, now News
1470	WNAU	New Albany, MS	was Cumulus Classic Hits, now Westwood One Classic Hits
1520	WNWS	Brownsville, TN	was Adult Contemporary, now Soft Adult Contemporary
1550	WIGN	Bristol, TN	adds Bluegrass as secondary format
1560	KEBC	Del City, OK	old slogan: "Comedy Radio 1560", new: "Sportsradio 1560"
1560	KEBC	Del City, OK	was Today's Comedy, now Westwood One NBC Sports network
1590	KWEY	Weatherford, OK	old slogan: "Coyote Country", new: "1590 The Score"
1590	KWEY	Weatherford, OK	was country, now Fox Sports Radio

MEMBER CONTRIBUTIONS

Mike Sanburn of Long Beach, CA along with similar info from Eric Bueneman of Hazelwood, MO (via John Tudenham dated August 15, 2014) passes on the following from TheWrap.com dated August 13, 2014 concerning Radio Disney selling off various stations:

The company (Radio Disney-ye ed) will hold on to its flagship station KDIS-AM 1110 in Los Angeles. Radio Disney will be selling 23 of its 24 radio stations across the United States, effective Sept. 26. As part of the changes, 184 positions (about eight per unloaded station) will be eliminated at the local level and in ad sales and operations. The company will be keeping its flagship station and studio, KDIS-AM 1110 in Los Angeles, which will drive its national network programming and provide content to partners moving forward. Its operations will be picked up by the national team. The sell-off of stations won't affect Radio Disney's international partners in Latin America, Canada and Russia. The company says the move will allow it to invest in more digital and multi-platform stations as recent data shows that only 18 percent of Radio Disney listeners receive its content via the radio broadcasts. "Radio Disney will be increasing investment in both digital distribution platforms and music-centric programming," Radio Disney's General Manager, Phil Guerini, said in a memo to staff obtained by TheWrap. He continued, "These decisions will optimize Radio Disney for long-term growth and better reflect the habits of the consumers we serve — a national audience of kids and families."

In addition to its 12-year partnership with SiriusXM, the memo lists new partnerships with ShowMobile, Slacker and Harman's Aha Radio and TuneIn. Also, as of July 1, the company entered into a syndication deal with Dee's Entertainment that provides its Radio Disney Top 30 to multiple U.S. stations.

Aside from being available on the WATCH Disney Channel app, the company intends to grow its popular Radio Disney App for iPhone, iPad and Android.

It also intends to invest in new multi-platform extensions of Radio Disney's programming, including talent competition Radio Disney's Next Big Thing (N.B.T.) and the Radio Disney Music Awards (RDMAs), which beat the "MTV Video Music Awards," "Billboard Music Awards" and "American Music Awards" in Radio Disney's youth demographics, including Kids 2-11, Kids 6-11 and Tweens 9-14 for April 2014. It also beat the Grammy Awards among Kids 2-11 and Kids 6-11. The following statement was released by a Radio Disney spokesperson regarding the intended station sales:

"Radio Disney will increase its investment in both digital distribution platforms and music-centric programming to optimize the network for long-term growth and to better reflect the habits of its listeners, a national audience of kids and families."

Read the full memo to staff from Guerini below:

August 13, 2014

Dear Colleagues,

Across all forms of media, digital technology continues to dramatically change consumer habits – from the iPad, mobile devices and the push of connected devices into the home – and these changes compel us to evaluate and evolve our businesses. Today, we're announcing meaningful changes to our Radio Disney business.

Radio Disney will be increasing investment in both digital distribution platforms and music-centric programming. These decisions will optimize Radio Disney for long-term growth and better reflect the habits of the consumers we serve – a national audience of kids and families. We are partnering with the most popular digital radio services including our distribution partner of over 12 years, SiriusXM, and the newly forged agreements with ShowMobile, Slacker and Harman's Aha Radio. We also have our fast growing Radio Disney App for iPhone, iPad and Android, our WATCH Disney Channel partnership and our Top 30 syndication partnership that's building across the U.S. We will also be exploring new digital extensions of Radio Disney's programming, including the Radio Disney Music Awards and Radio Disney's Next Big Thing (N.B.T.).

As part of this investment shift, at the end of September, we will be selling 23 of our 24 local radio stations, retaining KDIS-AM Los Angeles to originate Radio Disney's national network programming. The operations of the Los Angeles station will be picked up by the national team.

These changes will result in the elimination of some positions, adjustments to other roles and the addition of some new positions. Today and tomorrow, we will be talking individually to those directly affected. Please know that we approached this decision with care and rigor and will provide transition support to those who will be departing the organization.

I have always been impressed with the dedication and camaraderie of the people at the Radio Disney network and local stations. Thanks to that teamwork, Radio Disney leads the radio industry in delivering age-appropriate music and entertainment for kids and families. As we wish our colleagues all the best, we remain committed to continuing the momentum.

Sincerely,
Phil

The following from Mike Sanburn of Long Beach, CA is from fybush.com re the same subject, dated August 14, 2014:

NERW Extra: Radio Disney Drops the "Radio"

*The only surprising thing about Radio Disney's Wednesday announcement that it's selling off 23 of its 24 remaining over-the-air signals is that it took as long as it did.

When Disney entered the kids' radio business almost twenty years ago, it made a certain amount of sense that it did so by purchasing AM radio signals: this was, after all, at the very dawn of streaming audio, long before any of us had connectivity to our cars or to our mobile devices. (Indeed, it was before mobile devices, period.)

So if the goal was to find an economical way to deliver a stream of audio to as many listeners as possible, inexpensively, radio was it – and at a point when the value of FM signals was skyrocketing, the AM dial was the affordable way for Disney to go about extending its brand to radio. And so Disney bought and bought, putting Radio Disney outlets on the AM dial in most of the top hundred or so markets around the country.

Then the world changed: within the last decade or so, Disney's mission – which was never to "run radio stations," just to deliver audio to consumers – became more easily accomplished by streaming audio to tablets and connected dashboards and all the other places today's digital natives hang out. And so Disney began to sell, first shedding its very smallest stations, then the medium markets (including recent sales in Providence, Hartford and Albany), and now the top 25 markets, save only for Los Angeles, where it's keeping network flagship KDIS (1110).

It's a given now that Disney won't recoup anything close to what it paid for most of these stations: not only has the overall value of AM signals tumbled in recent years, but Disney in particular had paid top prices for many of them, buying when the market was near its peak.

Here's what will hit the market in NERW-land:

In New York City, Disney paid \$40 million for WQEW (1560) after LMA'ing the station for years from the New York Times. The 50,000-watt signal operates from four towers on a big piece of land on the Brooklyn/Queens line, with big gaps in its in-market coverage, especially at night, though it has phenomenal skywave coverage of the Northeast.

In Boston, Disney came to WMKI (1260) when then-owner Hibernia paid \$5 million to Salem for what was then WPZE in 1997. The 5,000-watt signal covers the core of the market decently, but suburban growth outstripped its reach decades ago.

In Philadelphia, Disney comes from across the river at WWJZ (640 Mount Holly NJ), with a big 50 kW daytime signal and almost no coverage after dark.

In Pittsburgh, Disney parked its format on WDDZ (1250) after sending another Disney-owned service, ESPN, down the dial to Clear Channel's WBGG (970). The 5 kW signal is one of the better AMs in an AM-challenged market.

Who'll be in the hunt when these signals hit the market? We'll have complete analysis coming up in NorthEast Radio Watch.

Well, ye ed is trying the column with our brand new template, it looks pretty good. I have more room now to put info, so I'll be able to put slogan info on the same line for the most part vice having to split it in the past. Hopefully everyone likes the new format. Well, I have 6 days left out here before I head back to Maryland. Effective 8/23/14, please send any physical mail column updates to my home address in Bowie, MD, I will take the Denver address off the column top with the next column. Did a lot of things out here in Denver the last 4 months and enjoyed all my time out here, but time to head back. Head to the IRCA convention in Billings, MT coming up soon, John and Nancy Johnson will have a great convention in store! 73's. Bob Wien

WESTERN DX ROUNDUP – Nancy Johnson – 2922 S Olivewood – Mesa AZ 85212-2923

E-mail: NancyJohnson@prodigy.net

WDXR DEADLINES: Aug. 29, Sept. 12, Sept. 26, Oct. 3, Oct. 10, Oct. 17, Oct. 24, Oct. 31, Nov. 7, Nov. 14, Nov. 21, Nov. 28. Please use Eastern Time.

REPORTERS FOR THIS ISSUE:

- (RB) **Rick Barton**-Box 1804-El Mirage, AZ 85335 **desertmoon_dxshack@inbox.com**
Panasonic RF-2200, Grundig Satellit 750
- (LG) **Larry Godwin**-2390 Clydes Dale Lane-Missoula, MT 59804 **lbg@mtwi.net**
Hammarlund HQ-150, Sanserino air-core box loop
- (JCJ) **John Johnson**-2922 S Olivewood-Mesa, AZ 85212 **john_johnson@prodigy.net**
Icom IC-R71A, Kiwa Loop
- (PM) **Patrick Martin**-P.O. Box 843-Seaside, OR 97138-0843 **mwdxer1@gmail.com**
Drake R8, SW EWE

OF SPECIAL INTEREST

- 740 KCIK HJ, Kihei Immaculate Heart Radio 7/31 new, heard under KCBS most of the night, then after KCBS faded, was left alone with some KXTG 750 splatter. Varied strength, with relig programming and many mentions of Immaculate Heart Radio. Then a pause at 0900 "KCIK, Kihei," back into relig. programming. Listed as 5kw. If it wasn't for KCBS, they would own the channel here a lot of the night. Thank you to Chuck Hutton for the tip on his recent Rockworks DXP. New. (PM-OR)
- 640 KFI CA, Los Angeles 7/20 2238 man & woman with talk program. Local quality at local sunset. (RB-AZ)
- 670 KMZQ NV, Las Vegas 7/20 2230 sports talk to break and "We are - Fox Sports!" (RB-AZ)
- 720 KFIR OR, Sweet Home 7/31 fought mightily with KDWN at 0800. Man announced "The Voice of the Valley, Newstalk 720, KFIR, Sweet Home, Eugene, Springfield, Albany." Interesting he left out Lebanon and Corvallis, perhaps as a concession to KGAL-1580. This station does well on nighttime 184 watts. (LG-MT)
- 760 KFMB CA, San Diego 7/17 0750 morning news magazine, mixing with unID Mexican station. Good ID by man on the hour, to network news. Good. (RB-AZ)
- 890 KDXU UT, Saint George 8/1 0730 local weather and ad spots, "St. George and Cedar City...Dixie Battery." Not heard well here for a while, now with excellent reception and overcoming local t-storm static. (RB-AZ)
- 980 KFWB CA, Los Angeles 7/30 0945 weak & fading, but well after local daybreak. Not heard in a while here. (RB-AZ)
+8/13 0130 good signal with "KFWB Los Angeles" ID during Overnight America program. (JCJ-AZ)
- 1200 WOAI TX, San Antonio 7/20 interview program re: the Ukraine jet disaster, "This is newstalk 12-hundred, WBAP" by man to Viagra spot. (RB-AZ)
- 1210 KGYN OK, Guymon 7/19 0620 local agri-business spots, IS and local weather, good. 7/31 2130 country music, unusually early for such strong reception from this Oklahoma Panhandle station. (RB-AZ)
- 1300 KROP CA, Brawley 7/15 0200 sounded like Coast to Coast with break, local spots (mentions of Imperial Valley), Rush promo and ID "13-hundred, KROP." Good, with local QRN from nearby T-storm. (RB-AZ)
- 1330 KGAK NM, Gallup 7/27 2130 man with ad spots in Navajo language, "Area code 505," female DJ in Navajo playing country/western songs. Good and early in the evening for this time of year. (RB-AZ)
- 1350 KSRO CA, Santa Rosa 7/27 0100 break from Art Bell to ID by male "Here on 13-50 KSRO." Good. (RB-AZ)
- 1380 KHEY TX, El Paso 7/30 0900 "KHEY AM 13-80" coming up clearly out of the mess. (RB-AZ)
- 1420 KULY KS, Ulysses 7/20 0022 "Your Home Town Radio, KULY," to more country music tunes. Good. (RB-AZ)
- 1430 KJAY CA, Sacramento 7/26 0945 strange sounding southern Asian music, fading in & out after local sunrise here. (RB-AZ)
- 1450 KLBK OR, La Grande 8/10 mixing with KPRK and others at 0800. I didn't hear call, only the slogan, "Oregon's first radio station." I phoned station and found out they do use this slogan, referring to eastern Oregon. Local KGRZ was off the entire day. (LG-MT)
- 1460 KENO NV, Reno 7/19 0820 with ESPN Sports programming, fair to good. (RB-AZ)
- 1620 KSMH CA, Sacramento 8/4 0920 lecture by woman followed by a choir and then faded to obscurity. Fair until fadeout. (RB-AZ)
- 1700 XEPE BCN, Tecate 8/15 0145 strong with "The New ESPN 1700" slogan during ESPN sports. (JCJ-AZ)

The next WDXR deadline is Friday August 29. Nancy 8/15 2100

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 **N0UIHEric@aol.com**
GE Superadio III, Yaesu FRG-7, Worcester Space Magnet II.
- [RD-NE] **Rick Dau**, South Omaha, NE **drummer1965us@hotmail.com**
Kenwood R-5000, Quantum QX Pro Loop.

DOWN THE DIAL

- 580 CKWW ON, Windsor. 7/17 fair to poor signal, mixing with WIBW, WILL, WTCM, XEMU. 03:35 with Oldies format, promo and Web site mention. [EB-MO]
- 610 KDAL MN, Duluth. 8/4 fair to poor signal over WAGG in KCSP null. 0420 with C2C, local spots, calls, CBS News update and weather forecast. [EB-MO]

- 750 KBNN MO, Lebanon. 7/18 good to fair signal in WSB null. 21:22 noted with local spots, talk on financing the making of a movie, sign-off at 21:25 with invite to tune to KJEL 103.7 MHz. [EB-MO]
- 810 WQIZ SC, Saint George. 8/19 fair to poor signal, mixing with KBHB, WHB. 21:55 noted with the Holy Rosary broadcast, into short features on the Catholic faith. [EB-MO]
- 850 WQRM MN, Duluth. 7/17 fair to poor signal through KOA. 02:50 noted with light Christian music, underwriting announcement, "WQRM Duluth, Minnesota" legal ID at 03:00. This was left on at night; listed as a 10 kW daytimer. [EB-MO]
- 880 KRVN NE, Lexington. 7/18 good signal over WCBS; WIJR on open carrier. 21:59 noted with local spots, legal ID into Fox News Radio. [EB-MO]
- 910 KLCN AR, Blytheville. 7/17 good to poor over WSUI. 21:00 with "This is the Delta's News Voice, KLCN Blytheville" legal ID into ABC News. [EB-MO]
- 930 WSEV TN, Sevierville. 7/17 good to fair signal over WKY, WTAD, WWON. 04:50 noted with "Smoky Mountain Radio" ID and local spots. TN #100 from Hazelwood. [EB-MO]
- 1070 KLIO KS, Wichita. 7/15 good to fair signal over WDIA. 02:10 noted with sports talk, national spots and "ESPN Deportes" mention in Spanish. [EB-MO]
- 1090 WAQE WI, Rice Lake. 7/16 2115 fair to poor signal over KAAY, ACI from WTAM 1100. 21:15 noted with local spots, calls and Rice Lake mention in promo. [EB-MO]
- 1100 KKLL MO, Webb City. 7/18 good to fair signal over WTAM. 2055 noted with Contemporary Christian music, "New Life Network" ID, "KKLL Joplin" mention at 2058. [EB-MO]
- 1110 WKDZ KY, Cadiz. 7/18 fair signal over KFAB; KMOX 1120 in analog mode for baseball game. 20:59 noted with Oldies format, legal ID for WHVO 1480 Hopkinsville and local spot. [EB-MO]
- 1160 WKCM KY, Hawesville. 7/18 2103 noted with Classic Country format, "Real Country" mention, "Perry County's home for Real Country is WKCM, 11-60 AM" ID and mention of FM relay. [EB-MO]
- 1180 KZOT NE, Bellevue. 7/28 fair to poor signal, mixing with WLDS; ACI from KQQZ 1190. 07:38 with a discussion on the NFL and local spots. [EB-MO]
- 1240 KFMO MO, Park Hills. 7/17 fair to good signal in WTAX null. 18:46 noted with local spots, into update from CBS Sports Radio. [EB-MO]
- 1270 WXGO IN, Madison. 7/18 fair to poor signal, mixing with WKBF and KFLC. 21:41 noted with Cincinnati Reds baseball PBP. [EB-MO]
- 1290 WHIO OH, Dayton. 7/15 fair to poor signal, poking through WURL. 20:54 noted with "News 95-7 WHIO" mention in promo, local spot. [EB-MO]
- 1300 KGLO IA, Mason City. 7/19 fair to poor signal over WOAD, WNQM. 21:30 noted with minor league baseball PBP, calls and local spots. [EB-MO]
- 1340 KROS IA, Clinton. 7/28 fair to poor signal, mixing with KXEO and other stations. 07:20 noted with local spots, "You're listening to Gary in the Morning on 13-40 KROS" mention. [EB-MO]
- WSBM AL, Florence. 8/10 fair to poor signal, mixing with WLOK and other stations. 01:59 noted with "AM 13-40 WSBM" ID and mention of an FM relay into Fox Sports Radio. [EB-MO]
- 1380 WLRM TN, Millington. 8/4 fair to poor signal through WTJK and other stations; local KXFN off. 05:01 noted with calls and Blues music. [EB-MO]
- 1390 KNCK KS, Concordia. 7/28 fair to poor signal, mixing with WGRB, WTJS. 04:04 with Oldies format, "You're listening to AM 13-90, KNCK" ID. [EB-MO]
- WZZB IN, Seymour. 7/16 2246 - Fair on presumed day power with Blondie's "Call Me", then ID as "Classic 1390 WZZB". [RD-NE]
- 1400 WEOA IN, Evansville. 7/18 local-like to poor signal over KFRU, KJFF, WGIL and other stations. 20:10 noted with Urban AC format, local spots. [EB-MO]
- 1480 KQAM KS, Wichita. 7/18 fair to poor signal, mixing with other stations in WJBM null. 21:29 noted with "The Big Talker, 14-80 KQAM, Wichita proud" ID into Fox News Radio. [EB-MO]
- 1580 KCHA IA, Charles City. 7/17 fair to poor signal, mixing with WAMW, WLJ. 20:53 noted with local spots, weather forecast, calls and Oldies format. IA #50 from Hazelwood. [EB-MO]
- 1640 WSJP WI, Sussex. 7/28 good to fair signal over WTNI. 07:57 noted with "Story Corner", "Relevant Radio" ID, "Morning Air" mention, promos, "WSJP Sussex, WSJP-FM Port Washington" legal ID into the Milwaukee area parish calendar. [EB-MO]

25 & 50 YEARS AGO

"DX Monitor" 25 year ago, 8-12-1989: Dues were increased from \$20 to \$25 ... **Mike Hardester** of Escondido, CA took a vacation to Tioga, PA prior to going overseas in the U.S. Navy ... **Mike Sanburn** of Bellflower, CA sent in a rare forum report mentioning he started DXing in July of 1972 logging KBOI. / 50 years ago, 8-14-1964: **Dave Johnson** of Denver, CO logged KRAN 1280 on a frequency check when local KTLN went off the air early ... **John Johnson** of Sheridan, WY logged WCAL 770 and WLDS 1180.

OPEN MIKE

The IRCA 50th Anniversary Convention will be held in Billings, Montana in less than a month. By now you should have made your hotel reservations and sent in your registration. Convention details may be found elsewhere in this issue of "DX Monitor." This column was typed 8-15-14. 73, John

EASTERN DX ROUNDUP – Eric Bueneman (NØUIH) – 631 Coachway Lane – Hazelwood MO 63042-1347

E-mail: n0uiheric@aol.com

DEADLINES: Thursday 2000 ELT

TUNING THE DIALS THIS ISSUE:

- (KK-VA) **Kraig Krist (KG4LAC)**, Manassas, VA
Winradio G33DDC software-defined receiver, Wellbrook ALA1530S+ Imperium loop antenna
- (JJR-MI) **John J. Rieger**, L'Anse, MI
Grundig Satellit 750, Terk AM-1000 loop

ACROSS THE DIAL

- 770 WYRV VA Cedar Bluff – 7/20 2000 noted with Oldies format, "...WYRV Radio" ID by a male announcer at 2000. "This is AM 77 WYRV...your way, your radio" ID at 2013. The signal was noted mixing with WABC and unidentified stations carrying talk and music. (KK-VA)
(Your unidentified music station could be WEW St. Louis – eb)
- 790 WAEB PA Allentown – 7/20 2005 noted with "here with (the) exclusive Accu-Weather forecast on WAEB" mention by a male announcer. The signal was noted mixing with WPIC, WNIS, WVCD and unidentified stations carrying Spanish vocal music and Country music. (KK-VA)
- 790 WPIC PA Sharon – 7/20 2059 noted with "You're tuned to News/Talk 790 WPIC" ID by a male announcer. The signal was noted mixing with WAEB, WNIS, WVCD and unidentified stations carrying Spanish vocal music and Country music. (KK-VA)
- 790 WVCD SC Bamberg/Denmark – 7/20 2110 noted with Urban Gospel music, "Dad, Dad (was the title of the previous song) right here on WVCD" mention by a male announcer. The signal was noted mixing with WAEB, WNIS, WPIC and unidentified stations carrying Spanish vocal music and Country music. (KK-VA)
- 800 WDSC SC Dillon – 7/25 2034 noted with "This is WDSC, Your Sports Connection, AM...right here every day. We are Your Sports Connection, WDSC" ID by a male announcer. The signal was noted mixing with WSVS, CKLW and unidentified stations carrying Oldies and Spanish formats. (KK-VA)
- 820 WNTW VA Chester – 7/25 2033 noted with "If you have a business and need office space, WNTW would love to have you as our neighbor. We have office space available at 4312 Old...Road in...Chester, next to our offices and studio. This building is located three miles from I-95 and Route 1 or Jefferson Davis Highway..." mention into "The Mark Levin Show". "There are many, many questions. Get the answers on AM 820 WNTW Chester" legal ID at 2059 into SRN News; "The Steve Deace" show followed. The signal was noted mixing with WWFD, WVSG and unidentified stations carrying vocal music and Spanish. (KK-VA)
- 850 WAXB CT Ridgefield – 7/30 2003 noted with "(The) All-New 107-3, Danbury's Classic Hits" ID by a male announcer. The signal was noted mixing with WTAR, WPTK, WFTL, WKNR and Radio Reloj (Cuba). (KK-VA)

- 850 WFTL FL West Palm Beach – 7/30 2100 noted with “This is 850 WFTL West Palm Beach/Fort Lauderdale/Miami” legal ID. The signal was noted mixing with WTKR, WPTK, WAXB, WKNR and Radio Reloj (Cuba). (KK-VA)
- 880 WRFD OH Columbus/Worthington – 7/30 2055 noted with “Life Changing Radio” mention by a male announcer, “WRFD Ministry of the Night...WRFD-dot-com” mention by a female announcer. The signal was noted mixing with WCBS, WPII and an unidentified music station. (KK-VA)
- 890 WKNV VA Fairlawn – 7/30 2000 noted with “This is Your AM 890, WKNV Fairlawn and 93.1 W226AT Christiansburg” legal ID by a male announcer. The signal was noted mixing with WLS and an unidentified vocal music station. (KK-VA)
- 900 WILC MD Laurel – 8/8 2000 noted with “The New AM 900 WILC” ID by a male announcer. The signal was noted mixing with WCPA, CHML, Oldies and vocal music in Spanish. (KK-VA)
(Your vocal music in Spanish could be WKDA Lebanon, TN – eb)
- 910 WLTP OH Marietta – 8/8 2030 noted with “News stories and more at the top and bottom of the hour, and breaking news as it happens on News Radio 910 WLTP” ID by a male announcer. The signal was noted mixing with WTMZ, Radio Disney (WFDF – eb), Oldies (WGTO – eb) and an unidentified station carrying vocal music in Spanish. (KK-VA)
- 920 WMMN WV Fairmont – 8/8 2047 noted with Fox Sports Radio, “Fairmont’s Sports...Fox Radio” ID by a male announcer; a promo for the Montgomery County Fair by a male announcer at 0053. The signal was noted mixing with WURA, CKNX and an unidentified vocal music station. (KK-VA)
- 1070 KNX CA Los Angeles – 7/31 0627 noted with “5 North at Smokey Bear Road...Southern California’s Traffic Leader, KNX 1070 and CBS L.A.-dot-com” mention. This signal was nice to hear; so clear! A poor and steady signal was noted, with no sign of WTSO. (JJR-MI)
- 1560 KNZR CA Bakersfield – 7/28 0612 noted with mentions of “presented by Cal State Credit Union, Parker Aerospace, Keystone Bank, Moni-CAL Bank...” and other businesses. All of these sponsors have California references. Too many coincidences; certainly not WQEW (NYC), KGOW, KKA, etc. LONG fade before losing signal. I had this one listed as “tentative” at first, but after listening to the Web stream, I heard this with the same voice-over talent with the same advertisers. A poor signal was noted. (JJR-MI)
- 1580 KREL CO Colorado Springs – 7/30 0623 noted with “Mike and Mike”, a weather forecast mentioning a high of 74 degrees, followed by a cell phone ad or something with “Radio Colorado” mention. This clears up the ESPN station on 1580 heard a while back I couldn’t figure out. A poor and steady was noted; CKDO nowhere to be found. (JJR-MI)

EDITOR'S NOTES

We've just started another volume; the new DX season is just around the corner! This is also the first EDXR under the new format.

Reports have been circulating around the grapevine that Radio Disney has put all of its stations up for sale, with the sole exception of KDIS 1110 Pasadena, CA. The list of stations for sale include WQEW 1560 New York, WFDF 910 Farmington Hills (Detroit), MI, WDWD 590 Atlanta, GA, KQRS 1440 Golden Valley (Minneapolis/St. Paul), MN, KMKI 620 Plano (Dallas/Fort Worth), TX and my daytime local WSDZ 1260 Belleville, IL (St. Louis, MO). Some of these stations may become Christian stations.

I'm sure many of you in IRCA have heard about the unrest in Ferguson, MO in recent days. I live five miles from the combat zone; I've been monitoring the police and fire department radio traffic over the past ten days as I write this. A number of local radio stations have been simulcasting the coverage from the local TV stations, especially local CBS affiliate KMOV 24 (4) and local Fox affiliate KTVI 43 (2).

73 and good DX from Eric (NØUIH)

DX WORLDWIDE – WEST / TROPICAL BAND DX – Patrick Martin – PO Box 843 – Seaside OR 97138
E-mail: mwdxer@webtv.net all times UTC

Welcome back to our TP reporters!! Deadline 9/1 noon PLT. All times UTC/GMT.

TRANS PACIFIC DX ROUNDUP

- 209 **ALASKA**, Yakataga. 1227 8/18 very weak signal with weather forecast. NW ewe. (DV-WA)
- 358 **ALASKA**, KAW 27, Sitka. 1229 8/18 weather forecast for Alaska weak signal. (DV-WA)
- 394 **ALASKA**, KAK 20, Kodiak. 1232 8/18 weather forecast for Kodiak area with weak signal. (DV-WA)
- 675 **UNID**. Tantalizingly close to audio for quite some time, but all I ever heard were time pips at 1200 8/17. (NP-AB)
- 693 **JAPAN**, JOAB, Tokyo, NHK2. 1242 8/18 very weak with woman in Japanese. Heavy splatter. NW ewe. (DV-WA)
- 702 **AUSTRALIA**, 2BL, Sydney, ABC. Weak but definitely English talk at 1205 8/17. (NP-AB)
- 740 **HAWAII**, KCIK, Kihei. Heard with Immaculate Heart Radio generally all night under KCBS-SF. At times faded up strong enough to tear KCBS up. Listed as 5KW ND. At 0900 EDT 7/31, there was a pause and “KCIK Kihei”. Then back into religious programming. Many mentions of Immaculate Heart Radio. KCBS had faded down by that time near LSR. Thanks to Chuck Hutton for the tip, as he heard it a Rockworks on the OR Coast. New station. (PM-OR)
- 774 **JAPAN**, JOUB, Akita, NHK2. 1238 8/18 very weak signal with woman in Japanese. (DV-WA)
 + Heard for the time this season at 1240 8/18 very poor. (BB-AZ)
- 774 **UNID**. Weak at 1152 8/16, but definitely in English, with man seemingly giving sports commentary of some type, so presumably ABC Melbourne. (NP-AB)
 + Traces of audio with man speaking at 1148 8/17, but too poor to even determine if it was Japan or Australia. (NP-AB)
- 828 **AUSTRALIA**, 3GI, Sale. At 1148 8/17, a similar situation to 774, when it could have been either Japan or Australia, but at 1200 it was definitely Australia, with ABC news theme, and then into the news. At 1206 peak it was the strongest DU of the season thus far. (NP-AB)
- 828 **JAPAN**, JOBB, Osaka, NHK2. 1246 8/18 weak signal with man & woman in Japanese. NW ewe. (DV-WA)
- 891 **UNID**. Traces of audio at 1141 8/12, too weak to determine station. (NP-AB)
 + Horse race commentary at 1159 8/16, so likely TAB Radio from Townsville, though ABC Adelaide could also have racing on a Saturday. (NP-AB)
- 972 **REP KOREA**, HLCA, Dangjin, KBS. With talk by a man at 1146 8/17. (NP-AB)
 + 1248 8/18 very weak buried in splatter. NW ewe. (DV-WA)
- 1053 **JAPAN**, JOAR, Nagoya. 1251 8/18 rising above jammer with man in Japanese. Fair briefly. W-SW ewe. (DV-WA)
- 1053 **REP KOREA**, jammer. 1250 8/18. Jammer atop channels with fair signal. W-SW ewe. (DV-WA)
- 1116 **AUSTRALIA**, 4BC, Brisbane. With talk by Aussie-accented man at 1203 8/16. (NP-AB)
- 1503 **JAPAN**, JOUK, Akita, NHK1. 1308 8/18 weak with man in Japanese. W-SW ewe. (DV-WA)
- 1566 **REP KOREA**, HLAZ, Jeju, FEBC. Heard for the first time this season with audio at 1251 8/15 with talk. (BB-AZ)
 + Woman talking at 1145 8/17. (NP-AB)
 + 1210 8/18 weak with Japanese. Good at 1303. NW ewe. (DV-WA)
 + Heard at 1236 8/18 very poor and just above the noise level. (BB-AZ)
- 1575 **THAILAND**, BanPhachi, VOA. 1215 8/18 fair signal with woman in Asian language. NW ewe. (DV-WA)
- 1629 **UNID**. Traces of instrumental music at 1157 8/12, but with the weak signal and four carriers of similar variable strength ranging from 1628.93 to 1629.04 I couldn't determine which was producing the audio. (NP-AB)
- 1656 **UNID**. Woman speaking in Chinese over an instrumental background at 1152 8/12. Almost certainly Voice of the Australian Chinese in Brisbane. (NP-AB)
- 1701.07 **UNID**. Presumed Radio Brisvaani with south Asian music at 1149 8/12, then heard apparent commercial with woman giving phone number and web address. (NP-AB)

PAN AMERICAN DX ROUNDUP

- 670 **CUBA**. 0601:50 7/25, 2+1 chime time signal just as I have nulled WSCR to check for KHGZ, so Radio Rebelde proves that Cuba is way behind the times in more ways than one. Isn't anyone paying attention to Radio Reloj? (GH-OK)
- 710 **MEXICO**, XEDP, Ciudad Cuauhtémoc, Chih. 0557 7/23, no het but some Spanish in the mix, so XEDP Chihuahua is not off-frequency tonight. (GH-OK)

- + 0558 7/24, Mexican music is dominant signal and off-frequency again making het with KCMO, KGNC or whatever on 710.0. 0602 brief announcement between tunes sounds like "alfa". Not until 0605 is there a full ID from XEDP, claiming 5 kW on AM; and also an FM frequency, street address, "La Ranchera de Cuauhtémoc", and finally 0606 into NA. There is wide variation in timing of their midnight festivities. (GH-OK)
- + 0603 7/25, Mexican NA is playing underneath US station, making only a SAH, not a LAH, so XEDP is not off-frequency tonight. US station mentions an AC 913, something in Overland Park, so it's KCMO. (KGNC Amarillo TX is not really a factor here at night; NRC Pattern Book shows day and night patterns are almost the same favoring SW to S to SE with little signal ENE toward us; yet KGNC is audible on daytime groundwave, with an edge over KCMO, whose day and night figure-8 patterns are slightly clockwise from N/S. KGNC also makes it better into OKC daytimes, contrary to pattern expectations). (GH-OK)
- + 0558 8/2, big het with US stations closer to 710.0, so XEDP Chihuahua is on its off-frequency transmitter tonight. (GH-OK)
- 960 **MÉXICO**, XEK, Nuevo Laredo, Tama. 0501 8/18, another Fox-hole, five minutes of dead air on local KGWA instead of Fox "news". I still check this periodically although not every night, and sometimes there is no hole. With open carrier nulled, I now hear choral Mexican NA, 0503 XEK ID from Nuevo Laredo, still proudly asserting its birth in 1937. A night or two ago the NA did not start until 0504. (GH-OK)
- 1060 **MÉXICO**, XEEP, México, DF. 0223 8/3 Sunday, reel music with fiddle, as long as cheater KIJJN Farwell TX is nulled; presumably part of eclectic music from XEEP; comparing to 6185 XEPPM surprisingly finds them //, although in evenings SW programming is supposed to be distinct and separate. The latest monthly program schedules at <http://www.radioeducacion.edu.mx/carta-programatica-del-mes> are from May! But they show non-specific programming on both at this time, just part of a large light blue blob on MW, a green blob on SW at 2120-2145 CDT Saturdays, so maybe the SW goes in and out of // music fill from MW, in between separate programming? (GH-OK)
- 1570 **MÉXICO**, XERF, Ciudad Acuña, Coah. 1145 7/21, XERF is still playing "Mañanitas" songs at this time every morning, followed by another tune, and at 1150, "Servicio Social – Avisos Personales", mainly missing persons but also missing purses. Lots of people trying to make contact on both sides of la frontera; station phone number announced for input is 877-108-7046. Seems unusual for a 1 to be in 4th place, but maybe not for toll-frees; several phone numbers but not this one are on their contact page <http://www.imer.mx/lapoderosa/contactanos/>. Starting to fade out at 1154, and at times some English US station occupying its null; LSR here was 1130. (GH-OK)

TRANS ATLANTIC DX ROUNDUP

- 1521 **SAUDI ARABIA**. 0333 8/7, het upon KOKC OKC, no doubt the 2-megawatt BSKSA heralding start of season?? Thanks to Brandon Jordan tip from Memphis, who was getting this and many other TA carriers above 1000 kHz during the previous hour, including 1215 UK, which I also detected in a quick check. (GH-OK)

TROPICAL BAND DX ROUNDUP (2300-5060)

- 2850 **DPR KOREA**, KCBS. 1130 7/19. Man in possible Korean. Very poor. (RB-AZ)
- + 1201 8/15, emphatic Korean talk, as the KCBS hi-MW outlet is making it thru very poorly a bit after sunrise here at 1149. (GH-OK)
- 3185 **USA**, TN, WWRB. 1040 8/1. Long lecture by "Brother Stair", "This nation will not be saved". Good with t-storm static. (RB-AZ)
- 3320 **DPR KOREA**, Pyongyang BS. 1130 7/30. Monologue by man in Korean. Fair; mixing with QRN. (RB-AZ)
- 3385 **PAPUA NEW GUINEA**. 1204 8/15, very poor with continuous talk past 1211 by one voice, presumably NBC News, sounds female, can't tell if in English or Tok Pisin, Radio East New Britain, Rabaul. No other PNG carriers audible, maybe already off. (GH-OK)
- 3480 **DPR KOREA**, jammer. 1215 7/22. Man in Korean talking over roar of pres. Good. (RB-AZ)
- 3480 **REP KOREA**, Voice of the People. 1145 7/19. Long talk by woman in Korean. Good. (RB-AZ)
- 3925 **JAPAN**, RN1. 1030 8/1. Traditional geisha house vocal music. Very good. (RB-AZ)
- 3945 **JAPAN**, RN2. 1205 7/25. Jazz piano, saxophone, vocals. Fair to good. (RB-AZ)
- 3985 **DPR KOREA**. 1213 8/15, Korean talk and noise jamming, ie Echo of Hope, from South to North; and 3912 same situation, ie Voice of the People, from South to North, all poor signals; the two JOZes also making it jamming-free on 3945 & 3925. (GH-OK)
- 3985 **REP KOREA**, Echo of Hope. 1130 7/17. Monologue by woman to vocal music. Good over jammer. (RB-AZ)
- 4055 **GUATEMALA**, Radio Verdad. 1115 7/26. Religious lecture by man in English, to hymns sung by female choir. Very good with light QRN from thunderstorms. (RB-AZ)
- 4810 **PERU**. 0149 8/13, trace of audio vs CODAR, and LSB tuning essential vs the uteblob on high side. Usually I can only detect a carrier here. Presumed Radio Logos, OAW9A, Chazuta, 1 kW. (GH-OK)
- 4870 **INDONESIA**. 1200 7/21, JBA carrier on the low side, probably RRI Wamena; 4835 VL8A in better than usual just after WWCR is off 4840. (GH-OK)
- 4965 **BRAZIL**. 0057 7/25, JBA carrier slightly on the high side during my 60m bandscan. Normally don't hear anything around 4965, but fits nicely with Thomas Nilsson's report from Sweden of a definite Radio Alvorada de Parintins, Amazonas, on 4965.01, 2300 7/6, as mentioned on WORLD OF RADIO 1731. Since the only other station anywhere listed in Aoki on 4965 is Radio Santa Mónica, Perú, which has really not been reported in DXLD for "eleven years", it's a good bet this is Radio Alvorada. (GH-OK)
- 5020 **SOLOMON ISLANDS**. Until 1200:21.5* 7/26 carrier-cut, ie SIBC, as reported by Ron Howard now on-frequency, so switched to new transmitter? BFO matches whatever signal is on 6020, China, Vietnam and India all scheduled. (GH-OK)
- + Until 1159:51.5* 8/15 carrier auto-cutoff of SIBC; tuned in just in time after hearing the Micronesia 4755.5 carrier cutoff a minute or two earlier but not looking at my watch to time that one precisely. (GH-OK)
- 5040 **CUBA**, Radio Havana Cuba. 0124 8/5, RHC in Spanish //11760, instead of English during this hour last night. (GH-OK)
- + 0119 8/9, RHC is missing from here, so can't tell whether it would be in wrong language, while 5025 Rebelde is on. (RB-AZ)

THANKS TO THESE REPORTERS

- BB-AZ **BILL BLOCK**, Prescott Valley AZ
Drake R8
- DV-WA **DENNIS VROOM**, Kalama WA
JRC NRD 545, NW + S-SW EWE
- GH-OK **GLENN HAUSER**, Enid OK
Mostly DX-398 with internal antenna only or Sony SRF-59
- NP-AB **NIGEL PIMBLETT**, Dunmore AB
- PM-OR **PAT MARTIN**, Seaside OR
Drake R8, SW EWE
- RB-AZ **RICK BARTON**, El Mirage AZ
Drake R8, Grundig Satellit 750, large random wire, Slinky, passive Wilson antenna

DX WORLDWIDE – EAST – Brandon Jordan – PO Box 338 – Rossville TN 38066
E-mail: bdjorda@gmail.com all times UTC

TRANS-ATLANTIC DX

- 1089 **UNITED KINGDOM** Talksport synchronos, 7 AUG 0252 - English talk by two men, poor. (Jordan-TN)
- 1206 **FRANCE** France Info, Bordeaux- Néac, 7 AUG 0235 - noted with female French speaker, poor. (Jordan-TN)
- 1215 **UNITED KINGDOM** Absolute Radio synchronos, 7 AUG 0242 – pop music during peak, sound efx, poor. (Jordan-TN)
- 1521 **SAUDI ARABIA** BSKSA 1, Doba, 7 AUG 0230 – monologue by male Arabic speaker, poor to fair. (Jordan-TN)

PAN-AMERICAN DX

- 530 **CUBA** Radio Rebelde, Guantanamo, 13 AUG 0400 – dominant with National Anthem, ID, Del Verso a la Mar by Liuba María Hevia. (Jordan-TN)

THANKS TO THIS EDITION'S CONTRIBUTOR

(Jordan-TN) Brandon Jordan, Fayette County, TN (G.C. 35° 6' N / 89 ° 30' W)
Receivers: WinRadio G33DDC 'Excalibur', WinRadio G313e, RFPSACE NetSDR [locked to Thunderbolt GPSDO]
Antennas: Array Solutions SAL-30 Shared Apex Loop, DX Engineering NCC-1 Phaser + 2x ARAV3 Active Verticals

EDITOR'S NOTEBOOK

Many thanks to Eric for allowing me to resume editing the DXWW-East again after a lengthy hiatus! I found a few Trans-Atlantic stations producing audio on Wednesday evening, August 6. Perhaps a sign of a decent upcoming DX season...

73, Brandon

DX FORUM – Richard C Evans – 3908 Grand Oak Ave Apartment 4 – Indianapolis IN 46237

E-mail: REvans5435@yahoo.com

DEADLINES: Saturdays

Deadlines: 8/30 9/11 9/27 10/4 10/11 10/18 10/25 11/1 11/8 11/15 11/22 11/29 12/6 12/13 12/18 12/27 1/3 and more

Tom Jasinski , 330 Dwight Avenue, Joliet, Illinois 60436

Just a heads up for a partial eclipse of the sun on the afternoon of October 23rd, so mark your calendar! The eclipse begins over the Bering Sea and Russia and will be over Alaska around 21:00 UT. The moon's shadow will be above the earth about 400 miles. So the shadow will be right where we want it, up near the ionosphere! Hopefully this will create a near sunset effect for possible DX conditions. Totality will be 40% to 70+% at ground level over most of North America, except the east coast. If you happen to live up in the far north of Canada it will be near 80% totality. Remember the moon's shadow moves from west to east so you may experience some DX from the west before your local sunset! This partial eclipse will end around 23:30 UT or near sunset in the Midwest. See <http://eclipse.gsfc.nasa.gov/solar.html> for more info including a map. And while at that NASA site take a look at August 21, 2017. There will be a total eclipse across the USA from northern Oregon to South Carolina near midday!

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

The countries list in the last DXM looks interesting. I hadn't seen the list in a long time (which doesn't mean it hasn't been published--I just missed it). I'll go thru it in a few days and see how many countries I had back when I was in northwest Indiana so many years ago. I use a different list for my business cards because that one also shows country codes as used in the computer age, hi. My new schedule for this season is shown in part at the front of this column. I hope those at the Midwest gathering in Madison, WI had a good time. Keep hoping that some year I can make it again. I also hope those at the convention in Billings have a great time as well. I find myself sometimes thinking of past conventions I have been at. One memory is of the auctions where guys use call letters for stations frequencies (such as WGN for \$8.20) instead of dollar amounts. Always funny to listen to. I always think of Labor Day weekend as the beginning of a new DX season. Until next time, 73.

IRCA TECHNICAL COLUMN – Nick Hall-Patch – 1538 Amphion St – Victoria BC Canada V8R 4Z6

E-mail: nhp@ieee.org

Some Field Information on the Double-Delta (D-Kaz) Antenna

by Mark Durenberger

DX-ing near N 45 48 56 W 94 34 46

(This supplants an earlier report dated 06.07.14 and replaces speculation with observations and conclusions)

- About the Double-Delta/"D-Kaz" Antenna
- Performance consistency: Real-world observations
- Chasing the measurements for some meaning
- Some recent long-haul loggings
- Pattern-reversal
- The "Broadside D-Kaz Antenna"
- Roll your own D-Kaz: Ideas about deployment

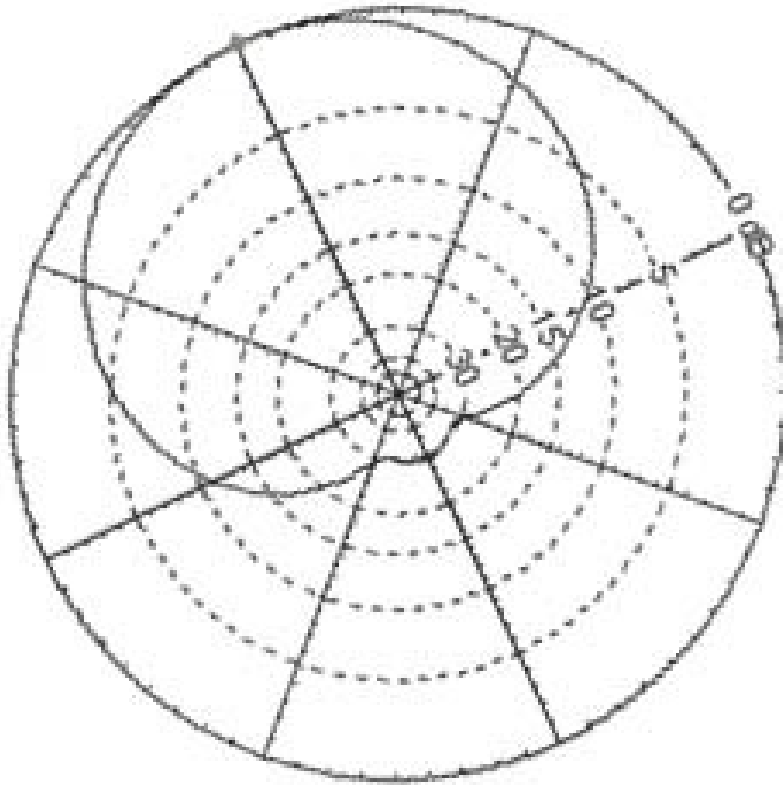
About a year ago we were introduced to the Double-Delta antenna, as modified by the brilliant DX-er Neil Kazaross, to become the "D-Kaz" antenna. Kaz came up with this approach as the result of his newly-acquired passion for EZNEC modeling. ("EZNEC" is pattern-prediction software that allows one to analyze the expected performance of an antenna, based on specific proposed physical parameters.)

DX-ers are having really good luck with the D-Kaz. Our work for the DX Audio Service (DXAS) involves vacuuming large areas for MW signals, adding some control over the direction of the catches. We found the D-Kaz to be exemplary for our specific purposes.

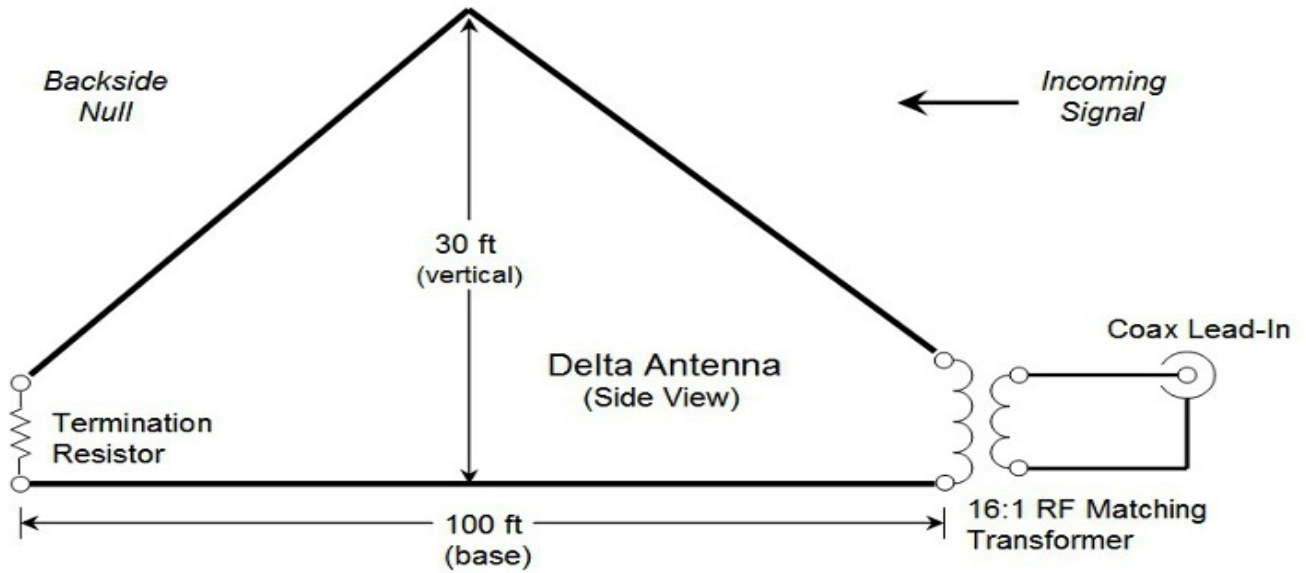
Kaz's models and subsequent real-world observation demonstrate front-to-back nulling can approach and exceed 40 dB across the MW broadcast band. That's awesome. But such deep nulls, it was supposed, required fairly careful antenna adjustment. We wanted to know just how hard it would be to create *reliable* pickup patterns with such good front-to-back ratios.

We carved out a few days in May and June 2014 to measure D-Kaz MW performance under differing conditions. In late June we took what we learned and did some serious MW-band recording with the Perseus SDR. Results were posted on several DX reflectors. Some of these loggings are also seen below.

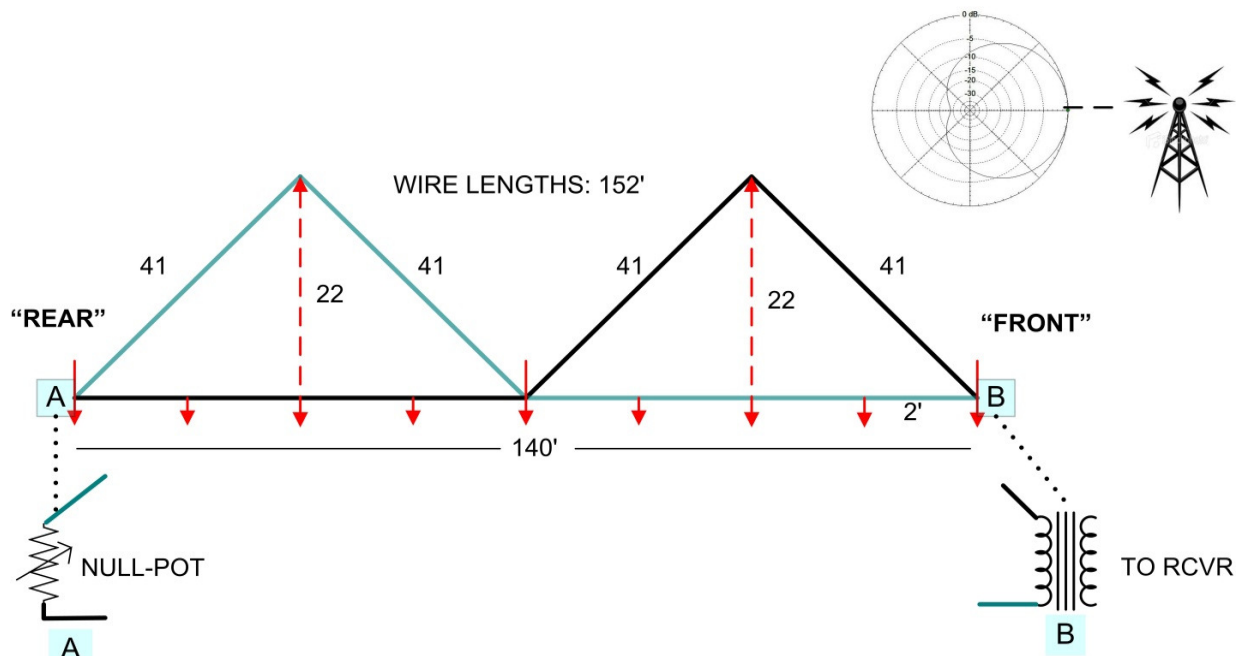
If you're new to the D-Kaz, read on...about a small, *reversible* wire antenna that can deliver this pattern:



To start with a review, here's the basic Delta configuration:



The **D-Kaz antenna** for MW (and well above) is a Double-Delta variant, as seen below. The "self-impedance" of the D-Kaz is around 1000 ohms at corners "A" and "B."



The null-pot at 2000 ohms gives good range. Each of the two D-Kaz wires composes the top two-thirds of a triangle...and then continues as the base of the other Delta. The crossfire phasing causes 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.

Here's an interesting way of contemplating this antenna...from the mind of Jim Snowbarger; a DX-er blind from birth:

"If you lay out a rectangle of wire, short vertical sides, and long horizontal sides, and just pick up the right hand side of the rectangle and flip it over, trading top and bottom ends of the right hand vertical edge, the rectangle is now twisted, and the long horizontal members cross, you can bend the wires as needed, even giving up the 90 degree corners, to form it into this dual triangle shape, where the wire that forms the base of one triangle, extends to become the side of the adjacent triangle..

It was that mental exercise that pointed out to me that these two loops are out of phase. And, they have a certain amount of physical distance. So, there is phase delay due to that (distance) as well. The pot just balances the effects on the receiver of the two loops, to get cancellation."

It's the simplicity of the practical arrangement that's appealing. Cancellation of signals to the "rear" (eliminating half of the usual "Figure 8" pattern) is accomplished by wire routing and furthered by adjusting the null pot opposite the receiver, to compensate for the physical arrangement. (By the way we've put "rear" in quotes since the antenna can be easily reversed by swapping null pot and receiver. Thus, "rear" is an abstraction. The receiver >>"front"<< side is the end facing the desired signals.)

We've said "null" a few times. We should define "null" as used in this document.

NULL is a "minima" and for our work it's: "the amount of signal left after adjustment."

THE "PERFECT FRONT-TO-BACK": Astute viewers have noted the two D-Kaz cancellation variables are a resistor and a lumped impedance (representing the input to the receiver). Our extensive measurements sought to confirm this thought: *That the best operation of the antenna* (the point where one section perfectly balanced the other) *would be approached when the impedance at both ends looked the same, across a MHz or two of Medium-Wave frequencies.*

To get to that optimum point, the null "R" might be formed into a network that mimicked the receiver input impedance... **AND/OR** the receiver impedance might be shaped to look more like the null-pot's resistance. This was going through our head as basic 'Bridge' theory. If you buy this concept, you'll not be surprised that at the end of the day, the truth of the matter is somewhere in the middle. You're dealing with a real-world wire array that has its own lumped impedances, determined by a number of physical factors; some of which you can't control. It's not a perfect antenna.

We know the D-Kaz works...so why drill this deep? Because we're curious. As is, without too much analysis, you can make the D-Kaz do front-to-back ratios exceeding 30 dB. And in our DX world, 30 dB is about as good as infinity...until they repeal sky-wave. We haven't seen our beloved Beverages get to that sort of number very often and, while they may be more directive, Bevs also put side-lobes into the mix. Beverages may be more fun to use...but an elevated Beverage is harder to deploy than a D-Kaz and demands more geography.

D-Kaz ANTENNA SIZE: Experimenters have tried various antenna lengths, up to 180 feet. Kaz correctly predicted that shorter versions cause some degradation in low-end MW performance, while the longer versions didn't produce good front-to-back nulling at the high end of the band. A good compromise length turns out to be **120 to 140 feet**. In these lengths, "it's a darn good antenna" as Nick Hall-Patch might say.

HOW YOU USE THE D-KAZ: Your approach to DX-ing with the D-Kaz might be to adjust for the deepest average null (so you can record the entire band for example). Or you might be chasing signals on specific frequencies...in which case you might want to re-adjust the null for each target channel.

Where do you work the antenna for **best performance**? Ideally, null-pot and receiver are side-by-side. You can stay at the wire...or you can 'extend' the ends to the shack for comfort and for convenience. There are minor performance differences in each approach. In our tests we verified that for tightest performance you'll be working a null-pot connected directly to the wire. (And you'll be recruiting another set of eyeballs because the receiver is at the other end.) Our measurements of this arrangement show there's nothing in the way of excellent nulls except the performance of the receiver-side's step-down transformer. (This 'minimalist' set-up also allowed us to note how environmental conditions such as moisture changes affected performance.)

The **next-best methodology** is to extend the receiver from the receiver-end of the D-Kaz to the null-pot end which you'll do if you want direct observation of nulling action. Our tests addressed this option as well.

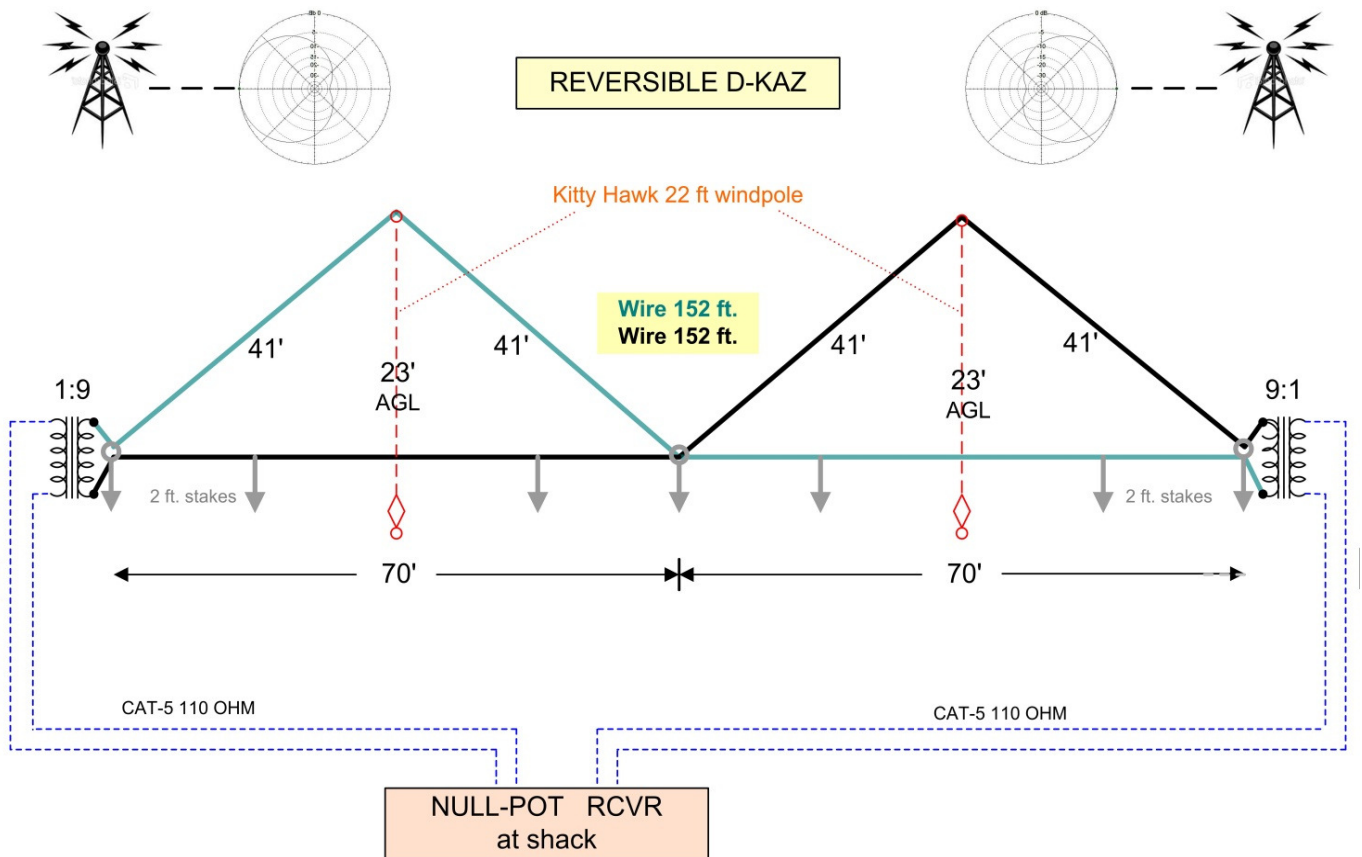
A Sidebar: For convenience and simplicity you may be willing to replace the null-pot with a fixed resistor that represents an average setting of the null-pot. This works best when the rest of your layout is such that, as you sweep the band, a minimal variation in null resistance is required. So in our measurements we sought to learn *how different extension configurations impacted the null resistance across the band*. We also wanted to know how, with a fixed resistor, *changes in where the receiver was located* might affect performance.

A **close third in performance** is realized when you extend **both** ends of the antenna to a 'remote' location. It had been posited by DX-ers that both the null-pot and the signal from the receiver end can be extended for a distance from the antenna, without serious degradation. We looked to verify that.

ANTENNA EXTENSIONS: Intuitively, it might appear that the physical copper-wire extension of the ends of the deltas could upset the balance and make it harder to do good nulling. Theorists may argue that this wire-extension doesn't matter in the RF domain...*as long as whatever cable extension is used is properly matched to the end-point terminations of the antenna.*

Thus, they suggest, a step-down transformer inserted at the antenna ends and matching a balanced transmission line will permit a 'reasonable' amount of such extension. Experimenters are using lamp-cord, twin-lead and Cat-5 for these extensions. It turns out that, with the (1000-ohm) D-Kaz, a 9:1 step-down nicely matches 110-ohm transmission lines such as inexpensive Cat-5. (*Cat-5 cable is well-balanced twisted-pair data cable, and in some applications it outperforms coax and has a lower loss at a lower price.*)

Here's a D-Kaz with such Cat-5 extensions:



In an ideal world the 9:1 transformers present identical impedances to the antenna. Our measurements sought to identify the variables that impact that impedance reflection. The tests included varying lengths of Cat-5 extensions, measurement locations, different transformers and different terminations at the "shack." We learned that identical end transformers wasn't always the best solution :-)

We set up the D-Kaz antenna where we could leave it in place for a few days (it's now been up for over a month and has survived the severe weather we've "enjoyed"). We're fortunate to have an ideal landing site for this antenna, behind our lake home in a remote rural area, away from MW pests and in a region where power is underground. By the whim of geography (the available clearing), our D-Kaz was oriented at 325 degrees True. (*Note the mid-point measurement location in the photo*)



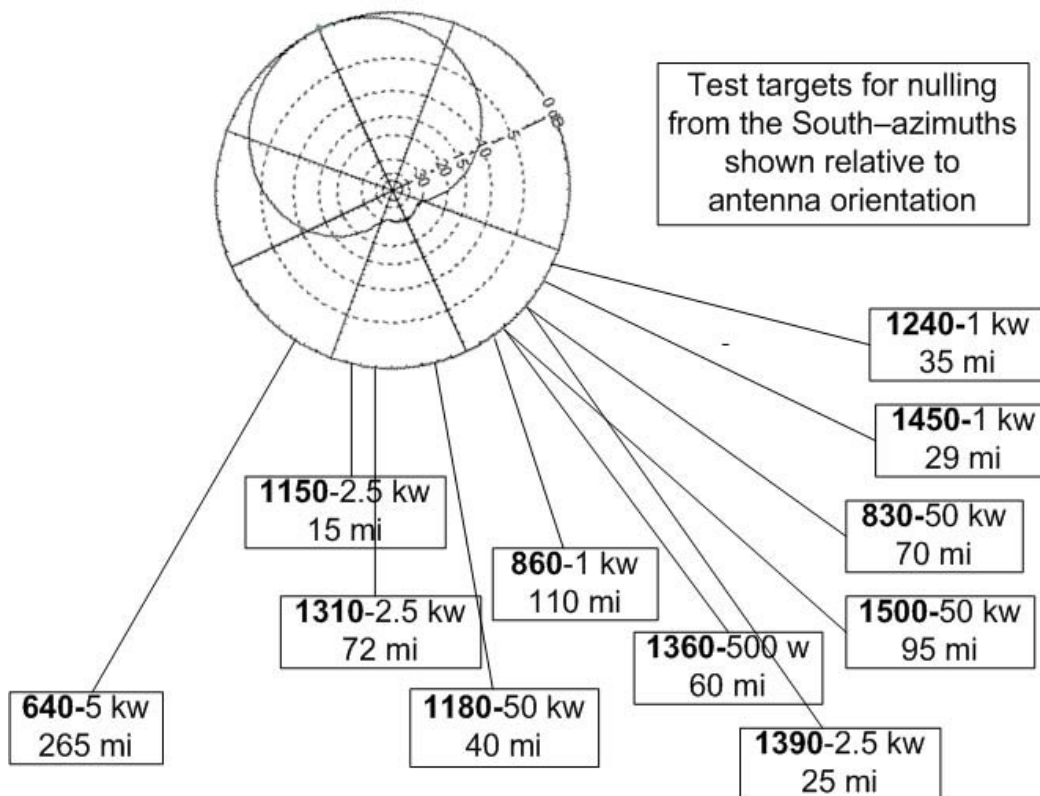
OBJECTIVES: As noted: *i)* We wanted to determine which null-pot and receiver connectivity arrangement delivered the deepest and most-consistent nulls from the "deaf" side of the array. *Could* we arbitrarily extend the "ends" of the antenna? Or should the null-pot and radio be at the antenna? *ii)* We wanted to know whether the null-pot could be pragmatically replaced by a fixed "average" resistor value. Our test segments included logging the null depth on a group of stations on the 'deaf' side of the D-Kaz and recording the value of the null-pot R when we had adjusted for maximum null depth for each frequency. Each test segment used a different connectivity or transformer alternative. While we have all the data on paper, it's dozens of pages of scribbling and isn't useful in this report. The conclusions however are included below.

CONDITIONS: Weather was sunny and dry for all test days and for recording dates (late May and June). Null measurements were made mid-day, taken from the signal-level display of our Perseus SDR. The subsequent full-band recordings/loggings were 10:55 PM to midnight, or 4:55 AM to 6 AM (CDT) in the third week of June. QRN was extremely low for June and QRM was at the noise floor of the Perseus.

Since the D-Kaz is inherently low-output, a DX Engineering RPA-1 (15 dB gain) was used in front of the Perseus SDR, and the SDR was operated with 0 dB or 10 dB of attenuation.

To cut the number of measurement variables in half, we first did a run at both 120-foot and 140-foot antennas, comparing nulls and signal levels. We placed a null-pot on the "dead" end and extended the SDR to that end via CAT5 lead-in. After a few hours of comparisons, we determined that for our situation the 140-foot version was the better compromise, and from that point on, we used only the 140-foot D-Kaz.

While we made measurements in both north-facing and south-facing directions, the preponderance of reliable ground-wave signals that might be null candidates came from south of us. Thus most of our data was gathered from a **north-facing** set-up and the measured nulls were all taken from stations to the south. Here are the stations, with their locations crudely plotted against the EZNEC predicted pickup pattern for the D-Kaz:



Measurements were made by: 1) Noting signal strength in dBm with the null end of the antenna 'open' ("MAX" below); then: 2) Connecting the null-pot and adjusting for best null ("MIN"); and: 3) logging the resistive value of the null-pot setting ("R") for that null. Here's the prototype datasheet for our test logging:

SAMPLE TEST DATA				
FREQ	MAX	MIN	NULL	R
640	-86	-104	18db	133
830	-65	-92	27db	124
1310	-67	-88	21db	138
1450	-66	-87	21db	130
1500	-74	-98	24db	126

Null-pot and receiver were tried: A) at the antenna's null-pot end and: B) at the mid-point (seen in the photo).

A) **AT THE NULL-POT END** (South): We quickly confirmed the ability to obtain deep nulls with the null-pot directly connected to the antenna and with the receiver extended to the null-pot end via a Cat-5 run of about 160 feet (the extra length is so you can run this return on the ground and well away from the antenna).

As variances of the Null-pot-end arrangement we tried different transformers on the receive end and tried locating the RF amplifier at the receive end ahead of the Cat-5 extension. The transformers caused differences but overall *the best individual-frequency nulls were obtained with the potentiometer connected to the wire.*

From our resistance measurements of those null-pot settings we concluded that a fixed resistor will work fine for overall wide-band recording, but you do sacrifice getting the very deepest nulls on some channels. This may be a valid trade-off: giving up deepest nulls in exchange for simplicity. On the other hand, some connection arrangements indicated that this null-pot didn't have to be moved very much as we swept the band, so maybe the fixed resistor wouldn't be such a bad

thing...if it's the right value! We suggest that whenever setting up in a new location this sweep be included in the set-up and various-value resistors be available because the physical environment does have *some* influence on the average null-resistor value.

B) **“REMOTE” MEASUREMENTS--THE MID-POINT:** Our bias was to *prove that a properly-extended null-pot and receiver would work well* and we gravitated toward measurements near the mid-point of the antenna. At mid-point, we first varied the relative lengths of the Cat-5 extensions and concluded that best performance was realized **when the Cat-5 extensions were of identical length.**

We also think that a pragmatic limit to Cat-5 extension is perhaps 300 feet. In our observations, longer runs tended to ‘broaden’ the remote nulling and the nulls weren’t as deep. We’d like to know of experimenters who are able to null more than 40 dB across the band with Cat-5 runs of much more than about 300 feet.

TRANSFORMERS: As an overall comment, with some transformers, this “remoting” meant the nulls weren’t quite as deep...but they were usually more uniform in depth. It was almost as though the Cat-5 extensions were “damping” the variations we had seen on individual frequencies when we were at the end of the wire.

We said earlier we thought about the need for identical impedances at both ends of the D-Kaz. We did a series of measurements using a Mini-Circuits T9-1 <http://www.minicircuits.com/pdfs/T9-1.pdf>, a home-brew toroid (21/7 turns on 82-75 material), and the KB-5 transformer by Bruce Clark: http://www.qsl.net/k1fz/flag_antenna_transformers.html

(The KB-5 however is an 18:1 device meant to see a 50-ohm radio. This required a follow-on Mini-Circuits T1-2, to match the Cat-5. (This 1:2 transformer *might* have slightly degraded the performance of the KB-5.)

Each transformer performed the best under different configurations. For example, *with the receiver extended to the null end and the null-pot on the wire*, as above, the toroid did best and the null-pot took some stations all the way into the noise. (One of the local pests presents a signal of about -40 dBm, and the noise floor was below -115 dBm.) However, the toroid seemed more frequency-sensitive and we eliminated it because the KB-5/T1-2 and the T9-1 delivered better performance under most variations of transmission-line configuration.

After a couple of days of this and a lot of talking to ourselves, we were making progress. *Measuring at the mid-point with equal Cat-5 lengths we could now more nearly replicate the null depths of the pot connected directly to the antenna, and the nulls were more uniform across the band.* Now we challenged the KB-5 and the T9-1 to a shoot-out...and the T9-1 seemed to be slightly better for this configuration. (We will bet that if we asked Bruce to build a “KB-6” 9:1 transformer with balanced output, we’d probably find that to be better.)

When we finished measurements we felt we had a pretty good idea of what worked best (at least under our conditions). We then proceeded to do some recording with the Perseus SDR. As you’ll see below, these *early-morning and late-night* recordings provided some really good DX-ing...normally reserved for the DX season.

AMPLIFIER LOCATION: When the amplifier was placed at the antenna rather than next to the receiver, performance on the low end of the band was slightly better, but nulls were not affected.

THE RECORDING ARRANGEMENT: We settled on the mid-point location for our recordings. Rather than go for the deepest null on a specific frequency, we set up the Perseus SDR to display the band; we flagged the signals south of us with markers; then we rotated the null pot back and forth...watching as those signals *as a group* were minimized. This was done mid-day; checked again a couple of hours later; then left alone. (You don’t want to try nulling on sky-wave at night; too variable).

A quick wrap-up and we’ll get to further D-Kaz applications: **I)** You can opt for a fixed-resistor and a Cat-5 receiver extension and do well. **II)** You’ll do better if you remote both null-pot and receiver, and can tune for good average nulls across the band. **III)** You’ll do best when chasing specific targets if you place the null-pot directly on the antenna. **We suggest receiver and null-pot at midpoint (though well away from the antenna; maybe in the shack). Equal lengths of balanced transmission-line from the ends. 10-20 dB RF amplification. And we think 140 feet is the right length.**

SIDEBAR: One thing that was predictable (even early on) was that, as expected, the 140-foot D-Kaz was somewhat better on the low end of the MW band than the 120-foot version. What *wasn’t* anticipated was that null depth average and null-pot resistance values were also a bit smoother with the longer antenna.

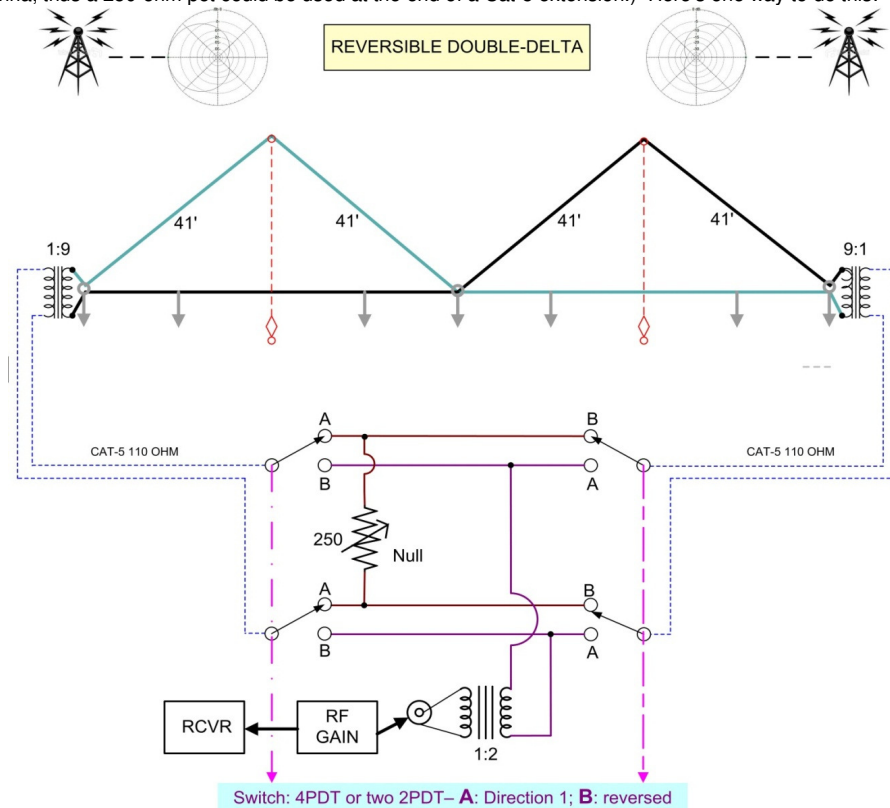
Finally...the quick and dirty way to deploy a D-Kaz has been to tie the wires off to the (dry) end stakes. We now added insulators on the wire ends...and gained a couple more dB in performance. Yes, we know, ***insulators are just basic Good Engineering Practice*** <g>

THE PUDDING: Here’s the “Proof” in a composite logging of late-night/early-morning recordings. For brevity we are showing only those captures more than 200 miles or so from our QTH:

540	CBK	REGINA SK CA	790	CFCW	CAMROSE AB CA
560	KMON	GREAT FALLS MT	790	KGHL	BILLINGS MT
580	KIDO	NAMPA ID	800	CHAB	MOOSE JAW SK CA
590	KQNT	SPOKANE WA	810	KBHB	STURGIS SD
600	CJWW	SASKATOON SK CA	820	CHAM	HAMILTON ON CA
620	CKRM	REGINA SK CA	840	KTIC	WEST POINT NE
630	CFCO	CHATHAM ON CA	860	CBKF2	SASKATOON SK CA
650	CKOM	SASKATOON SK CA	880	CKLQ	BRANDON MB CA
650	KGAB	ORCHARD VALLEY WY	900	CKBI	PRINCE ALBERT SK CA
680	CJOB	WINNIPEG MB CA	910	KCJB	MINOT ND
690	CBKF1	GRAVELBOURG SK CA	910	KJJQ	VOLGA SD
710	KNUS	DENVER CO	920	CFRY	PORTAGE LA PRAIRIE MB CA
730	CKDM	DAUPHIN MB CA	940	CJGX	YORKTON SK CA
740	CFZM	TORONTO ON CA	950	CFAM	ALTONA MB CA
750	KHWG	FALLON NV	960	CFAC	CALGARY AB CA
750	CKJH	MELFORT SK CA	980	CJME	REGINA SK CA
770	KATL	MILES CITY MT	990	CBW	WINNIPEG MB CA

790	KGHL	BILLINGS MT	1000	KOMO	SEATTLE WA
1010	CBR	CALGARY AB CA	1320	KHRT	MINOT ND
1030	KTWO	CASPER WY	1330	CJYM	ROSETOWN SK CA
1050	KMTA	MILES CITY MT	1340	KXPO	GRAFTON ND
1050	CJNB	N. BATTLEFORD SK CA	1350	KRLC	LEWISTON ID
1060	CKMX	CALGARY AB CA	1360	KHNC	JOHNSTOWN CO
1060	KGFX	PIERRE SD	1380	KRKO	EVERETT WA
1080	KNDK	LANGDON ND	1390	KRRZ	MINOT ND
1090	KTGO	TIOGA ND (<i>Tough</i>)	1430	KLO	OGDEN UT
1130	CKWX	VANCOUVER BC CA	1440	KMED	MEDFORD OR
1130	KBMR	BISMARCK ND	1450	KZZJ	RUGBY ND (<i>I-D diff?</i>)
1190	CFSL	WEYBURN SK CA	1470	KHND	HARVEY ND
1210	KHAT	LARAMIE WY	1490	KWOK	HOQUIAM WA
1210	CFYM	KINDERSLEY SK CA	1490	KOVC	VALLEY CITY ND
1220	CJRB	BOISSEVAIN MB CA	1510	KCKK	LITTLETON CO
1230	KGHS	INTERNAT'L FALLS MN	1520	KXXA	EVERETT WA
1250	CHSM	STEINBACH MB CA	1550	KRPI	FRENDALE WA
1270	KLXX	BISMARCK ND	1600	KDAK	CARRINGTON ND
1290	KOWB	LARAMIE WY	1600s: a yawner, except:		
1290	CFRW	WINNIPEG MB CA	1670	KNRO	REDDING CA

PATTERN-REVERSAL: A significant appeal of this antenna is its reversibility. This is done by electrically swapping receiver and null-pot ends. As noted, the 9:1 step-down at the ends of the antenna meant the native antenna impedance of 1000 ohms was taken to just over 100 ohms. With this step-down into a balanced 110-ohm transmission line, the null pot at the extended end would need to be about 1/9 of that used directly at the antenna. (A 2K pot provides good range when connected directly to the antenna; thus a 250-ohm pot could be used at the end of a Cat-5 extension.) Here's one way to do this:



These 'termination functions' were combined in a mini-box we unimaginatively call a "Reverse/Null-box." Here's the unit, along with other transformers (and the null-pot used to directly connect to the antenna):



Note on the Reverse/null-box there's a "vernier" screw-driver-adjust pot for deepest null. The RF amplifier is connected to one of the BNC outputs on the bottom (the two BNC jacks are labeled "main" and "friends"). The two Cat-5 extensions are connected to the top of the null/reverse box.

Pattern-reversal is as easy as flipping the switch. Here are two logs showing how well this works (due in part to the comparatively sparse radio-station population within a few hundred miles.) These lists show the "co's" when an antenna flip is made and the so-called "hot" side of the antenna is actually looking for signals from the opposite direction...and *no touching of the null-pot!*

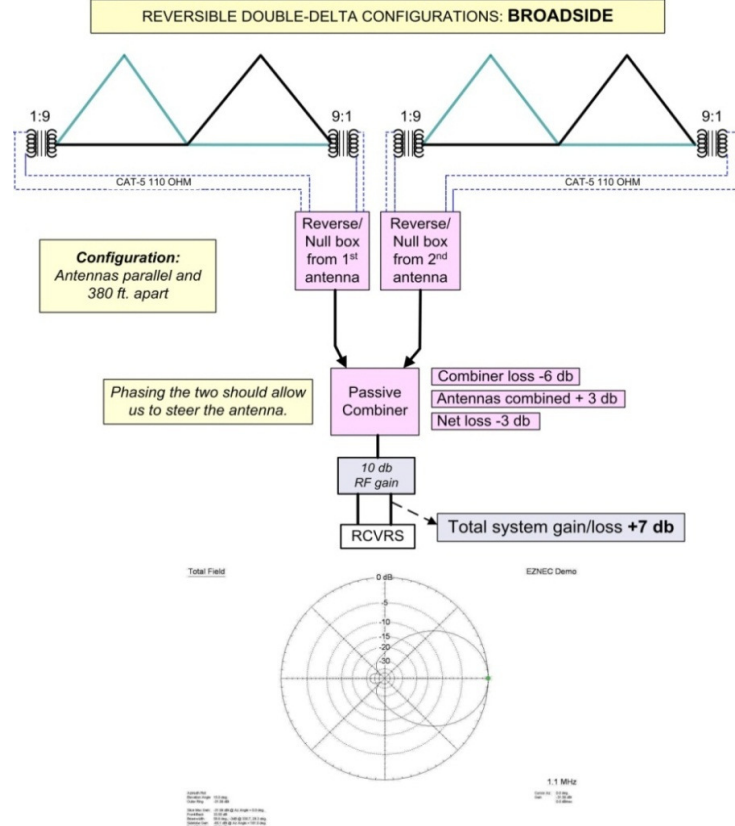
Stations heard on opposite sides of D-Kaz 140-ft. antenna (KB-5s on ends)

Grid Square EN25 Copy at 4PM, 7PM, 9PM CDT 061714

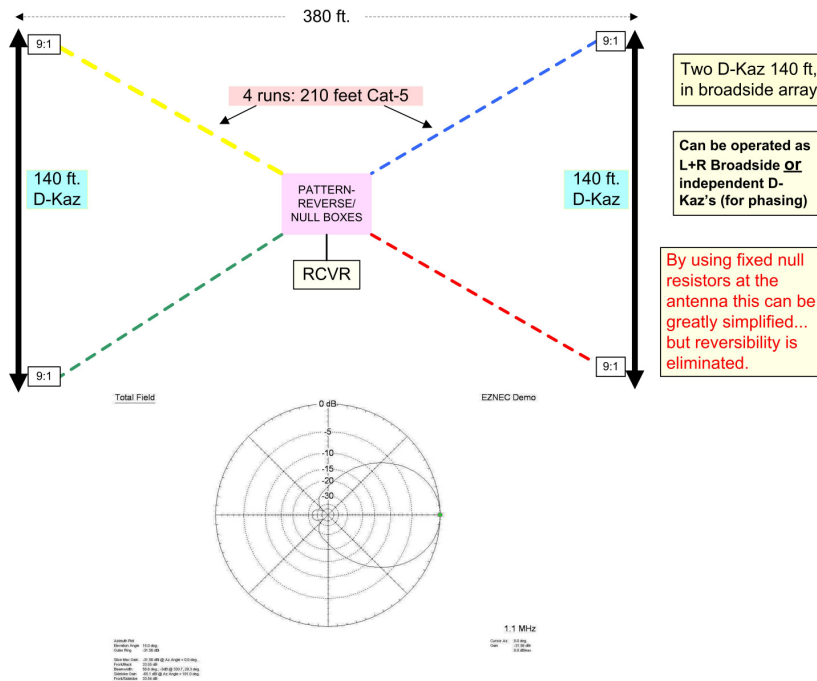
		"North" (330 deg)		"South" (150 deg)
600	KSJB	Jamestown ND	WMT	Cedar Rapids IA
620	CKCK	Regina, SK, CA	KMNS	Sioux City IA
680	CJOB	Winnipeg, MB, CA	KFEQ	St. Joseph MO
740	KVOX	Fargo ND	WDGY	Hudson WI
790	KFGO	Fargo ND	WAYY	Eau Claire, WI
810	KBHB	Sturgis SD	WHB	Kansas City MO
860	CBKF2	Saskatoon, SK, CA--NO ID	KNUJ	New Ulm MN
880	CHQT	Edmonton, AB, CA--NO ID	WMEQ	Menominee WI
890	KQLX	Lisbon, ND	WLS	Chicago IL
910	KCJB	Minot ND	WHSM	Hayward WI
950	KWAT	Watertown ND	KTNF	St Louis Park MN
970	WDAY	Fargo ND	KQAQ	Austin MN
980	KDSJ	Deadwood SD (poor copy)	KKMS	Richfield MN
990	CBW	Winnipeg, MB, CA	KAYL	Storm Lake IA
1080	KNDK	Langdon ND	KYMN	Northfield MN
1130	KBMR	Bismarck ND	KTCN	Minneapolis MN
1170	CKGY	Alberta, SK, CA	KRUE	Waseca MN

1220	KDDR	Oakes ND	KLBB	Stillwater MN
1230	KTRF	Thief River Falls MN	KMRS	Morris MN
1280	KVXR	Moorhead MN	WWTC	Minneapolis MN
1300	KPMI	Bemidji MN	WQPM	Princeton MN
1310	KNOX	Grand Forks ND	KGLB	Glencoe MN
1340	KVBR	Brainerd MN	KWLM	Willmar MN
1350	KDIO	Ortonville MN	KCHK	New Prague MN
1360	KKBJ	Bemidji MN	KRWC	Buffalo MN
1370	KWTL	Grand Forks ND	KSUM	Fairmont MN
1450	KBMW	Breckenridge MN	KNSI	St. Cloud MN
1470	KHND	Harvey ND	KMNQ	Shakopee MN
1480	KKCQ	Fosston MN	KAUS	Austin MN
1520	KMSR	Mayville ND	KOLM	Rochester MN
1660	KQWB	Fargo ND	KUDL	Kansas City KS

THE BROADSIDE D-KAZ: This variation has great promise. Adding a parallel element narrows the beam-width of the array. The resultant pickup pattern begins to challenge the Beverage antenna. The electric set-up for the broadside might be similar to this (*the antennas are side-by-side, not inline as perceived here*):



Here's the physical layout for a Broadside D-Kaz. Two identical antennas can be combined or operated independently:



DEPLOYMENT OF THE D-KAZ; SOME IDEAS LEARNED THROUGH PRACTICE

You can set up one of these antennas in a half-hour or so if you've prepped the components. Here are the parts for a system with a 'shack-located" observation point. (Before we close, we'll suggest a step-by-step deployment procedure.)

Have on hand:

- Two 9:1 step-down transformers:** See discussion.
- Two identical lengths Cat-5, lamp-cord, twin-lead extension cables.**
- One 2:1 step-down transformer.**
- One 250-ohm pot.**
- RF amplification of 10 to 15 dB.**
- Four insulators for the wire-ends.**

Two support poles. Kaz's find of a 22-foot "fish-pole" is great:

<http://store.kittyhawk.com/22-Foot-Heavy-Duty-Telescoping-Windsock-Pole-P1432.aspx>

Supports for these poles: Two 2-foot galvanized pipes. Kaz says: "I use 1" ID pipes. 1" ID pipe has an OD of about 1.31" and the masts slide over that very nicely for a good fit."

Two pre-cut lengths of insulated stranded wire: #18 or larger; not critical. If you're building a 140-foot D-Kaz, the wires can be cut to 155 feet each; that'll give you a bit extra.

Wire-support stakes. Home Depot sells these in 12-pack bundles; 3-ft, pre-cut with points. Drill a couple of holes near the top. Use them as end-posts and as wire supports.

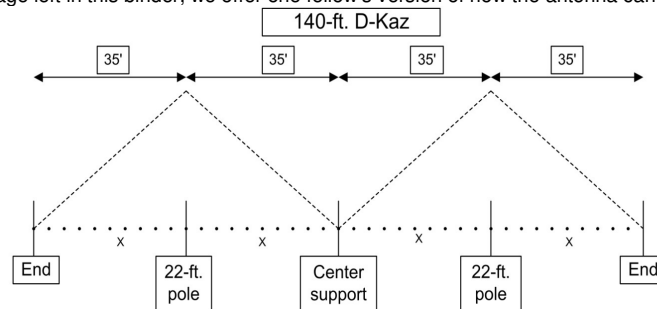


Alternatively (and easier to use) are plastic electric-fence posts; available from farm supply stores. You can use either wood or plastic stakes as the **center-support** where the two deltas cross...but we do something a little different. Here's our center-support pole. This is where each of the delta-triangle wires is landed and extended as the base of the adjacent delta:



We drop a short, small-diameter pole into the ground and slide a 1-1/4" PVC pipe over it, with holes drilled at the 2-foot level for the wire-crossings. The PVC can 'ride' up and down, and by its weight puts a soft tension on the wires so the deltas keep their shape. We used a four-foot PVC for enough weight to put a small amount of tension on the wires; note our PVC is lifted slightly above ground, indicating that tension.

PHIELD PHOLLIES OR SIMPLE CONSTRUCTION? And that leaves one item: how to build the antenna. No doubt you've mentally constructed this array (if not actually built one). Since we have one page left in this binder, we offer one fellow's version of how the antenna can be deployed.



1. Spot the center post location; pull out a tape measure in each direction along the azimuth you want, marking the 35 foot and 70 foot spots. Drive in the center stake/support first.
2. Drive in the two end supports, in line with the center. The insulators go on the end posts.
3. Place the intermediate wire supports about where the "X"s are.
4. Drive in the pipes that will hold the support poles. Pull out the *top section only* and lay the 22-ft. poles on the ground at their locations.
5. Now tie one of the wires to an end support, thread the other end through the close-by 22-ft. support pole, then through the center support and through the X supports to the other end.
6. Reverse the procedure, starting the second wire on the opposite end, through its nearby 22-ft. support pole, through the center support and the X supports to the other end.
7. Carefully open the 22-ft. support poles to their full height; they should be lifting their wire as you do. Insert the support poles onto their pipes.
8. Now you can go to the ends, gently pulling each wire tight until the deltas take shape. Then tie off those wires to the end stakes. If you're using our center-support idea, proper tension is when you observe the PVC rising slightly as you pull on the wires.
9. Connect your equipment. That's it! You should be able to do this in less than a half-hour.

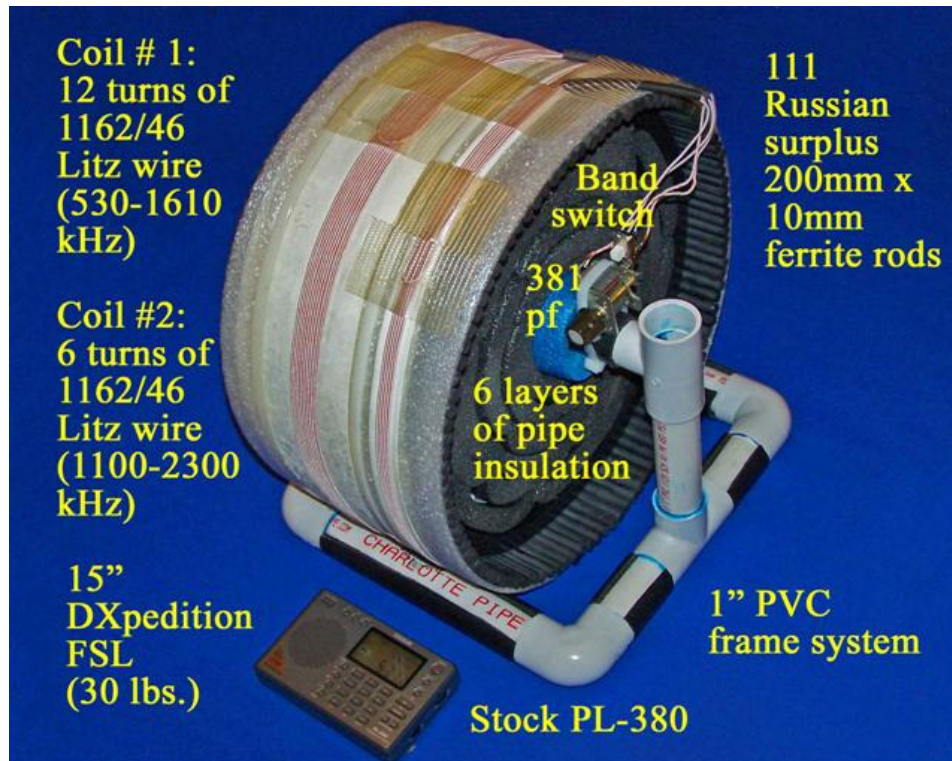
ULTRALIGHT NEWS – Phil Bytheway – 9705 Mary NW – Seattle WA 98117-2334
E-mail: phil_tekno@yahoo.com

July 2014 Rockwork 4 Ocean Cliff DU-DXpedition
Exceptional New Zealand Propagation for Both Perseus-SDR and Ultralight DXing
 By Gary DeBock, Puyallup, WA, USA August 2014



Introduction: A wacky idea dreamed up three years ago sounded like something straight out of a science fiction novel – that an ocean cliff’s flat shape should be able to boost up transoceanic DX signals in a major way. The theory was based upon the dramatic signal boost that a DXer observes when going uphill and listening to a weak DX station’s signal on a car radio (while going away from the station.) Of course, nobody had ever driven up an ocean side cliff vertically to observe this phenomenon with transoceanic DX signals, and a car radio’s meager antenna wasn’t up to the job of tracking down exotic DX anyway. As a matter of fact none of the conventional DXpedition antennas could possibly fit at these extremely narrow ocean cliff sites – so the sites had all been written off by serious Transoceanic AM-DXers for decades.

In February of 2011 an antenna breakthrough started to change all of this, although nobody knew it at the time. The UK’s Graham Maynard introduced a strange-looking antenna based upon a cylindrical collection of ferrite rods wrapped by a single coil, with a tuning capacitor. Those of us in the Ultralight radio community were always eager to try out new antenna concepts, especially one which held the potential of dramatically boosting the DXing capability of our pocket radios. As such, three major experimenters began all-out testing to develop and refine high gain FSL (ferrite sleeve loop, a.k.a. financial sinkhole loop) antennas, while Graham was left with the unenviable task of defending his new antenna against the skeptics. All three major experimenters quickly discovered that this new antenna was a very serious DXing performer, although the high cost of constructing the most sensitive models made it necessary to choose design priorities. For me, the antenna’s unique capability of providing extremely high gain, low noise reception from an extremely compact size was its breakthrough advantage – and since I was primarily a Transoceanic DXer, I dreamed of constructing high gain DXpedition models that could be set up almost anywhere along the Pacific coast – including the narrowest of the ocean cliff sites!



Fast Forward to 2014: The FSL antenna is still a specialty item because of its relatively high construction cost, but over the past three years its transoceanic DXing effectiveness at narrow ocean cliff sites has inspired local Perseus-SDR DXers to give ocean cliff propagation a try. Since traditional broadband DXpedition antennas cannot possibly fit at these narrow Highway 101 turnoffs there has been intense interest in developing a broadband version of the FSL, as well as miniature versions of directional broadband loops such as the Flag, Dave’s Tent-Pole Loop and Mark’s Micro-SuperLoop. Because the standard FSL is a high-Q tuned antenna (with a single optimized frequency,) its current function is incompatible with the spectrum capture capability of popular Transoceanic DXing receivers such as the Perseus-SDR – but that has not stopped us from trying creative approaches like replacing the tuning capacitor with a Wellbrook FLG100LN-2 amplifier in an attempt to broadband the antenna. Although both the author and the local Perseus-SDR DXers have great interest in somehow adapting its

capabilities to boost the DXing effectiveness of the spectrum capture receivers, the FSL antenna's transoceanic DXing prowess with the humble PL-380 would once again be demonstrated during this July 2014 DXpedition – and by fortunate coincidence, the ocean cliff's potent propagation boost to a modest 15' x 15' Flag antenna would also be demonstrated by noted Perseus-SDR DXpeditioner Chuck Hutton, who joined me at Rockwork 4 for two of the best days of New Zealand propagation.



Cultivating a Gain Monster: Three years of FSL design refinements have made it a relatively simple matter to boost the innovative antenna's sensitivity – so long as the experimenter isn't particularly intimidated by high cost, or heavy weight ☺. The new July 2014 15" DXpedition FSL pushed the limits in both areas, with construction materials running over \$900, and a finished weight of 30.5 lbs (about 14 kg.) Included was a new dual-coil design to boost high AM band sensitivity, new higher-sensitivity 1162/46 Litz wire, a larger (15") coil diameter and 111 Russian surplus ferrite rods (obtained from Ukrainian eBay sellers, who must now be enjoying early retirement.) Although the primary challenge in constructing this monster was keeping the scandalous purchasing receipts far away from my wife, I knew that unless I was willing to drag this 30-pound beast around dark ocean cliff venues prior to sunrise all the investment would be wasted – so I found myself in the ridiculous position of taking up serious weightlifting at age 61.



7.5" Loopstick Tecsun PL-380: As a co-founder of the Ultralight Radio Yahoo group I have been captivated by the thrill of live DXing for many years, and would once again be using a modified PL-380 for my DXpedition loggings – boosted by the new 15" FSLs inductive coupling gain. Although this \$50 radio's DSP filtering and audio fidelity are not in the same league as that of the Perseus-SDR, it is reasonably competitive in transoceanic DXing capability when assisted by the 15" FSLs "turbo boost." As a matter of fact this unusual combo would end up tracking down some New Zealand signals of exceptional strength and variety, providing some of the most thrilling experiences possible for a live DXer with a modified \$50 radio.

The general DXing routine every morning would be to keep track of several South Pacific target stations with an ICF-2010 SSB spotting receiver, checking their carrier strengths repeatedly for exceptional signals (and possible MP3 recordings.) Once a suitable DU target station was found the 15" FSL antenna would be tuned to match the frequency of the ICF-2010 (a very simple process even in the dark, because of the ICF-2010's multiple LED signal strength display.) Finally, the PL-380 would also be tuned to the DU target station frequency – and brought within the FSL antenna's inductive coupling range for a tremendous signal boost.



Welcome to Rockwork 4: The ocean cliff venue for this DXpedition was a narrow Highway 101 turnoff on the side of Neahkanie Mountain, located about 15 miles south of Cannon Beach, Oregon in Tillamook County (see photo.) Since both Chuck and I had previously visited this cliff site on numerous occasions we had a fairly good idea of what to expect in the month of July – noisy traffic, fickle weather and a bizarre propagation preference for New Zealand signals. As far as a cliff-provided transoceanic signal boost, this particular Highway 101 turnoff has the most impressive drop off of all the Rockwork sites – 400 feet (122m) straight down to the Pacific Ocean below. My own plan was to set up the PL-380 + FSL antenna combo each morning from July 13-19, while Chuck planned to set up his Perseus-SDR + 15' x 15' Flag combo on July 16th and 17th. We worked out a "separate but equal" DXpedition plan where Chuck would set up at the "wide" spot of

the Rockwork 4 turnoff to accommodate his 15' x 15' Flag antenna, while my Ultralight radio + FSL antenna combo would be set up 100 feet to the southeast. Neither antenna was designed to be a gain champion at sea level, but the ocean cliff's awesome propagation boost was about to give both of us an unforgettable experience – recorded on both live DXing MP3's and Perseus-SDR .wav files.



The DXpedition Starts Off With a Bang: For some unknown reason Murphy's Law seemed to take an extended vacation during this entire trip, despite the Cliff's wild reputation. As such, there were no equipment breakdowns, accidents or major mistakes during 7 mornings of all-out DXing. The first morning (July 13th) was a preview of what I could expect for most of the week – extremely twisted propagation which boosted New Zealand stations up to freakish levels while shutting down Australian stations completely. 531-PI and the relatively obscure 702-Radio Live both managed S9+ signals for several minutes each, while 603-R.Waatea and 1503-Radio Sport did the same thing briefly. About 15 other Kiwi stations managed audio at some time during the wild morning, with 738-Tahiti the only station outside of New Zealand to show up from the South Pacific. Mistakenly thinking that this bizarre propagation was a one-time-only deal, I used some serious time chasing obscure Kiwis on 558, 576, 585, 936 and other frequencies. The Kiwi propagation was indeed excellent on that first day, but it was about to be surpassed by even more freakish conditions on July 16th and 17th (the days of Chuck's Perseus-SDR DXpedition.)

The second day (July 14th) was slightly more balanced, with the really obscure Kiwis going back down into the noise. That morning featured a highly unusual appearance from the NHK1 big gun 594-JOAK (the first Asian to show up at this cliff during three summer DXpeditions) and an exceptional signal from the Australian big gun 891-5AN. Other than these the usual Maori language 2.5 kW overachiever 765-Radio Kahungunu had an exceptional signal, as well as the usual blowtorch 738-Tahiti.

On the third day the propagation again shifted back to favor New Zealand in a major way, and the very obscure 585-Radio Ngati Porou was just strong enough to match its programming with the 603-R.Waatea parallel signal. To my knowledge, on the west coast this ultra-weak Kiwi has only been heard at this Rockwork 4 cliff (for the first time in 2012,) and only during exceptional conditions. Another obscure Kiwi started managing some audio on that morning – the 1 kW station 936-Chinese Voice. Unfortunately its signal just didn't have enough steam to make a decent MP3, but it certainly went to the top of the "Watch List." Finally, I was beginning to hear another weak station with something religious on 576, which couldn't possibly be the ABC big gun 2RN. This 2.5 kW station was another of the very obscure Kiwis which seemed to have waited for this DXpedition to show up, but the ocean cliff propagation still wasn't potent enough to record a good MP3. The situation was about to change, though – Chuck was due to arrive at Rockwork 4 the following morning – and the Kiwi propagation was about to hit a legendary level.



Chuck Hutton Arrives at Rockwork 4: As I drove up to the ocean cliff site in total darkness at 1105 UTC (0405 local time) on July 16th I noticed that Chuck had already set up his cleverly designed 15' x 15' Flag antenna on the north side of the turnoff (see photo,) and was presumably checking the band for DU signals. The Flag antenna was set up with two vertical poles supported by concrete bases, and included a pot control for F/B adjustment. The antenna's concrete base design gave it some protection against violent cliff weather, and it seemed fairly easy to set up (although maybe not quite as easy as the FSLs 2 minute routine.)

After some brief conversation with Chuck I set up the FSL on its PVC base at the south side of the turnoff and began checking Kiwi signals in the total darkness. To my amazement 531-PI had already hit an S9+ level in the total darkness as early as 1114, and was holding steady at that level – something that I had never experienced in any of these DXpeditions. As Chuck and I begin to check other frequencies it became obvious to both of us that we had stumbled onto some phenomenal New Zealand propagation, with Chuck's Perseus-SDR recording all the details. With my PL-380 Ultralight + 15" FSL combo I went after the really obscure Kiwi stations on 576 and 936, and was surprised to receive fairly decent audio from both of them. In fact every New Zealand frequency that I checked had some audio, leading to a wild live-DXing search of every obscure Kiwi that I could think of. In the meantime Chuck's Perseus-SDR was making out like a bandit, recording more New Zealand stations during this one session at Rockwork 4 than he had ever experienced in any previous DXpedition session. After sunrise enhancement finished up we shared some notes on our amazing Kiwi session, and both agreed that we had hit the jackpot.

It seemed highly unlikely that such legendary propagation would be repeated for a second day, but if anything the New Zealand propagation on July 17th was even a little bit stronger. Hamilton's 576-The Word (2.5 kW) actually sounded pretty healthy in an MP3, and Chinese was also there from the 1 kW Auckland station 936-Chinese Voice. At 2.5 kW 837-RNZ was strong enough to confirm the 567 // (despite semi-local 840-KSWB) and 828-Live Sport was holding down the frequency quite well with 2 kW. Although Chuck didn't know it at the time, he had actually stumbled upon the two best days of Kiwi propagation during the entire week. As he dismantled the 15' x 15' Flag antenna after the session he probably wondered what type of wacky ionosphere could have come up with such freakish propagation.

Final Two Days: After Chuck's departure the Kiwi propagation cooled off somewhat, and other Pacific areas finally began to show up. On July 18th at 1233 I noticed a strong carrier on 558 that I presumed would be the very rare Kiwi Radio Sport (not yet heard during the DXpedition,) but its fair audio turned out to be Polynesian choral music – a sure match with 558-Radio Fiji One's format. Since this is the last surviving Fiji MW outlet there was no parallel to check, but that is

the only DU station on the frequency with that format. The 558 signal rose up and down out of the noise for most of sunrise enhancement, fighting it out with the SF pest on 560. The Aussie big gun 576-2RN finally reclaimed its frequency from the obscure 2.5 kW Kiwi The Word, while big gun 891-5AN was dominant over a presumed The Breeze.



On the last day (7/19) I was fully set up by 1100 UTC in order to chase a station which is usually a pretty tough catch in Oregon... 1017-A3Z in Tonga. The station has variable sign off times, but since this was late Saturday night in Tonga I figured that the chance of a late (1200 UTC) sign off might be greater. Sure enough there it was on 1017 kHz at 1100, fighting a tough battle with splatter from the usual Spanish pest on 1020. Tonga rose in and out of the noise for about an hour, featuring the standard male announcer talking in a foreign language. I was able to record some fair-level speech and good-level interval music prior to 1200 but the Spanish pest really went on the warpath after that, ruining any chance of recording Tonga's choral music signoff (like Bill W. did so well last year, in Grayland.) Many MIA Australian stations waited until this last day to show up, although several Kiwis (like 594-NZ's Rhema and 603-R. Waatea) managed their best audio of the entire week on this last day. Finally, 531-PI again provided some excitement by blasting in with the strongest DU signal that I had ever heard (again) at 1230, upon which I decided to record a demonstration video of the 5 kW Samoan-language station's reception on the 7.5" loopstick PL-380 (assisted by the 15" FSL antenna.) 531-PI cooperated very nicely for the demonstration video, even to the point of conveniently providing an English-language ID right in the middle of the video. This kind of symbolized the entire one-week DXpedition for me – everything falling into place like a dream, exceeding my expectations in every way.

Summary: Ocean cliff propagation at Rockwork 4 was the key factor in providing exceptional New Zealand results for both Chuck and me, since neither of us was using very large antennas. Relying upon ocean cliff propagation for transoceanic DXing success is an all-new concept, and certainly is a radical departure from the tradition of using huge antennas covering some serious real estate. The exceptional results obtained during this DXpedition (both for spectrum capture and live DXing) should provide ample evidence to all that the ocean cliffs do indeed enhance propagation to a remarkable degree – and that such enhancement can boost the effectiveness of modest-sized antennas far beyond expectations.

Listed below are my own South Pacific DXing results with the 7.5" loopstick PL-380 and 15" FSL antenna combo, which (like Chuck) received potent transoceanic DX signal boosts from the sheer ocean cliff. MP3 recording links for most of the receptions are listed with the loggings, and the signals which pegged the PL-380's S/N display at the 25 maximum at least once during the recording are identified with a double asterisk (**).

- **531 **NEW ZEALAND**, PI, Auckland (5 kW.) The strength of this Samoan-language NZ station over the 7 day trip was exceptional – It pegged the PL-380 S/N every morning, and always kept the Australian co-channels way down. This particular signal at 1230 on 7/19 was the strongest DU signal that I've ever heard in any ocean coast DXpedition. <http://www.mediafire.com/listen/bpi940b1byig1eo/531-PI-1230z071914PL380.MP3>.
- 531 **UnID Australian**. In general the Australian stations on this frequency had a very rough time breaking through the heavy 531-PI signal, but in this recording at 1233z on 7/17 there is an Australian pop music station mixing with PI at a fair level, with a female presenter giving some speech from :08 until :17 into the recording. Not too much to go with, but possibly 2PM in Kempsey, which was heard last July at this site (headphones recommended) <http://www.mediafire.com/listen/6226aomeihz2ek9/531-UnID Aussie-1233z071714PL380.MP3>.
- 531 **UnID Australian**. Another Aussie signal under PI's overwhelming speech at 1258 on 7/16 with possible male talk format, but this may simply be station news just prior to the TOH. Don't know if this is the same Australian station as above, or not <http://www.mediafire.com/listen/bbx02dq4d9aq55s/531-UnID Aussie-1258z071614PL380.MP3>.
- 558 **FJI**, Radio Fiji One, Suva (10 kW.) A big surprise at 1233 on 7/18, this station was received for the first time in 4 years. As the last surviving Fiji MW outlet there is no parallel to check, but it's the only DU on this frequency with a Polynesian music format. Received at a fair level when South Pacific propagation was not so Kiwi-slanted <http://www.mediafire.com/listen/qb5t8ivirbsj7ck/558-RadioFijiOne-1233z071814PL380.MP3>.
- **567 **NEW ZEALAND**, RNZ, Wellington (50 kW.) This Kiwi big gun often hit an exceptional strength level, but it frequently had issues with 570-Seattle splatter. With music, news and interviews, it was a convenient signal to confirm reception of other RNZ stations across the band. As the strongest RNZ outlet in the network, it pegged the PL-380 S/N on most days <http://www.mediafire.com/listen/ei3fcu7fmpm7bs2/567-RNZ-130z071614PL380.MP3>.
- 576 **AUSTRALIA**, 2RN, Sydney (50 kW.) MIA during much of the DXpedition, this RN network big gun finally reclaimed its usual spot over the low-powered Kiwi at 1241 on 7/18. Since The Word broadcasts Bible reading 24 hours a day, the Australian big gun was always easy to distinguish <http://www.mediafire.com/listen/hrf5uyuxt2d5frc/576-2RN-1241z071814PL380.MP3>.
- 576 **NEW ZEALAND**, The Word, Hamilton (2.5 kW.) Obscure, low-powered Kiwi station was a big surprise on 7/17 at 1246, with Bible reading at a fairly good level because of a completely absent 2RN. This was an apparent all-time new west coast DU logging by Chuck and I during this DXpedition, with Chuck also mentioning reception of the 1.5 kW transmitter on 540 <http://www.mediafire.com/listen/o38siapebaec7i8/576-TheWordRadio-1246z071714PL380.MP3>.
- 585 **NEW ZEALAND**, Radio Ngati Porou, Ruatoria (2 kW.) This underperforming Maori-language station is one of the toughest Kiwis to track down, appearing only during exceptional propagation. The only way to identify it is to check its programming against late-night parallels on 603 or 765, and it's rarely strong enough to do this. Fortunately this was barely possible at 1236 on 7/15 (17 seconds each of 585 and the 603 // on the MP3) <http://www.mediafire.com/listen/vog3me5rgar5qq3/585-R.NgatiPorou-1236z071514PL380.MP3>.
- 585 **UnID Australian**. This fairly weak signal was definitely not //603, so it wasn't the weak Kiwi. Both male and female presenters are audible, although it's tough to dig out any detail. "Outback Radio" 585-2WEB has been heard here three times during previous DXpeditions, but ABC station 7RN in Hobart is also a possibility <http://www.mediafire.com/listen/sx699ey6dnss8qv/585-UnID-DU-1238z071714PL380.MP3>.
- 594 **JAPAN**, JOAK, Tokyo (300 kW.) NHK1 big gun crashed the DU-DXing party for about 5 minutes around 1213 on 7/14 before quickly being evicted by NZ's Rhema. This was the first appearance of a Japanese station in July at the Rockwork 4 cliff; no Asian had ever shown up there for 2 full July DXpeditions <http://www.mediafire.com/listen/dlcpdb8kr8car6h/594-JOAK-1213z071414PL380.MP3>.
- **594 **NEW ZEALAND**, NZ's Rhema, Timaru/Wanagnui (5 kW/2 kW.) This relatively low-powered Christian music broadcasting network blasted into the Cliff with this monster signal on 7/19 – the strongest that I've ever heard it. Holding strong on the frequency all week, it never allowed the Aussie big gun 3WV to manage a trace <http://www.mediafire.com/listen/zvag6239o66cyb9/594-NZ.Rhema-1252z071914PL380.MP3>.
- **603 **NEW ZEALAND**, Radio Waatea, Auckland (5 kW.) Maori language broadcaster plays a variety of Maori and American R & B music, and is parallel with fellow Maori broadcasters on 585 and 765 in NZ's early morning. This huge signal (with a Maori ID) showed up on the last day at the Cliff <http://www.mediafire.com/listen/6qo8rndrtz18st8/603-R.Watea-1258z071914PL380.MP3>.
- **657 **NEW ZEALAND**, Southern Star, Wellington/Tauranga (50 kW/10 kW.) This Christian hymn broadcaster was a real Kiwi big gun on most mornings, although it typically had some domestic splatter issues. This potent signal was recorded during exceptional Kiwi propagation on 7/16 <http://www.mediafire.com/listen/5zo555cfkbulcw1/657-SouthernStar-1223z071614PL380.MP3>.

- 675 **NEW ZEALAND**, RNZ, Christchurch (10 kW.) The second strongest RNZ outlet (after 567,) it features music, news and interviews. Parallel to 567, 639, 756, 837 and other RNZ network frequencies <http://www.mediafire.com/listen/os7e9crlg9yt6b7/675-RNZ-1259z071314PL380.MP3>.
- 684 **NEW ZEALAND**, NZ's Rhema, Gisborne (5 kW.) Usually slightly weaker than its parallel on 594, this station could also be quite potent at times with its Christian contemporary music and sermons. Here it is at 1244 on 7/14 <http://www.mediafire.com/listen/iv16kocz86z2nau/684-NZ.Rhema-1244z071414PL380.MP3>.
- 702 **AUSTRALIA**, 2BL, Sydney (50 kW.) In contrast to the potent Kiwi Radio Live, this RN network big gun usually sounded pretty Dead. It didn't show up at all until the last day of the DXpedition, with a fair signal seemingly //774 <http://www.mediafire.com/listen/mw14gu5m27zupz9/702-2BL-1211z071914PL380.MP3>.
- **702 **NEW ZEALAND**, Radio Live, Auckland (10 kW.) The potent signal of this obscure Kiwi station was one of the biggest surprises of the entire DXpedition. Usually buried by (or mixing with) Aussie big gun 2BL, it rode the freakish Kiwi propagation to this exceptional level on the first day of 7/13, pegging the PL-380 S/N readout for almost 3 minutes <http://www.mediafire.com/listen/cbfaqf6q18obfo4/702-RadioLive-1237z071314PL380.MP3>.
- **738 **TAHITI**, Radio Polynesie, Mahina (20 kW.) This French-language blowtorch had no trouble pounding in each morning, completely shutting out both the Aussie big gun 2NR and the obscure 5 kW Kiwi, Radio Live. When it really blasted in (like with this pop music on 7/18,) it could turn the tables, and throw splatter on the SF pest 740-KCBS <http://www.mediafire.com/listen/g0dz4j04pvn9f9/738-RadioPolynesie-1244z071814PL380.MP3>
- 756 **NEW ZEALAND**, RNZ, Auckland (10 kW.) Not one of the stronger RNZ outlets during this DXpedition, as is fairly typical of its usual performance. Proximity to the major 750-Portland pest doesn't help matters <http://www.mediafire.com/listen/l2ut4d6bxax1gdi/756-RNZ-1143z071714PL380.MP3>.
- **765 **NEW ZEALAND**, Radio Kahungunu, Napier-Hastings (2.5 kW.) The potent signals from this low-powered Maori broadcaster were nothing short of amazing. Parallel to other Maori stations on 585 and 603 during the early morning in NZ, it was almost always the strongest one of the three. It blasted in with this signal at 1217 on 7/14 <http://www.mediafire.com/listen/3w58t5463naik50/765-R.Kahungunu-1212z071514PL380.MP3>.
- 774 **AUSTRALIA**, 3LO, Melbourne (50 kW.) Another Aussie big gun completely shut out until the last day of the DXpedition. Showing up at a fair level through 770-Seattle splatter, it provided an LR network parallel for a couple of other Australian stations on 7/19, right before the trip wrapped up <http://www.mediafire.com/listen/9nlm49brhqr968/774-3LO-1216z071914PL380.MP3>.
- 783 **NEW ZEALAND**, Access Radio, Wellington (10 kW.) There were fairly good signals from this multi-ethnic Kiwi station all week long as it enjoyed a complete lack of Australian competition. This temporarily strong music was received on 7/16, one of the most favorable days for NZ propagation <http://www.mediafire.com/view/kx3l6fk73d7sfb2/783-AccessRadio-1311z071614PL380.MP3>.
- 792 **AUSTRALIA**, 4RN, Brisbane (25 kW.) Aussie big gun was MIA until the very last day (7/19,) finally showing up with this fair-level female speech //576 at 1302 <http://www.mediafire.com/listen/htpkj3w3iitcq7/792-4RN-1302z071914PL380.MP3>.
- 792 **NEW ZEALAND**, Radio Sport, Hamilton (5 kW.) Dominant on the frequency almost all week, this fairly obscure Kiwi station shut out the Aussie big gun 4RN until the last day. This fair-level conversation about the WNBA on 7/15 was typical programming <http://www.mediafire.com/listen/4z7m6lf7ees20ds/792-RadioSport-1253z071514PL380.MP3>.
- 828 **NEW ZEALAND**, Live Sport, Palmerston North (2 kW.) In this MP3 recorded across the 1300 TOH on 7/15 the station is apparently relaying TAB TV, as per the PAL listing. Not thought to be the ABC station 3GI because of the commercial ads ("brought to you by...") after the TOH pause <http://www.mediafire.com/listen/kzoa5jmky6g8eng/828-LiveSport-1300z071514PL380.MP3>.
- 828 **NEW ZEALAND**, Radio Trackside, Palmerston North (2 kW.) Same transmitter as above, but broadcasting horse racing at an anemic level on 7/13 at 1156 (prior to the 1200 TOH when Trackside programming wraps up) <http://www.mediafire.com/listen/s2u0mfady16vcqa/828-R.Trackside-1156z071314PL380.MP3>.
- 828 **UnID-DU**. This is almost certainly the Australian 10 kW LR network station 3GI in Sale showing up with fair-level female speech on the last day (like many other Australians,) but I wasn't able to confirm the 774 // <http://www.mediafire.com/listen/m3la6cofgii9zon/828-UnID-DU-1306z071914PL380.MP3>.
- 837 **NEW ZEALAND**, RNZ, Whangarei/Kaitia (2.5/2 kW.) This was the weakest of the RNZ relays picked up during this trip, but that wasn't surprising when it was only 3 kHz away from the semi-local 840-KSWB in Seaside. Heard //567 at 1233 on 7/17 <http://www.mediafire.com/listen/4r8lf3a64hmn1qs/837-RNZ-1223z071714PL380.MP3>.
- 855 **NEW ZEALAND**, NZ's Rhema, Hamilton (2 kW.) This station was received at an anemic level twice during the DXpedition //594, but I was waiting for a better signal to record an MP3. Of course, it never cooperated.
- **891 **AUSTRALIA**, 5AN, Adelaide (50 kW.) Although many Australian big guns were MIA during the DXpedition this South Australian blaster certainly wasn't one of them. This blistering signal pounded into the Cliff at 1253 on 7/14 as the LR network big gun apparently rode a different propagation path than the MIA eastern Australian stations <http://www.mediafire.com/listen/r2l33tmlzxpza5/891-5AN-1253z071414PL380.MP3>.
- 936 **NEW ZEALAND**, Chinese Voice, Auckland (1 kW.) Exceptional Kiwi propagation on 7/17 finally made it possible to record Chinese from this flea-powered station. This apparently was a new Ultralight radio DXing distance record for 1 kW station reception in North America, and the first 1 kW New Zealand station I've ever received <http://www.mediafire.com/listen/br2l5h1q7162523/936-ChineseVoice-1204z071714PL380.MP3>.
- 936 **UnID Australian**. Weak non-Chinese music showing up on the last day (7/19,) one of the few days with any Australian propagation. No real identity clues, but probably one of the 10 kW Aussies on the frequency (4PB or 7ZR.) The flea-power Kiwi station Chinese Voice held down the frequency (very weakly) on the other six days <http://www.mediafire.com/listen/acvvh8llq4aiadk/936-UnID-DU-1318z071914PL380.MP3>.
- 963 **NEW ZEALAND**, Southern Star, Christchurch (10 kW.) Usually not quite as strong as its 657 parallel, this Christian hymn broadcaster could occasionally manage good signals. Unlike previous DXpeditions there was no Australian competition all week long <http://www.mediafire.com/listen/gdf9n0mun1zrheq/963-SouthernStar-1309z071514PL380.MP3>.
- 1008 **NEW ZEALAND**, Newstalk ZB, Tauranga (10 kW.) This Kiwi news station had a decent signal on most days but didn't benefit from a blasting domestic pest on 1010. For some unknown reason its 1035 // was MIA despite several searches during good Kiwi propagation. <http://www.mediafire.com/listen/ihx44a7epi7o2uu/1008-NewstalkZB-1303z071814PL380.MP3>.
- 1017 **NEW ZEALAND**, Radio Sport/Newstalk ZB, Christchurch (2.5 kW.) This was the best signal that I've ever heard from this low-powered Kiwi station, with good level male conversation and a female commercial ("right here in New Zealand") on the last day of the DXpedition at 1241 <http://www.mediafire.com/listen/ftuh8lufktz38ta/1017-R.Sport-NewstalkZB-1241z071914PL380.MP3>.
- 1017 **TONGA**, A3Z, Nuku'alofa (10 kW.) This somewhat obscure DU waited until the last day of the DXpedition before showing up before a late sign off, but a Spanish pest on 1020 made reception a little dicey. The usual foreign-language male speaker rose up out of the 1020 splatter at a fair level at 1154 on 7/19 (headphones recommended,) occasionally speaking "island-style" (bizarre pauses between sentences) <http://www.mediafire.com/listen/el5z3pufpapaf3n/1017-A3Z-1154z071914PL380.MP3>. The station returned with good-level interval music and the same male speaker at 1158 before the 1020 Spanish pest reclaimed the frequency – ruining hopes of a vibrant sign-off recording <http://www.mediafire.com/listen/apvngvqwyyg0vin/1017-A3Z-1158z071914PL380.MP3>.
- **1116 **AUSTRALIA**, 4BC, Brisbane (16/7.3 kW.) This eastern Oz commercial big gun managed pretty potent signals but had the misfortune of being only 4 kHz away from the 50 kW Oregon pest KPNW. Despite this it was one of the few Aussies to provide decent signals each morning, and certainly worthy of a "Top Ten" spot of the strongest DU signals throughout the DXpedition <http://www.mediafire.com/listen/xsxewoew3ah7rou/1116-4BC-1251z071614PL380.MP3>.
- 1386 **NEW ZEALAND**, Radio Tarana, Auckland (10 kW.) Female-voiced Hindu music at a good level from this ethnic station at 1311 on 7/19 (the last day of the DXpedition.) This signal (and other high-band DU's) got a serious boost from the new FSLs dual coil tuning system <http://www.mediafire.com/listen/yq91aqyr2upm943/1386-R.Tarana-1311z071914PL380.MP3>.
- 1503 **NEW ZEALAND**, Radio Sport, Wellington (5 kW.) The strongest signal that I've ever received from this high band Kiwi station was heard at 1248 on 7/13, with a female-voiced "I want some sports." Unlike Chuck, I ran out of live DXing time to make a serious investigation of the high band frequencies, although many good signals were around <http://www.mediafire.com/listen/q8dnvd2uwqxyz5b/1503-R.Sport-1248z071314PL380.MP3>.

ADDITIONAL RESOURCES

For those interested, a July 2014 Rockwork 4 DXpedition video has been posted at <http://www.youtube.com/watch?v=INSSJIV6Zg>, and an "Apples and Oranges" DXpedition video showing Chuck's listening setup and mine is posted at <http://www.youtube.com/watch?v=tAZaY8b4Eec>. Finally, a demonstration video of the reception of the 5 kW Kiwi station 531-PI on the modified PL-380 at the ocean cliff site just after sunrise on July 19th has been posted at

<http://www.youtube.com/watch?v=ITBJ31cEAH0>. Chuck also had superb Perseus-SDR DXing results at the cliff, and we have a plan to combine our loggings for a final DXpedition report at a future date.

GEOMAGNETIC INDICES – Compiled by: Phil Bytheway

E-mail: phil_tekno@yahoo.com

Geomagnetic Summary July 1 2014 through July 31 2014

Tabulated from email status daily (K @ 0000 UTC.)

Date	Flux	A	K	Space Wx										
7/ 1	152	4	1	minor, R1	7/12	145	6	1	no storms	7/23	99	6	3	no storms
2	169	5	1	no storms	13	127	5	2	no storms	24	104	5	1	no storms
3	178	6	1	no storms	14	109	9	2	no storms	25	107	6	1	no storms
4	188	5	1	no storms	15	101	7	1	no storms	26	117	7	1	no storms
5	193	4	1	no storms	16	92	5	1	no storms	27	121	5	2	no storms
6	201	5	1	no storms	17	89	5	2	no storms	28	132	9	1	no storms
7	198	6	2	no storms	18	89	3	1	no storms	29	142	4	1	no storms
8	201	6	2	moderate, R2	19	86	3	0	no storms	30	152	5	1	no storms
9	198	7	3	minor, R1	20	87	3	1	no storms	7/31	156	5	2	minor, R1
10	177	8	2	minor, R1	21	90	5	2	no storms					
7/11	166	6	2	no storms	7/22	93	5	2	no storms					

Sx – Solar Radiation Storm Level

Gx – Geomagnetic Storm Level

Rx – Radio Blackouts Level

***** JUST RELEASED *****

***** IRCA TIS/HAR LIST (Summer 2014) *****

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 August 1 2014.

Prices: IRCA/NRC members – \$9.50 (US), \$11.00 (Canada) \$12.00 (México), \$12.50 (rest of the world). Non-IRCA/NRC members – add \$2.00.

To order from the IRCA Goodie Factory, send the correct amount (in US funds payable to **Phil Bytheway**) to: **IRCA GOODIE FACTORY, 9705 MARY NW, SEATTLE WA 98117-2334**. Order through PayPal [add \$1.00] to email: phil_tekno@yahoo.com. Please state club affiliation when ordering.

The NRC AM Antenna Pattern Book

Prepared by noted DXer Paul Swearingen, it is an all-inclusive book of day and night operation patterns for stations in the United States, Canada and selected foreign countries. The data sources for the information come from the 34th NRC AM Radio log and the comprehensive Mexican station listing put together by noted DXer John Callarman. There are 240 pages in this book; the maps cover each frequency from 530 to 1700 kHz, depicting the U.S. "Lower 48", Canada and Mexico. Hawaii and Alaska are shown on separate maps at the end of the book. The member price is \$22.95 (\$26.80 for shipping via Priority Mail); the non-member price is \$28.95 (\$32.80 for shipping via Priority Mail). The price for shipping to Canada is \$35.00, while the price for overseas shipping is \$39.00. Orders shipped to Canadian and overseas addresses will be shipped via Global Priority Mail. The NRC AM Pattern Book may also be ordered using PayPal (a service fee will apply) at <http://www.nrcdxas.org/>

Prices: \$16.95 to USA/Canada IRCA/NRC members, \$22.95 USA non-members, \$25.95, Canada non-members/all overseas orders. Order from: NRC Publications – PO Box 473251 – Aurora CO 80047-3251 (CO residents, please add 3.5% sales tax). Please state your IRCA membership affiliation when you order.

The County Cross Reference

What a time-saver! A complete list of counties, parishes, and similar political divisions in the U. S. and Canada. Two lists are included: alpha by county, and by state. Compiled by Bill Hale and designed and produced by Wayne and Joan Heinen. \$8.95 for IRCA/NRC members, \$11.95, non-members; overseas customers, please contact us for exact price. Order from: NRC Publications – PO Box 473251 – Aurora CO 80047-3251 (CO residents, please add 3.5% sales tax). Please state your IRCA membership affiliation when you order.

DX Audio Service

Back issues on audio cassettes: \$3.00 each; specify month and year. Order from: NRC Publications – PO Box 473251 – Aurora CO 80047-3251 (CO residents, please add 3.5% sales tax). Please state your IRCA membership affiliation when you order.

The Challenging Crystal Set

For hobbyists demanding the ultimate DX challenge, Ray Cole's publication detailing step-by-step procedures in building a crystal set is for you! Only \$4.00 for IRCA/NRC members; non-members, \$5.00. Order from: NRC Publications – PO Box 473251 – Aurora CO 80047-3251 (CO residents, please add 3.5% sales tax). Please state your IRCA membership affiliation when you order.

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 members** – \$2.25 (US/Canada/Mexico/sea mail), \$3.00 (rest of the Americas/Europe airmail), \$4.00 (Australia/New Zealand airmail). Non-IRCA members – add \$1.00.

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.

To order any of the above items from the **IRCA Bookstore**, send the correct amount (in US funds payable to **Phil Bytheway** – which will be returned if not made out to **Phil Bytheway**) to: **IRCA BOOKSTORE, 9705 MARY NW, SEATTLE WA 98117-2334** (email: phil_tekno@yahoo.com).

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.

New from the IRCA reprint service. "IRCA REPRINTS ON CD"!!! 648 Reprints. The entire set, now on one CD. Only \$10.00 (US/Canadian IRCA members, overseas contact Phil.) Categories include: Antennas, Domestic, Foreign, History, DX Lists, Receivers and Receiver Modifications, and Technical.

For a complete list of reprints, or to purchase the CD send to: **IRCA Reprints, c/o Phil Bytheway, 9715 Mary NW, Seattle, WA 98117-2334**. Allow 3-4 weeks for delivery. (Make all checks and money orders out to **Phil Bytheway**)

Pay electronically with PayPal-add \$1 to all prices above. Go to www.PayPal.com, then send your funds to phil_tekno@yahoo.com (Phil Bytheway).

ARRL Hamfest Calendar

As you may know (and I can say this from experience – EIC), a Hamfest is a great place to find good deals on new and used receivers, wires and cables for antenna projects, and other hobby-related needs. The American Radio Relay League has a Web page to help you find a Hamfest near your home QTH or while you're traveling to other parts of the country. You can search by ZIP Code, select from Hamfests within 25, 50, 100 and 250 miles of your QTH, as well as by city and state. Those of us who are Amateur Radio operators can also find Hamfests by their ARRL section. To find a Hamfest near your QTH, visit <http://www.arrl.org/hamfests-and-conventions-calendar> and plug in your city, state and/or ZIP Code. You'll be able to find upcoming Hamfests in your area.

IRCA Facebook Page

The IRCA's Facebook page is now online! This is a new feature of IRCA, featuring photos of transmitter sites (many of which provided by CDXR Editor John C. Johnson), members' shacks (your Editor-in-Chief included) and plenty of information. If you have a Facebook page, enter "International Radio Club of America" into your Facebook search engine, then click the "Like" icon. Many thanks to Mike Sanburn (KG6LJU) and John C. Johnson for setting this page up.

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 November through March, twice monthly from April to November.) **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.



CLUB OFFICERS AND CONTACT INFORMATION

President: Phil Bytheway, 9705 Mary Ave. NW, Seattle, WA 98117-2334 **E-mail:** phil_tekno@yahoo.com (all proposals and gripes go here)

Secretary-Treasurer: Lynn Hollerman, PO Box 60241, Lafayette LA 70596
e-mail: lynnhollerman@yahoo.com – (dues, address changes, IRCA mailing list sign-ups)

Board of Directors: Dennis Gibson – wb6tnb@yahoo.com, Craig Healy – craig@craighealy.com, John C Johnson – John_Johnson@prodigy.net, Patrick Martin (Chairman) – mwdxer@webtv.net, Bruce Portzer – bportzer@comcast.net, Mike Sanburn – mikesanburn@hotmail.com and Robert Wien – wienbob@aol.com

Publishing Committee: Editor-in-Chief: Eric Bueneman, 631 Coachway Lane, Hazelwood MO 63042-1347, e-mail: n0uiheric@aol.com – (all material for publication goes here).

MEMBERSHIP DUES

Destination	Rate
USA	\$10
Canada & Mexico	\$10
Western Europe	\$10
Australia/NZ/Japan	\$10
Rest of world	\$10

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Pay electronically with PayPal – add \$1 to all prices above. Go to www.paypal.com, then send your dues to ircamember@ircaonline.org – contact Lynn Hollerman for more information.

Sample copies of DX Monitor are unavailable at the present time.

For information on **subscribing to the IRCA mailing list** at Hard-Core-DX, a group e-mail service, contact the moderator, Lynn Hollerman at lynnhollerman@yahoo.com.

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THE INTERNATIONAL RADIO CLUB OF AMERICA
PO Box 60241, Lafayette LA 70596
<http://www.ircaonline.org>

