

DX News

• Serving DX'ers since 1933



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NRC/WTFDA Convention 2012: Make your plans NOW – if you haven't already – for this year's joint NRC/WTFDA convention, which is rapidly approaching: August 3-5 in Bridgeport, WV. See page 23 for details.

Convention hosts Bill and Brenda Swiger advise: If you are attending the convention, you really need to call the Days Inn and Suites and make your reservations as soon as possible. Apparently there are new people running the hotel now, and they say that they definitely cannot keep the rooms open after Friday, July 20. The area is full of oil and gas workers on the Marcellus Shale project, and rooms are very scarce right now. If you aren't sure about whether you'll make it, call now and make your room reservations – if you find out you can't attend, then you can always cancel.

FM Atlas – Close-Out Sale: The NRC has obtained the remaining copies of the 21st edition of the *FM Atlas*, the final edition of that definitive North American FM station guide published by Dr. Bruce Elving before his untimely passing last year. If you don't have a copy, you can order it for \$15.00 postpaid to USA addresses, or \$18.50 to Canadian addresses. Same prices to non-NRC members, if you wish to forward the tip on to them. For addresses elsewhere in the world, please contact us for a quote. The quantity is limited to the books on hand. Order from NRC Publications at the address found on the back page.

Madison-Milwaukee DX GTG: The 19th annual Madison-Milwaukee Get-Together for DXers and Radio Enthusiasts will be held on Saturday, August 18, 2012, beginning at 1 PM CDT. This year's location is Madison WI and your hosts are Bill and Nina Dvorak. For more information, please e-mail Bill at dxe rak@aol.com (please include "Madison DX GTG" in the subject line), write him (3358 Ridgeway Ave., Madison WI 53704), or if you prefer call (608-244-5497). Participation by NRC members is strong every year for this event, and this year should be no exception. We hope you can join us!

Membership Report: A warm welcome to new members Dan Cameron, Whitehall, MI, and Eric Cooper, Lake Forest, CA and rejoining member John R. Wallace, Syracuse, NY.

We also thank our renewing members for their continued support: Michael N Beu; Jesse R Bruner W4TTT; Dan Dankert; Michael J. De Roo; Kenneth L. Diehl; Tom Dimeo; Michael Hunter; Robert Ice; Bob Karchevski; Chris Knight; David Lewis; Richard L. Lucas; Kenneth Lyon; Taylor McNeil; Paul R. Mount; Tom Mulvaney KR4BD; Darrell Neft; Tim Noonan; Robert C. Pote; Charles Rader; John Rieger; Ralph Shankland; John Tudenham; Frank Welch; and David M. Wurl.

Reprints: Barry K. Williams, Wolverhampton, U.K writes: "Could I please extend my thanks to all members of your staff for the reprints from your magazine that I had requested and have received your kindness has enriched my DXing a great deal Once more, many thanks."

The thanks go to Bill and Brenda Swiger, our Reprints managers (and this year's convention hosts!), who fill a lot of reprint orders. We haven't published a full reprint catalogue in *DX News* for a number of years now, but yes, we still have reprints – and the full listing is on the Club web site at www.nrcdxas.org. There you will see what's available and how you can order.

From the Publisher: We are working our way through the backlog of material here. Next issue, we'll be reporting live from the 2012 NRC Convention ... and then the fall DX season starts getting underway.

What with the very full issues of late, the DX Time Machine has apparently fallen into a black hole ... but we'll get it out soon and back here on the front page before too much longer!

NRC AM Log 2011-2012 (32nd Edition): Is sold out, but work is underway on the 33rd Edition, which should be available around Labor Day.

VOL. 79 DX NEWS PUBLISHING SCHEDULE

No	In By	Date	No	In By	Date
29	Aug. 3	Aug. 13	30	Sept. 7	Sept. 17

AM Switch



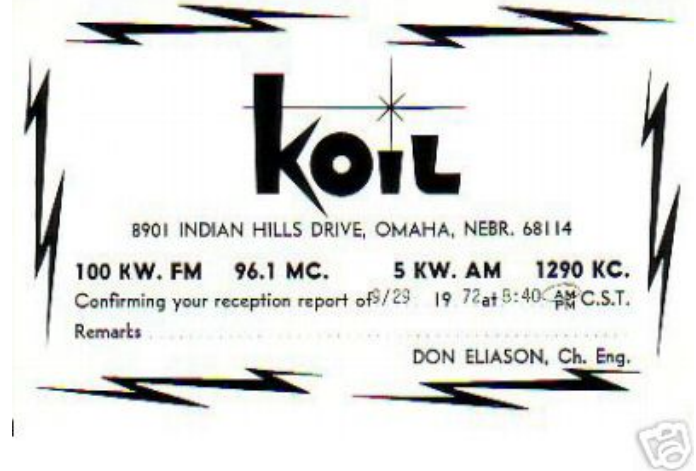
Bill Hale w_r_hale@sbcglobal.net
6124 Roaring Springs Drive
North Richland Hills, TX 76180-5552



Status changes in AM stations, supplied by the FCC, CRTC, listeners

CALL LETTER CHANGES

	<u>Old Call</u>			<u>New Call</u>
810	WEUS	FL	Orlovista	WRSO
820	WWAM	TN	Jasper	WTNW
1170	KOWZ	MN	Waseca	KRUE
1180	KOIL	NE	Bellevue	KZOT
1190	WHYN	TN	Humboldt	WJPJ
1290	KKAR	NE	Omaha	KOIL
1300	WAMF	NY	Fulton	WOSW
1350	CP	GU	Agana	KUSG
1380	KSLG	MO	St. Louis	KXFN
1470	KRBR	CO	Estes Park	KDEB
1480	WGUS	GA	Augusta	WCHZ
1600	WLUZ	PR	Bayamon	WCMA



CPs ON THE AIR

540	WRGC	NC	Sylva – U1 5000/140 [ex: U2 1000/250 on 680 kHz]
570	WFNL	NC	Raleigh – U1 1000/40 [ex: U1 1000/52]
830	KOTC	TN	Memphis – D1 3000/0 [ex: D1 10000/0 at Kennett, Missouri] [see Applications below]
1050	WFSC	NC	Franklin – U1 5000/153 [ex: U1 1000/153] from the adjusted coordinates of 35-12-40/83-22-07.
1050	WDVM	WI	Eau Claire – U1 860/260 [ex: U1 1000/500]
1060	KFOY	NV	Sparks – Program Test Authority (the FCC's term for "OK to begin regular schedule") for this new station has been granted for U4 10000/250 from two towers at 39-30-06/119-44-03. Day and night patterns are identical butterfly-shaped, except for size. The main lobes are east and west, with the signal being drawn in to the north and south.
1260	WI3XSO	PR	Aguadilla – U4 5000/4800 [ex: U5 2500/850]
1290	WWHM	SC	Sumter – U1 1000/12 [ex: U2 1000/1000] from the adjusted coordinates of 33-55-26/80-17-12.
1420	WCED	PA	DuBois – U1 4200/5 [ex: U2 5000/500]
1550	WCLY	NC	Raleigh – U1 1000/8 [ex: U1 1000/7]

ACTIONS

680	CHFA	AB	Edmonton – CP granted to replace CHFA with an FM station, as CHFA-FM10, on 90.1 MHz with 100 kW-Horizontal at 124 metres. Once the new FM station signs on, CHFA-680 may remain on for up to 90 days.
690	WIST	LA	New Orleans – CP granted for U1 9100/108 [ex: U4 10000/5000].
730	WZGV	NC	Cramerton – CP granted for U1 10000/178 [ex: U1 10000/190]. The night transmitter will move to the tower #3 of the WYFQ-930 Charlotte array at 35-16-00/80-54-05.
1330	WNIX	MS	Greenville – Licenced for U2 1000/500, WNIX has a CP for U1 1000/55. This action has them filing a Special Temporary Authorization (STA) for U1 1000/125 while they dismantle two of their three towers in preparation for them to implement the CP.
1340	KRMD	LA	Shreveport – Licensed for U1 1000/1000, KRMD is operating under an STA with U1 378/378 as they conduct field measurements on their signal to establish ground conductivity in the vicinity of their transmitter site.
1400	WBIZ	WI	Eau Claire – Licensed for U1 1000/1000, WBIZ is operating U1 500/500* as, in the wording on the application: "An extreme wind event in the late afternoon of May 24, 2012 resulted in the toppling of the stations antenna tower. A horizontal wire has been attached to a temporary 30 foot grounded support

near the former tower location, the wire runs from there 160 ft. in a north-northwest direction to another temporary support. It is excited at the end nearest the former tower by a coaxial feed line." * – The application states they would be using a power "... not to exceed .5 kW".

- 1420 WVJS KY Owensboro – CP granted for U1 980/20 from the adjusted coordinates of 37-46-30/87-09-32 [ex: U4 5000/1000]
- 1470 WCLA GA Claxton – CP granted for U1 1000/170 [ex: U1 1000/260], moving to the tower of WMCD 107.3 Claxton at 32-10-01/81-54-07. The WMCD tower is almost double the height of WCLA's current facility, so they must reduce their night power to, theoretically, provide coverage to the same area.
- 1480 KAUS MN Austin – Licensed for U4 1000/1000, KAUS is operating under an STA with U1 250/250 during "renovation of the licensed 4-tower directional antenna system."
- 1530 WOBX NC Wanchese – Licensed for D3 1000/0, WOBX is operating D1 250/0 until repairs are made to their phasing unit.
- 1560 KHBR TX Hillsboro – Coordinate correction to 32-00-57/97-06-33.
- 1590 WCGO IL Evanston – CP granted for U2 7200/2000 at the adjusted coordinates of 42-01-15/87-42-34.

APPLICATIONS

- 830 KOTC TN Memphis – Newly licensed with D1 3000/0, KOTC has now applied for D1 8000/0 CH 8000.
- 1000 KNWS IA Waterloo – Applies to drop their 1000 Watts CH authorization to become simply D1 1000/0.

AMENDMENTS TO APPLICATIONS

- 590 WAFC FL Clewiston – Licensed for U1 930/470, WAFC applied for U3 5000/5000 along with a change in City-License to Cape Coral. This request only changes the application to read "U4" in place of "U3".
- 1030 APP ID Melba – Initial application was for U2 50000/1000. This amendment requests U4 500/500.
- 1510 WQUL SC Woodruff – Licensed for D1 1000/0 CH 250, WQUL applied for D1 930/0 CH 27. This amendment requests D1 930/0 CH 28. One Watt!!

APPLICATIONS AND CPs DISMISSED

- 620 WSNR NJ Jersey City – Application for U4 15000/15000. WSNR remains U4 3000/7600.
- 860 WDMG GA Douglas – Licensed for U2 5000/5000, WDMG applied for U1 5000/29. They then applied for U1 5000/30. That later request has been dismissed.
- 890 KQLX ND Lisbon – Application for D1 2500/0 CH 2500. KQLX remains D1 1800/0.

HEAR AND THAR

- ✿ Returning to the airwaves: WNOV-860 Milwaukee, Wisconsin with Urban music; KSKE-1450 Buena Vista, Colorado with Surveillance/ Weather/Traffic; WRLV-1140 Salyersville, Kentucky with Country as *Pure Country*.
- ✿ Reported as silent: WHFB-1060 Benton Harbor, Michigan; WROP-1390 Belton, South Carolina; KENT-1400 Parowan, Utah; WJPI-1470 Plymouth, North Carolina; WJDJ-1490 Hartsville, South Carolina; WMJL-1500 Marion, Kentucky; WTNI-1520 Brunswick, Maryland (again!).
- ✿ Fines: KBPO-1150 Port Neches, Texas: \$15,000 for failure to make available a complete public inspection file, and if that's not enough . . . another \$25,000 for willful violation of the Commission's rules involving KBPO's "provision of incorrect factual information of a material nature to the Commission regarding their public inspection file without a reasonable basis for believing that the information was correct and accurate"; WCXI-1160 Fenton, Michigan: \$17,000 for Public Inspection File and tower fencing issues; WSNJ-1240 Bridgeton, New Jersey (and WMVB-FM Millville, New Jersey): \$16,000 for Public Inspection File and other issues; WIPC-1280 Lake Wales, Florida: \$3500 for not switching to the night power/pattern in accordance with its licensed schedule; WOAP-1080 Owosso, Michigan: \$4000 for operating past their local sunset (WOAP is a daytime-only station).
- ✿ News Item: WWVB to Test Signal Improvement – NIST radio station WWVB is trying to improve its signal penetration. The station, near Fort Collins, Colorado, continuously broadcasts time and frequency signals at 60 kHz. The carrier frequency provides a stable

frequency reference traceable to the national standard. WWVB is also used for high-level applications such as network time synchronization and frequency calibrations.

WWVB began testing a phase-modulated broadcast format at 1900 UTC Thursday, June 14 and ended at the same time on Friday, June 29. Radio-controlled clocks and watches were not affected by the test. Phase-locking 60 kHz timing and frequency standard receivers may have lost lock during the test, but should be restored during the normal broadcast period. WWVB's current power level is about 70 kW. In theory, WWVB could improve its signal penetration by 14 dB if it added phase modulation to its existing amplitude modulated carrier. Devices designed to receive the PM will have at least a 14 dB advantage over the AM signal. WWVB has already conducted experiments where phase modulation has been added to its AM signal for brief periods of time. For this new test, NIST will gather field data on the East Coast to better determine how much of the calculated 14 dB improvement is actually realized.

✳ Thanks to **Tim Noonan, Dave Schmidt, Ernie Wesolowski, Upper Midwest Broadcasting and Radio World Online.**

Domestic DX **Mike Brooker** patria1818@yahoo.com
Digest – East 99 Wychrest Avenue
 Toronto, ON M6G 3X8 CANADA
U.S./Canadian Loggings from Eastern/Atlantic Time Zones. All ELT.

REPORTERS

- KK-VA** **Kraig Krist, Manassas** – Winradio G33DDC SDR, homemade 134 foot multiband antenna running NW to SE.
TLK-FL **Terry L. Krueger, Clearwater** – - JRC NRD-535, ICOM IC-R75, Sangean PR-D5, roof dipole, in-room random wire.
MKB-ON **Mike Brooker, Toronto** – Grundig G5, Grundig YB-400PE, Sony SRF-39FP, Panasonic RF-2200 (receiver emeritus)

Follow me on Twitter! @patria1818 DX-related tweets will be hash-tagged #MWDX.

Friend me on Facebook! www.facebook.com/keval.mike

DX TEST

- 1440 WFN** NY **Gloversville** – 5/26 0100 – Fighting CHKT-1430 slop and usual pest WHKZ's gospel, DX test with assortment of oldies such as "House of the Rising Sun" by Eric Burdon and the Animals and "At the Hop" by Danny and the Juniors, WFN code IDs (.-. ..-. -. ---) at 0118. Not needed, heard on similar test in March 2011. (**MKB-ON**)



- 5/26 0055 – Mixing with WHKY, other talk and oldies. "WFNY" ID given in morse code several times. Oldies songs. Hello to listeners. Asking listeners outside the area to call 518 725-1108. (**KK-VA**)

UNID

- 1210 UNID** -- - 6/11 2004 – Briefly under/over Cuban Rebelde with Journey's "Who's Crying Now" and fade-down, then "Roxanne" by the Police at 2008. Faded but noted again at 2015 playing "Popcorn" by Hot Butter. (**TLK-FL**)

LOGGINGS

- 720 WVCC** GA **Hogansville** – 6/11 1917 – Fox News Radio feature on, of all cool things, new and classic artist music releases over the past two weeks, including Joe Walsh "Analog Man," Patti Smith "Banga," and the new Beach Boys album. Quick canned male ID, more FOX feed, fast fade. (**TLK-FL**)
- 790 WSGW** MI **Saginaw** – 6/13 2114 – Over usual pest WAEB with Tigers game v. Cubs, McDonalds ad and "WSGW is your station for the Tigers" ID between innings. (**MKB-ON**)
- 1120 WSME** NC **Camp Lejeune** – 5/26 0608 – In KMOX mix with oldies, station promo: "Hey Belgrade, New Bern, Holly Ridge. We're playing the greatest music of your life, Freedom 11-20 WSME." (**KK-VA**) *City of license is actually a Marine Corps base, so you would expect them to have a patriotic slogan such as "Freedom 1120."* Mike.

Domestic DX Jim Tedford Radio_Enthusiast@hotmail.com *Digest – West* 20310 Bothell-Everett Highway B4 Bothell, WA 98012-8133

U.S./Canadian Loggings from Pacific/Mtn/Central Time Zones. All times ELT.

Reporters

- JJR-WI** John J Rieger, South Milwaukee, WI Icom IC-R75, Kiwa loop, MFJ-959B tuner, preamp
- JW-CO** John Wilkins, Wheat Ridge, CO Drake R-8, GE Superadio II, 4-foot box loop.
- RD-IA** Rick Dau at an AmericInn in West Burlington, Iowa Sangean ATS-909X, Quantum QX Pro loop
- RD-IL** Rick Dau at a Super 8 in Peru, Illinois Sangean ATS-909X
- SA-MB** Shawn M. Axelrod, VE4DX1SMA/VEPC4SWL, Winnipeg, MB Icom ICR-70 / Drake R8; 3 Foot un-amplified box loop / Quantum QX LOOP v2.0/ 155 Foot "U" shaped outdoor wire / 100 Foot indoor wire run around the basement walls / MFJ 1026 Phasing unit
- TK-MO** Tim Kridel, Columbia, MO Icom R70 with a roughly 110' beverage running E/W.

DX Test

- 1440 WFN** NY **Gloversville** – 05/26 0100 – DX test heard. After going through the recording of the DX test I had bits of Morse Code and/or tones at 0118 and possibly again around 0127. It took a few tries of listening to my recording but did manage to pull out some code and tones to log a new one in May! Band was very noisy but not from T-storms as we had a frost warning here that night! Thanks to all who helped put on the test. **NEW!! (SA-MB)**



Station News

- 890 KJME** CO **Fountain** – 6/5 0821 – New station on the air. Heard with NOS and Big Band tunes; occasional canned IDs; legal ID at 0900. Fair daytime signal into metro Denver. **(JW-CO)**
- 1380 KJUA** WY **Cheyenne** – 6/14 0837 – Noted with Hip-hop format and "The Block" slogans. ID at 0841: "KJUA Cheyenne, Wyoming. You're listening to The Block, Cheyenne's only real hip-hop station." Can't imagine this format in Cowboy Country. Fair signal with local KGNU's IBOC turned off (it's still off as of 27 June – permanently, I hope). **(JW-CO)**



DX Loggings

- 580 WILL** IL **Urbana** – 4/30 1359 – Good with conclusion of program "Afternoon Magazine" with host Celeste Quinn, then brief announcement by Celeste that this was her last day on the air on WILL, as she was retiring. **(RD-IL)**
- 1050 WTKA** MI **Ann Arbor** – 6/20 0412 – Poor "SportsTalk 1050 WTKA" after ad for "Supersonic Payday." FOX Sports and no semi-local WLIP heard at all! **JJR-WI**
- 1150 WIMA** OH **Lima** – 6/20 0410 – Poor with ad for buying gold and "... on 1150 WIMA," into /Noory. Very weak CKOC in back. **(JJR-MI)**
- 1170 KRUE** MN **Waseca** – 6/21 0410 – Poor signals fading in and out with True Oldies programming. Heard a "Crew" ID. New calls, ex-KOWZ, and format, ex-talk/sports. **NEW!** First day of summer and I get a new one. Who says this isn't a summer hobby?? **(SA-MB)**
- 1190 KQQZ** MO **University City** – 6/14 0520 – Usually atop mess with "Minute of silence," with DJ explaining that they're about to have a minute of dead air to remember loved ones who have died. He said that those who didn't like it should tune away and never come back. Into classic C&W such as "Southern Rain." **(TK-MO)**
- 1210 KGYN** OK **Guymon** – 6/14 0435 – Booming in at times over WPHT with "U.S. Country 1210 KGYN" and local ads such as Farm Credit of Western Oklahoma and T&T Auctions. Ron Pritchard with weather, then back into C&W such as Faith Hill and Kenny Chesney. "The ag news you need and today's best country all day, we're U.S. Country 1210 KGYN." **(TK-MO)**
- 1219.83 KMVL** TX **Madisonville** – 6/20 0642 – Farm report, area ads, area weather, all on TNN (Texas News Network). Fair peaks. Best on LSB for obvious reasons. **(JW-CO)**

- 1230 KBCR CO Steamboat Springs – 5/29 0715 – Man saying "... every Tuesday on High Country Farm and Seed and KBCR Big Country Radio"; signal then faded. Just barely readable thru QRM briefly. (JW-CO)
- 1320 KRDD NM Roswell – 6/20 0702 – Heard only "... señor comerciante ... en KRDD, La Doble D." Rough copy, mixing with XECPN and KOLT. (JW-CO)
- 1350.05 KCCY CO Pueblo – 6/4 0712 – Older C&W music; ad block at 0720; canned IDs. Fair/poor signal with loop aimed E-W to avoid local KVOQ's IBOC. Ex-KDZA. (JW-CO)
- 1380 KHEY TX El Paso – 6/19 0659 – "We are Sports Radio 13-80 KHEY-AM El Paso" and into Fox Sports at 0700. Fair with good peaks; KGNU's IBOC was off, thankfully. (JW-CO)
- 1550 KAPE MO Cape Girardeau – 6/20 0405 – Poor. End of Fox News, "On Cape Radio 1550 and 100.3," and no usual WDLR! (JJR-WI)
- 1680 KRJO LA Monroe – 4/30 2056 – Fair with ad for local business Diva Connections, then ID as "Old School 1680," and into music. Heard while passing through Iowa City, it's my first new logging from my old stomping grounds since Dec. 2001. (RD-IA)



Tentative, Could Be, Might Be, Oh I Hope It Is

- 1260 WWMK OH Cleveland – 6/14 0503 – Tentative; good and usually atop mess with lots of "Radio Disney" IDs. (TK-MO) *Would WSDZ be more likely? - DY*

OK, It's Not DX Season, But There Is Radio Stuff You Can Do

Fix, refurbish, and upgrade your antennas. Go to the NRC web site at www.nrcdxas.org, and click the link for Publications, and browse the reprints section. You're bound to find an article on some kind of intriguing antenna. Go ahead, splurge and spend a buck to get the reprint.

Go through that backlog of cassettes or electronic recordings from last season to find that gem of DX you actually recorded last season.

July is officially Anti-Boredom Month. Celebrate by buying yourself a new radio. Seriously, buy a new radio (it doesn't have to be an expensive DX machine; a consumer grade radio will do) and resolve to spend time with it over next season doing some casual AM DXing. Be sure to report your results to *DX News* columns.

Get yourself a really, really good chair for your listening post. This will make a huge difference in your DX results. Don't be a cheapskate. Eight years ago I bought one of those Miller Aeron chairs for about \$600 at a discount office furniture place. It might have even been the genuine article. Though at the time \$600 was a dear price to pay, I figure I've parked my fanny in that chair for a minimum of ten hours a week since I got it in 2004. Overall, I've spent about 15 cents per hour.

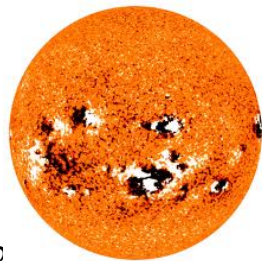
Give a kid a radio. The Sony ICF-S10MK2 pocket AM/FM is available many places for 10 bucks or less, and is sensitive enough to pick up a bit of DX. I've given it to a dozen or more kids. It takes with a few. You won't likely make BCB DXers out of them, but it will help keep a fading medium alive to a new generation. And you never know, you might be providing the spark for the next Wayne Heinen or Glenn Hauser.

Hope you all have a good summer. Stay cool, and see you next time. (JDT-WA)

Geomagnetic Summary May 1 2012 through May 31 2012

Via Phil Bytheway – Tabulated from email status daily.

Date	Flux	A	K	Space Weather	Date	Flux	A	K	Space Weather
5/1	110	4	1	no storms	5/17	136	6	1	moderate, S2, R1
2	116	5	3	no storms	18	132	8	2	minor, S1
3	114	8	3	no storms	19	131	5	1	no storms
4	114	4	1	no storms	20	131	13	2	no storms
5	116	4	4	minor, R1	21	125	7	2	no storms
6	117	5	0	minor, R1	22	121	16	3	no storms
7	122	4	1	minor, R1	23	117	18	2	minor, G1
8	123	9	4	minor, R1	24	116	8	2	no storms
9	127	24	4	minor, R1	25	117	6	1	no storms
10	131	12	4	moderate, R2	26	110	4	0	no storms
11	136	12	2	no storms	27	111	4	0	minor, S1
12	130	10	3	no storms	28	110	6	1	no storms
13	131	12	3	no storms	29	106	6	2	no storms
14	130	6	2	no storms	30	111	6	1	no storms
15	129	5	2	no storms	5/31	117	10	1	no storms
16	131	9	4	no storms					



Sx – Solar Radiation Storm Level / Gx – Geomagnetic Storm Level / Rx – Radio Blackouts Level

International DX Digest

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Loggings of stations outside the Lower 48 and Canada. All times UTC.

Trans-Atlantic DX

- 531 **ALGERIA** *Jil FM*, F'kirina Wilaya d'Oum El Bouaghi MAY 9 0000 – *Jil FM* ID, Arabic talk by man; fair. [Connelly*O-MA] MAY 26 0036 – Parallel to 549 with Bryan Adams tune and The Eagles "Hotel California." [Wolfish-NS]
- 549 **ALGERIA** *Jil FM*, Les Trembles JUN 29 0209 – Good; pop music, *Jil FM* ID. This and 1521 Saudi Arabia were the best and most consistent transatlantic signals during the month of June. Hardly a blip on the radar from 531 parallel tonight. [Conti-NH]
- 585 **SPAIN** *RNE1* Madrid MAY 24 0101 – News by man in Spanish; to fair peak through WEZE slop. [Connelly*Y-MA]
- 612 **MOROCCO** *SNRT* Sebba-Aioun MAY 9 0031 – Teletalk/interview with two men; poor. [Connelly*O-MA]
- 621 **CANARY ISLANDS//SPAIN** *RNE1* synchronos MAY 9 0028 – Man and woman in Spanish; fair. [Connelly*O-MA]
- 630 **TUNISIA** *RTT* Tunis MAY 26 0140 – Presumed the weak station here, all alone, with Arabic singing. [Wolfish-NS]
- 684 **SPAIN** *RNE1* Sevilla MAY 24 0031 – Man in Spanish; in *WRKO* slop. [Connelly*Y-MA]
- 720 **PORTUGAL** *RDP Antena 1* synchronos MAY 26 0158 – Poor with pop music. Matched up audio to webcast. [Wolfish-NS]
- 783 **MAURITANIA** *R.Mauritanie*, Nouakchott MAY 9 0030 – Man in Arabic; poor to fair. [Connelly*O-MA]
- 837 **CANARY ISLANDS//SPAIN** *COPE* synchronos MAY 9 0032 – Parallel 882 with pop-dance vocal; poor. [Connelly*O-MA]
- 837 **FRANCE** *France Info*, Nancy MAY 27 2357 – Weak and parallel to 1206 with Dixieland music. [Wolfish-NS]
- 882 **CANARY ISLANDS//SPAIN** *COPE* synchronos MAY 9 0030 – Fast Spanish talk by man; fair. [Connelly*O-MA] MAY 27 2357 – Cover of Elton John's "Your Song," ID that sounded something like "La noche de COPE." Station promo with James Bond theme and then pips on hourtop. Parallel 1215, 1224 and 1296 kHz. [Wolfish-NS]
- 890.96 **ALGERIA** *Chaîne 1*, Algiers MAY 9 0029 – Female vocal in *WAMG* slop; strong carrier but very light audio. [Connelly*O-MA]
- 909 **UNITED KINGDOM** *BBC Radio 5* synchronos MAY 9 0029 – To fair peak with BBC interview/report from field correspondent. [Connelly*O-MA]
- 918 **SPAIN** *R.Intercontinental*, Madrid MAY 9 0030 – Spanish talk, soft music; occasionally through 930 *WPKX* IBOC. [Connelly*O-MA]
- 945 **FRANCE** *France Info*, Toulouse MAY 9 0030 – Romantic female vocal, *France Info* theme, talk by woman; a bit better on USB against sporadic *WROL* slop versus LSB against constant-grind *WPKX* IBOC. [Connelly*O-MA]
- 954 **SPAIN** *Onda Cero*, Madrid, MAY 9 0029 – Excited Spanish talk by man; poor to fair. [Connelly*O-MA]
- 981 **ALGERIA** *Chaîne 2*, Algiers MAY 9 0000 – Two men in French, then a few notes on an electric organ; fair. [Connelly*O-MA]
- 999 **SAUDI ARABIA** *BSKSA R.Quran*, Tabuk MAY 9 0000 – Arabic vocal; under Spain. [Connelly*O-MA]
- 999 **SPAIN** *COPE* Madrid MAY 9 0028 – Abba "Knowing Me, Knowing You." 0031 man in Spanish then thumping dance music parallel 837, 882; good. [Connelly*O-MA]
- 1008 **CANARY ISLANDS** *Punto Radio*, Las Palmas MAY 27 2358 – Man and woman talking with cuckoo clock sounds in background. Mention of Canarias before hourtop. Five pips and ID on hour as "ABC Punto Radio" into noticias read by a man. [Wolfish-NS]
- 1035 **PORTUGAL** *Star FM*, Belmonte MAY 9 0054 – "Dizzy" by Tommy Roe, then man in Portuguese; fair. [Connelly*O-MA]
- 1053 **UNITED KINGDOM** *TalkSport* synchronos MAY 9 0100 – Poker advert, *TalkSport* ID; fair. [Connelly*O-MA]
- 1080 **IRAN** *IRIB R.Iran/VOIRI*, Abadan MAY 8 2359 – Koranic chant; under *SER* Spain and *WTIC*. [Connelly*O-MA]

- 1080 **SPAIN** *SER* synchros MAY 9 0000 – Parallel 1116 with pips, emphasis music, woman in Spanish; mixed with WTIC. [Connelly*O-MA] MAY 27 2359 – Weak under WTIC with interview in Spanish. Time pips at 0000. Parallel 1026, 1044, 1116 and 1179 kHz. [Wolfish-NS]
- 1088 **ANGOLA** *R.Nacional*, Mulenvos MAY 8 2346 – Female talk, slow music; about equal to 1089 and 1090 kHz. [Connelly*O-MA]
- 1089 **UNITED KINGDOM** *TalkSport* synchros MAY 9 0101 – Mention of "1089 and 1053 AM"; to good peak. [Connelly*O-MA]
- 1098 **SPAIN** *RNE5* synchros MAY 9 0000 – Pips, *R.Nacional de España* ID by man, news by woman; fair. [Connelly*O-MA]
- 1107 **SPAIN** *RNE5* synchros MAY 9 0029 – Man and woman in Spanish; fair. [Connelly*O-MA]
- 1116 **SPAIN** *SER* synchros MAY 8 2345 – Parallel 1179 with male vocal cover version of Dylan's "Blowin' in the Wind"; fair. [Connelly*O-MA]
- 1125 **SPAIN** *RNE5* synchros MAY 9 0059 – Parallel 1107 with classical violin music; fair. [Connelly*O-MA]
- 1134 **SPAIN** *COPE* synchros MAY 8 2345 – "Cadena COPE" ID, lounge-style female jazz vocal; good. [Connelly*O-MA]
- 1170 **UNITED ARAB EMIRATES** *R.Sawa*, Al Dhabiya MAY 9 0048 – Male vocal, dance orchestration; good, over WWVA after WFPB went off. [Connelly*O-MA]
- 1179 **CANARY ISLANDS//SPAIN** *SER* synchros MAY 8 2345 – Parallel 1116 with male vocal cover version of Dylan's "Blowin' in the Wind"; in 1170 WFPB slop. [Connelly*O-MA]
- 1179 **ROMANIA** *România Actualitati*, Galbeni-Bacau et al. MAY 9 0100 – End of Ray Charles "I Can't Stop Loving You" ('62), then ID, "Aici Bucuresti, Radio România Actualitati"; to good peak. [Connelly*O-MA]
- 1206 **FRANCE** *France Info*, Bordeaux MAY 9 0000 – Folk guitar, *France Info* theme, French news by woman; to good peak. [Connelly*O-MA]
- 1215 **UNITED KINGDOM** *Absolute Radio* synchros MAY 9 0030 – Genesis "Land of Confusion"; to good peak. [Connelly*O-MA]
- 1224 **SPAIN** *COPE* synchros MAY 8 2359 – Woman in Spanish; poor. [Connelly*O-MA]
- 1242 **FRANCE** *France Info*, Marseille MAY 9 0000 – Parallel 1206 with *France Info* theme; through WBUR slop. [Connelly*O-MA]
- 1278 **IRAN** *IRIB R.Iran*, Kermanshah MAY 9 0031 – Male a cappella Koranic chanting; up to good peak. [Connelly*O-MA]
- 1296 **SPAIN** *COPE* Valencia MAY 9 0030 – Fast Spanish talk by man; in jumble with Arabic station and others. [Connelly*O-MA]
- 1296 **SUDAN** *SNBC* Reiba MAY 9 0001 – Arabic news by man; dominant. [Connelly*O-MA]
- 1341 **NORTHERN IRELAND** *BBC R.Ulster*, Lisnagarvey MAY 9 0100 – Man with BBC Radio mention, then news by woman; to fair peak. [Connelly*O-MA]
- 1377 **FRANCE** *France Info*, Lille MAY 9 0000 – Rap music with sampling of "I've Got Rhythm," a few seconds of acoustic guitar, *France Info* theme music, French talk; loud! [Connelly*O-MA]
- 1413 **SPAIN** *RNE5* synchros MAY 9 0001 – Spanish news by woman; fair. [Connelly*O-MA]
- 1422 **GERMANY** *Deutschlandfunk*, Heusweiler MAY 9 0000 – Electronic sounder, *Deutschlandfunk* ID, pips; fair, over others. [Connelly*O-MA]
- 1449 **LIBYA** *Voice of Great Homeland*, Misurata, MAY 9 0001 – Man in Arabic; poor. [Connelly*O-MA]
- 1458 **ROMANIA** *România Actualitati*, Constanta, MAY 9 0000 – Pips, Romania mention into news; mixed with *Sunrise Radio*. [Connelly*O-MA]
- 1458 **UNITED KINGDOM** *Sunrise Radio*, Brookmans Park MAY 9 0002 – ID, advert "We apologise for any inconvenience"; popping up over Romania. [Connelly*O-MA]
- 1494 **CORSICA** *France Bleu*, Bastia MAY 9 0000 – French talk, music not parallel 1377 kHz. [Connelly*O-MA]
- 1503 **IRAN** *IRIB R.Iran*, Bushehr MAY 9 0001 – Male a cappella chant; fair. [Connelly*O-MA]
- 1512 **SAUDI ARABIA** *BSKSA* Jeddah MAY 9 0101 – A cappella Koranic male vocal; well over unID pop music station. [Connelly*O-MA]
- 1521 **SAUDI ARABIA** *BSKSA* Duba MAY 9 0001 – Arabic news with electronic 'stinger' sounds between items; loud. [Connelly*O-MA] JUN 29 0205 – Good; man reading news in Arabic. [Conti-NH]
- 1530 **ROMANIA** *România Actualitati*, Mihaileni & Mahmudia MAY 9 0059 – Parallel 1179 with Ray Charles "I Can't Stop Loving You"; over WVBF. [Connelly*O-MA]
- 1539 **UNITED ARAB EMIRATES** *R.Aap Ki Dunyaa*, Al Dhabiya MAY 9 0100 – Fanfare, "Aap Ki Dunyaa" ID; in Bahamas slop. [Connelly*O-MA]
- 1548 **KUWAIT** *R.Sawa*, Kabd-Kuwait City MAY 9 0059 – Pop female Mideast vocal; to good peak. [Connelly*O-MA]



- 1557 **FRANCE** *France Info*, Fontbonne MAY 9 0000 – Parallel 1377 with music, France Info theme, woman in French; good. [Connelly*O-MA]
- 1575 **UNITED ARAB EMIRATES** *R.Farda*, Al Dhabiya MAY 9 0000 – *R.Farda* ID; fair. [Connelly*O-MA]
- 1575 unID MAY 9 0001 – A cappella male chanting (Koranic?); mixing with UAE. Iran trying to jam? [Connelly*O-MA]
- 1584 **CEUTA** *RadiOlé*, Ceuta MAY 8 2345 – Non-SER operatic female Spanish vocal, talk ID'ed as *RadiOlé* per RealDX audio clip. [Connelly*O-MA]

Pan-American DX

- 530 **CUBA** *R.Enciclopedia*, Villa María MAY 24 0100 – Usual soft music, Spanish talk by woman. [Connelly*Y-MA]
- 570 **CUBA** *R.Relej*, Santa Clara MAY 17 0101 – Relej news, ticks, beeps; over WMCA. [Connelly*Y-MA]
- 600 **CUBA** *R.Rebelde*, San Germán MAY 24 0103 – 9-note sounder chimes, Rebelde mention parallel 670 et al.; good. [Connelly*Y-MA]
- 610 **CUBA** *R.Rebelde*, multiple sites MAY 24 0103 – 9-note sounder chimes, parallel 670 et al.; over WIOD. [Connelly*Y-MA]
- 620 **CUBA** *R.Rebelde*, Colón MAY 24 0103 – 9-note sounder chimes, parallel 670 et al.; over jumble. [Connelly*Y-MA]
- 630 **CUBA** *R.Progreso*, multiple sites MAY 24 0059 – Hollies "On a Carousel" parallel 640, 650; under WPRO. [Connelly*Y-MA]
- 640 **CUBA** *R.Progreso*, two sites MAY 24 0012 – Hollies "On a Carousel" parallel 630, 650; over CBN and YVQO. [Connelly*Y-MA]
- 650 **CUBA** *R.Progreso*, Ciego de Avila MAY 24 0012 – Hollies "On a Carousel" parallel 630, 640; dominant. [Connelly*Y-MA]
- 670 **CUBA** *R.Rebelde*, multiple sites MAY 24 0103 – 9-note sounder chimes, parallel 600 et al.; good. [Connelly*Y-MA]
- 690 **BRAZIL** ZYH587 *R.Shalom*, Fortaleza MAY 26 2335 – Religious music. MAY 28 0001 – ID and promo mentioning their new 25 kW power. Thanks to RealDX for deciphering promo. [Wolfish-NS]
- 690 **COLOMBIA** HJCZ *R.Recuernos*, Bogotá MAY 24 0101 – Slow song, talk, "esta es Recuerdos... ocho de la noche"; over others. [Connelly*Y-MA]
- 710 **CUBA** *R.Rebelde*, multiple sites MAY 24 0103 – 9-note sounder chimes, parallel 670 et al.; under WOR. [Connelly*Y-MA]
- 720 **NICARAGUA** *R.Catolica*, Managua JUN 3 1033 – Spanish female choir within morning services. Quickly fading. [Krueger-FL]
- 750 **VENEZUELA** YVKS RCR Caracas MAY 24 0032 – Venezuelan political talk, "Radio Cadena Radio" ID; way over Cuba. [Connelly*Y-MA]
- 760 **BRAZIL** ZYH588 *R.Uirapuru*, Fortaleza MAY 27 2350 – Presumed with what sounded like Portuguese gospel music. Ran over hourtop without IDing. Good signal. [Wolfish-NS]
- 760 **COLOMBIA** HJAJ RCN Barranquilla MAY 24 0028 – RCN ID, excited talk; dominant. [Connelly*Y-MA]
- 770 **COLOMBIA** HJXX RCN Bogotá MAY 9 0029 – Sports shouting parallel 760 including "goooooal!"; way under WABC but still audible. [Connelly*O-MA]
- 770 **CUBA** *R.Rebelde*, Victoria de las Tunas MAY 24 0103 – 9-note sounder chimes, parallel 670 et al.; under WABC. [Connelly*Y-MA]
- 790 **CUBA** *R.Relej*, Pinar del Río and Holguín MAY 17 0012 – Relej news, ticks, beeps; over WPRV. [Connelly*Y-MA]
- 800 **BONAIRE** PJB *TransWorld Radio*, Kralendijk MAY 24 0030 – Folk guitar, then ID "Radio Transmundial... Bonaire, Antillas Holandesas"; mixed with WNNW. [Connelly*Y-MA]
- 800 **BRAZIL** ZYJ457 *Radio MEC*, Rio de Janeiro MAY 28 0002 – Faded up over VOWR with ID by man and synthesizer sound jingle which seemed to be start of a program. [Wolfish-NS]
- 810 **COLOMBIA** HJCY *Caracol Radio*, Bogotá MAY 24 0030 – Advert with ringtones parallel 1090, 1100, 1170; under CJVA and WGY. [Connelly*Y-MA]
- 819.54 **COLOMBIA** HJAD Cartagena MAY 24 0032 – Tentative. Man in Spanish, ID sounded like Radio Vigia; somewhat splittable on LSB from 820 St. Kitts. [Connelly*Y-MA]
- 820 **ST. KITTS & NEVIS** TBN *R.Paradise*, Charlestown MAY 9 0030 – "This is the Trinity Broadcasting Network"; good. [Connelly*O-MA]
- 840 **BRAZIL** ZYK687 *R.Bandeirantes*, São Paulo MAY 27 2358 – Poor with talk in Portuguese by man and time pips heard. [Wolfish-NS]
- 840 **HAITI** *Radio 4VEH*, Cap Haitien MAY 9 0031 – Male French hymn; to good peak. [Connelly*O-MA]
- 850 **BRAZIL** unID MAY 27 2358 – Something in Portuguese, but lost to WEEL. [Wolfish-NS]

- 860 **BRAZIL** ZYJ459 *Radio CBN*, Rio de Janeiro MAY 27 2357 – Talk about Formula One racing. ID as CBN at hourtop. Station promos mentioning "futebol CBN" and "CBN Madrugada," then mentioning AM and FM frequencies. Fair-good signal. [Wolfish-NS]
- 880 **BRAZIL** ZYL275 *R.Inconfidencia*, Belo Horizonte MAY 27 2357 – Station promos heard before hourtop. Lost to WCBS by 0000. [Wolfish-NS]
- 900 **CUBA** *R.Progreso*, San Germán MAY 17 0030 – Good with talk, "Radio Progreso, cadena nacional, la onda de la alegría, transmitiendo desde la Habana, Cuba." [Connelly*Y-MA]
- 910 **CUBA** *R.Metropolitana*, Villa María JUN 10 1631 – Very good with female announcer, into "Till the World Ends" by Britney Spears, "Club Rocker (Play & Win Radio Version)" by Inna, "Late Friday Night (T.G.I.F.)" by Katy Perry and other pop-tart songs in top dance hits of the week countdown, reverbing female DJ hosting between every couple of tracks. Finally something in at least Spanglish – albeit another lousy one – "Tengo Tu Love" by Sie7e. Reverbing male mentioned "Studio 91" (or maybe "Estudio 91" – those "e's" are often almost silent) at 1652, maybe the show name, into a real all-Spanish lyrics song, "Bienvenido" by – hark! My new love Laura Pausini (see 1120 Mexico log about her). Into Noticiero Nacional de Radio news pick-up at 1700 (1 p.m.). So much for their incredibly slow-loading website schedule at www.radiometropolitana.cu, obviously wrong for at least Sunday. NNdR ended late at 1730:30, quick Metropolitana ID, into way better Spanish salsa/pop now. [Krueger-FL]
- 940 **BRAZIL** ZYJ453 *Super R.Brasil*, Rio de Janeiro MAY 28 2358 – Promo or a spot with a kid and ID. Sounded like a hymn before hourtop. And sounded like a religious program after 0000. [Wolfish-NS]
- 940 **PUERTO RICO** WIPR *Máxima 940*, San Juan MAY 9 0100 – "San Juan... Maxima... nueve cuarenta"; good. [Connelly*O-MA]
- 950 **CUBA** *R.Relej*, two sites MAY 17 0030 – Relej news, ticks, beeps; mixed with domestics. [Connelly*Y-MA]
- 960 **CUBA** *R.Relej*, Guantánamo MAY 24 0031 – Relej news, beeps, ticks; hetted by something on 960.17 kHz. [Connelly*Y-MA]
- 980 **BRAZIL** ZYH707 *R.Nacional*, Brasilia MAY 27 2358 – Presumed with man with lots of echo in his voice. Poor. [Wolfish-NS]
- 980 **CUBA** *R.Relej*, Moa MAY 24 0102 – Relej ticks, "RR" beeps; just a bit under WCAP. [Connelly*Y-MA]
- 1000 **BRAZIL** ZYK522 *R.Record*, São Paulo MAY 9 0030 – Woman in Portuguese; poor to fair. [Connelly*O-MA]
- 1000 **COLOMBIA** HJAJ RCN Cartagena MAY 24 0100 – Parallel 760 with net ID, "Esta es RCN... la radio... noticias"; very good. [Connelly*Y-MA]
- 1010 **BRAZIL** ZYH625 *Radio CBN*, Fortaleza MAY 8 2345 – Two men in Portuguese; under WINS. MAY 9 0102 – Woman in Portuguese, then man with "CBN" net ID; over (!) WINS. [Connelly*O-MA] MAY 28 0000 – Same ID and fanfare as on 860. Mixing with WINS. [Wolfish-NS]
- 1020 **CUBA** *R.Relej*, Victoria de las Tunas MAY 24 0100 – Relej ticks, beeps; under unID station with Latin American tropical music. [Connelly*Y-MA]
- 1040 **BRAZIL** ZYK537 *R.Capital*, São Paulo MAY 27 2358 – Upfaded with "Capital" promos by man with a lot of reverb on his voice. Promo with "In The Mood Music" at 0001. [Wolfish-NS]
- 1039.61 **VENEZUELA** YVLB *La Voz de Carabobo*, Valencia MAY 24 0100 – Fast Spanish talk with Venezuela mentions; fair on LSB to split from 1040 jumble. [Connelly*Y-MA]
- 1070.122 unID MAY 24 0030 – Fast Spanish talk by man; occasionally splittable on USB from 1070 jumble. [Connelly*Y-MA]
- 1090 **COLOMBIA** HJBC Cucuta MAY 24 0030 – Parallel 810, 1100, 1170 with telephone ring tones as part of advert; mixed with YVSZ and WBAL. [Connelly*Y-MA]
- 1090 **VENEZUELA** YVSZ *Union Radio*, Caracas MAY 24 0029 – *Union Radio* ID; mixed with WBAL and HJBC. [Connelly*Y-MA]
- 1100 **BRAZIL** ZYK694 *R.Globo*, São Paulo MAY 27 2358 – Portuguese talk-sounding like a discussion between two men. Seemed to go over 0000 without ID but there may have been time pips. Decent signal except for right at the hourtop. [Wolfish-NS]
- 1100 **COLOMBIA** HJAT *Caracol Radio*, Barranquilla MAY 24 0030 – Parallel 810, 1090, 1170 with telephone ring tones as part of advert; dominant. [Connelly*Y-MA] JUN 3 1001 – Excellent on peak as is sunrise approaching with ID's and "primera cadena radio colombiana" slogan. Ad block from 1009 comprised of mostly Bogotá stores and companies. [Krueger-FL]
- 1120 **MEXICO** unID JUN 9 1025 – Tentatively Mexico, anyway. Soft Spanish smooth jazz-type vocal, male announcer 1029, then signal faded. But at 1037, "Venus" by Frankie Avalon faded up, segued into "Sunny" by Bobby Hebb at 1039, then at 1041, "Non C'è" sung in



- Italian by previously unknown to me Italian-born Laura Pausini, which my iPhone's SoundHound app (a great music ID tool when DXing) identified, and being on her debut album released in Italy. She's now 38, big in Italy since beginning her career in the early-90's, and even bigger in Latin America after issuing several albums in Spanish. Seemed an odd song choice to follow the previous two. Pretty much lost the signal after this, with KMOX sports talk dominating till they too faded out a little after 1100. No U.S. stations that should be audible at this time are listed with an oldies format, but that's what I presumed this set of songs must be sourcing from, until re-checking the next morning. JUN 10 1014 – Tune-in to soft vocal in English by female, Spanish male announcer, signal fade. But back up at 1023 with John Lennon's "Beautiful Boy" from the 1980 "Double Fantasy" album, then male announcer mentioning, "...música ---dente" into Spanish female vocal (no SoundHound matches this time). At 1030, male again mentioned, twice, a slogan seemingly ending in "---dente" and signal lost by 1033, local sunrise enhancement not allowing the signal to hold through any potential Mexican anthem around 1100. JUN 11 1020 – "Diary" by Bread, segued into unidentified English female singer, segued into Spanish female vocal, signal lost 1030. LOB is roughly W/WNW. Very unusual format, if a Mexican, and no slogan or format seems to fit in Fred Cantú's online list. [Krueger-FL]
- 1121 **CUBA** unID JUN 4 1620 – I've been hearing this one for a few weeks, never any audio, seemingly carrier only or nearly no modulation in use. Prompted to get a better DF on it after Gerry Bishop, David Crawford and Paul Zecchino from the other corners of the state also confirmed hearing it. For me, it seems to be around 210° at local high noon, putting it maybe in Pinar del Río province. Paul – probably more accurate – gets a LOB much farther east of this, slightly west of Santa Clara and east of Cienfuegos. Smack on 1121.00 and no sign of anything Cuba otherwise on 1120 proper, daytime or nights here. [Krueger-FL]
- 1129.9 unID MAY 24 0030 – Het growl against WBBR, also something appearing on 1129.95 kHz. [Connelly*Y-MA]
- 1130 **BRAZIL** ZYJ460 *R.Nacional*, Rio de Janeiro MAY 9 0000 – Musical fanfare, *R.Nacional* ID, man in Portuguese; under WBBR. [Connelly*O-MA] MAY 27 2359 – Jingle and ID mentioning power heard before hourtop. Also a second station with Barbara Streisand's "Woman in Love" as well as WBBR. [Wolfish-NS]
- 1140 **CUBA** *R.Mayabeque*, La Salud JUN 3 1708 – Tune-in to Noticiero Nacional de Radio news feed pickup, exiting it at 1729 and change with *R.Mayabeque* interval signal thrice, ID by female, into Cuban pop vocals. Seems common for those who pick up this feed to exit NNdR a bit early during the NNdR synthesizer theme at the conclusion (also used at the opening). Maybe because it appears to originate via the Rebelde network, and they don't want to capture a Rebelde ID. [Krueger-FL]
- 1140 **CUBA** *R.Rebelde*, multiple sites JUN 29 0901 – Signature organ music parallel 600 and 1620; heard through WRVA. [Conti-NH]
- 1150 **BRAZIL** ZYK656 *Super R.Tupi*, São Paulo MAY 28 0000 – Mentions of Brasil and São Paulo. Hourtop ID: "Super Radio 97.3, Super Radio 1150, Super Radio Tupi, São Paulo." Best in USB to avoid splatter from local 1140 CBI. [Wolfish-NS]
- 1160 **BERMUDA** VSB3 Hamilton MAY 17 0030 – Good with talk "As the Queen celebrates the Diamond Jubilee, the BBC examines the effects she has had on people around the world," and "The Royal Visit, part of London Calling on air and online from the 26th of May on the BBC." [Connelly*Y-MA]
- 1170 **COLOMBIA** HJNW *Caracol Radio*, Cartagena MAY 24 0030 – Advert with ringtones parallel 810, 1090, 1100; just a bit under WFPB. 0045 man and woman with Spanish news about Colombia and the city of Cartagena; dominant after WFPB went off. [Connelly*Y-MA] JUN 3 1013 – Perfectly parallel and almost as good as 1100 kHz. [Krueger-FL]
- 1180 **CUBA** *R.Rebelde*, multiple sites MAY 24 0030 – Cuban news; loud. [Connelly*Y-MA]
- 1190 **CUBA** *R.Sancti Spiritus*, Trinidad JUN 3 0954 – Nice traditional Cuban vocals with flutes, canned ID by man with chimes, "CMHT Radio Sancti Spiritus" at 1059. Good. [Krueger-FL]
- 1210 **CUBA** *R.Caribe*, La Fe, Isla de la Juventud JUN 12 0027 – Fading up atop all the others with the usual canned male/female ID over steel pan music bed, parallel weaker and 2012 WRTH listed 1220 kHz. [Krueger-FL]
- 1210.1 unID JUN 11 1038 – Threshold, Spanish vocals. Carrier is always slightly warbly, USB to avoid as much of WNMA Miami Springs (Spanish format) as possible. It's been here forever, as there are entries in my logbook from September and October, 2010 and October, 2011. Rebelde also present and weak, but spot on 1210, so not them. Suspect something Central American or maybe Mexican. [Krueger-FL]
- 1220 **BRAZIL** ZYJ458 *R.Globo*, Rio de Janeiro MAY 9 0000 – "Globo noticias"; good. [Connelly*O-MA] MAY 27 0003 – Wolf whistle sounds and station promos. Good. MAY 27 2357 – Sounded like futebol highlights. Shouted ID on hourtop. Followed by spots. Good signal. [Wolfish-NS]

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- 1280 **BERMUDA** VSB2 Hamilton MAY 17 0030 – Old-fashioned choral hymn with piano; dominant. [Connelly*Y-MA]
- 1280 **BRAZIL** ZYJ455 *Super R.Tupi*, Rio de Janeiro MAY 27 0001 – Two men with a lively discussion. Fair signal. [Wolfish-NS]
- 1290 **CUBA** *R.Enciclopedia*, Guanabacoa JUN 3 1102 – Extremely poor and fading out fast, parallel 530. Another one that's mostly unlisted on Cuba list references. [Krueger-FL]
- 1290 **MEXICO** unID JUN 3 1100 – Threshold with choral Mexican anthem, no hope for ID. Someone else in the mix with frequent and annoying gong-like chimes (not to be confused with the different-sounding and usually Sunday-only *R.Relej* Cuba chimes). [Krueger-FL]
- 1290 **VENEZUELA** YVKF *R.Puerto Cabello*, Puerto Cabello MAY 27 2359 – ID and station promos mentioning "doce noventa." [Wolfish-NS]
- 1309.68 **COLOMBIA** HJAK *La Voz de la Patria*, Barranquilla MAY 24 0030 – Suspect this as source of het growl; too much WLOB to pull audio. [Connelly*Y-MA]
- 1520.14 **COLOMBIA** HJLQ *R.Minuto*, Barranquilla MAY 24 0029 – Man with Spanish preaching; briefly getting by WWKB. [Connelly*Y-MA]
- 1540 **BAHAMAS** ZNS1 Nassau MAY 24 0031 – Bahamas tourism discussion; excellent. [Connelly*Y-MA]
- 1540.42 unID MAY 9 0000 – Weak het against Bahamas. [Connelly*O-MA]
- 1550 **CUBA** *R.Rebelde* synchros MAY 24 0030 – Rebelde talk parallel 1620; dominant. [Connelly*Y-MA]
- 1580 **COLOMBIA** HJQZ *R.Maria*, Barranquilla MAY 24 0101 – "Esta es Radio Maria," majestic classical music; fair to good. [Connelly*Y-MA]
- 1580 **COLOMBIA** HJRM CARACOL Sincelejo MAY 24 0031 – Advert parallel 1100; overtaking HJQZ *R.Maria*. [Connelly*Y-MA]
- 1610 **ANGUILLA** *Caribbean Beacon*, The Valley MAY 8 2346 – Male U.S. preacher, large hall acoustics; to good peak. [Connelly*O-MA]
- 1620 **CUBA** *R.Rebelde* synchros MAY 17 0030 – Cuban anthem parallel 1180; good. [Connelly*Y-MA] JUN 29 0901 – Fair; signature organ music and ID, "Rebelde la habana, emisora de la revolución," parallel 600 kHz. [Conti-NH]

Contributors

Mark Connelly WA1ION, Orleans and South Yarmouth MA; Microtelecom Perseus, cardioid-pattern Micro-SuperLoop on car roof, square, 2 m per side, with 9:1 xfmr on east bottom corner to speaker wire to 2:1 xfmr to W7IUV transfer amp, and 9:1 xfmr on west corner to speaker wire to 500 ohm null-adjust potentiometer.

Bruce Conti WPC1CAT, Nashua NH; WiNRADiO Excalibur, 7 x 19.5-m variable termination Split SuperLoop at 60°, 15 x 23-m variable termination north/south SuperLoop.

Terry L. Krueger, Clearwater FL; NRD-535, Icom IC-R75, Sangean PR-D5; 1 X roof dipole, 1 X room random wire.

Niel Wolfish, Louisbourg NS; WiNRADiO Excalibur G31DDC with Wellbrook Loop.

International News

FIJI: *R.Fiji One/Domoiviti* has shutdown all mediumwave except 558 kHz which is the only AM station listed on its website in addition to FM 92.8, 93, 93.2, and 93.4 MHz. Shutdown including 10 kW stations on 639 and 684 kHz confirmed by Bryan Clark of the New Zealand Radio DX League. 639 was once a regular many mornings on the west coast, and provided enjoyable Fijian music and programming. [Walt Salmaniw, *coastalroundtable*]

IRELAND: *Spirit Radio* has been testing on 549 kHz, heard in parts of the UK. See aerial rigger Brian giving you a short tour of the 200-ft transmission mast near Emyvale, Co Monaghan, Ireland, at www.youtube.com/watch?v=Zwf5hk6SCyU. [Mike Terry, *mwdx*]

MEXICO: I asked Julián Santiago Díez de Bonilla, DF, about the new x-bander on 1650 in the DF, is it still operating? Apparently never has made it to the USA. He replied June 4, "XEARZ 1650 was on the air for three days from May 1 and then went off the air. It has not been possible to obtain any info about this." [Glenn Hauser, *DX Listening Digest*]

VATICAN: 1530, 1611, and shortwave parallels are now history. In a public address, Fr. Federico Lombardi, Director General, announced new strategies, "After celebrating its 80th birthday last year, Vatican Radio is ready to open a new chapter in its history by committing its message of service to the Gospel and the Church to new communication technologies... On July 1st, short and medium wave broadcasts from Vatican Radio's Santa Maria di Galeria Transmission Centre, to most of Europe and the Americas, will be suspended. These areas of the world are already well served by Vatican Radio's local rebroadcasting partners and by widespread internet access to its services and language programming." [www.news.va]



DX Tool Box

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Improving your DX skills – tips from new and veteran members

Greetings once again from the Heart of the Continent and welcome to the DX Tool Box, column number 41.

We have a letter passed on to me from a member this time around. John R. Wallace, Sr., I 170 Ballantyne Road, Syracuse NY 13205-2073 (USA) has sent in an information request about storage boxes for *DX-News*:

1. I've been a *DX-News* subscriber/National Radio Club member for a number of years.
2. As such, I have kept my *DX-News* issues.
3. I'm looking now for a more satisfactory type of container, 'box', to keep them in.
4. Because they're only about 5" x 8" tall, they're really too small to store in Princeton Files (Bankers' Boxes).
5. A while ago, I believe you might have advertised, (though I haven't seen it lately), a kind of small acrylic box manufactured by a company, Marbian Co. However, when I looked them up on the Internet, I could not find this product.
6. Would you sell anything directly or have any suggestions?
7. Any and all information will be much appreciated.

He is correct in saying that the Marbian Co. no long seems to be around. I have checked all over and found nothing.

When I received my NRC *DX News* in a paper format I did store them in Bankers' boxes or file cartons. It was not a satisfactory way as the issues often got mixed up if you made them two rows high in the box. I had to tie up each year's issues to keep them in a more orderly fashion.

NRC does not sell storage boxes, but I do have some other ideas that may work:

1. IKEA sells a box in their Kasset line that may be useful. It is 6" x 8.25" x 11" in size, so the *DX News* issues he wants to store will fit.
2. The Rubbermaid Roughneck storage box is a bit bigger than the IKEA box above but would work well too. Look for the 3 Gallon sized unit with the snap on lid.
3. A company called U Line Shipping Supply at http://www.uline.ca/cls_04/Boxes-Corrugated sells a ton of boxes in sizes to fit almost every need you could want.
4. Also in the box business, but see-through plastic instead of cardboard construction, is Clearbags at <http://www.clearbags.com/box/> This company also sells a myriad of sizes that should be able to meet your needs.
5. Finally there is Corrugated Boxes USA at <http://www.corrugatedboxesusa.com/>. They too have tons of sizes of cardboard boxes for sale.

I must say that other than IKEA and Rubbermaid I have no idea how good the other companies are as I have no experience with them personally. You can try a Google search for cardboard boxes and your town/city name to see if you have a local supplier. Also a quick peek in the Yellow pages of your local phone book under boxes or cartons will also give you some choices. As for John's location, a Google search came up with Uncommon Cartons, 2100 Park Street, in Syracuse NY. They may be able to help you out, John.

In my radio room I have multi-coloured cardboard boxes with lids that slip onto the boxes that I use to store my QSL collection. They look great and cost me \$2.00 each at a local dollar store here in Winnipeg that had several sizes in stock.

SDR Loggings and Tips

We have a bunch of March 10 and March 12 loggings from Kraig Krist in Manassas VA that we'll run as space is available.

From Mark Durenberger, here are loggings from a May 2012 DXpedition in eastern Utah (grid square DM59JC).

Receiver: Perseus SDR. Antenna: 1800-foot Beverage, elevated 3 feet; oriented SE—NW

#1: May 4, 2012 1900 ELT (that's 7 p.m. MDT – still lots of daylight)

(Semi-respectable daytime catches are in **BOLD**)

540 KNMX Las Vegas, NM

550 KRAI Craig, CO

580 KUBC Montrose, CO

600 KROD El Paso, TX

620 KJOL Grand Junction, CO

650 KMTI Manti, UT

660 KTNN Window Rock, AZ

670 KBOI Boise, ID

690 KGRS Rifle, CO	1160 KSL Salt Lake City, UT
710 KFIA Carmichael, CA	1170 KFAQ Tulsa, OK
740 KVFC Cortez, CO	1190 KXKS Albuquerque, NM
750 KOAL Price, UT	1200 WOAI San Antonio, TX
760 KKZN Thornton, CO	1210 KGYN Guymon, OK
770 KKOB Albuquerque, NM	1240 KSLV Monte Vista, CO GY!
780 KKOH Reno, NV	1250 KNEU Roosevelt, UT
800 KBRV Soda Springs, ID	1260 KTRC Santa Fe, NM
810 KSWV Santa Fe, NM	1270 KPDA Twin Falls, ID
820 KUTR Salt Lake City, UT	1280 KZNS Salt Lake City, UT
850 KOA Denver, CO	1300 KLER Orofino, ID
860 KKAT Salt Lake City, UT	1310 KFKA Greeley, CO
880 KHAC Tse Bonito, NM	1330 KCKM Monahans, TX
910 KWDZ Salt Lake City, UT	1350 KABQ Albuquerque, NM
920 KVEL Vernal, UT	1390 KHOB Hobbs, NM
940 KIXZ Amarillo, TX	1430 KLO Salt Lake City, UT
950 KDCE Espanola, NM	1440 KTNO University Park, TX
960 KOVO Provo, UT	1460 KZNT Colorado Springs, CO
980 KMIN Grants, NM	1510 KOAZ Isleta, NM
990 KSVP Artesia, NM	1520 KOKC Oklahoma City, OK
1000 KKIM Albuquerque, NM	1530 KFBK Sacramento, CA
1010 KIHU Tooele, UT	1550 KIVA Albuquerque, NM
1020 KCKN Roswell, NM	1580 KMIK Tempe, AZ
1030 KBUF Holcomb, KS	1590 KELP El Paso, TX
1040 KCBR Monument, CO	1600 KRKE Albuquerque, NM
1050 KTBL Los Ranchos, NM	1620 WTAW College Station, TX
1060 KDYL Salt Lake City, UT	1630 KKGW Fort Worth, TX
1080 KSSL Price, UT	1640 KBJA Sandy, UT
1100 KNZZ Grand Junction, CO	1650 KSVE El Paso, TX
1120 KANN Roy, UT	1700 KCLF Richardson, TX

Band was pretty noisy; stations still on day power. Salt Lake City stations covered some channels not heard until later. Note the "W" call on 1620 ... West of the Mississippi River!

Bits and Bites from the NRC listserv:

From: Shawn Axelrod amandx@mymts.net Subject: LOOKING FOR A CALLSIGN

If you are interested in getting a callsign for your monitoring station, *Popular Communications* is now issuing callsigns for SW's and DX'ers. These are like the old calls that were issued years ago by Hank Bennett and friends. Go to: <http://www.popcommmonitors.blogspot.ca/> and follow the instructions. It was easy to do and I was registered in 24 hours so I could print off my certificate with my new callsign VEPC4SWL. It's a fun thing to do when the DX is poor. 73 Best of DX Shawn Axelrod VE4DX1SMA, VEPC4SWL Winnipeg MB

This is a new way to lose an antenna...sorry to hear about it

From: Ira Elbert New III ien3@hotmail.com Subject: Gone With the Wind...with a little help from a riding mower.

My 135' Long Wire Antenna is no more. It was down and I didn't see it in time. The mower sucked it up, wrapped it around the blades a couple of times, and then it was no more. It was ripped in two and even ripped from the balun at the feed point. I know I haven't been burning up the dials lately, but I was thinking this year might be different once summer rolled around. Now I need to figure something else out. Anyone have a really tall ladder I can borrow? KI4SYC Ira Elbert New, III Watkinsville, Georgia Proudly Serving You Since 1964.

From: Ira Elbert New III ien3@hotmail.com Subject: Antenna Options

In an effort to save space and the appearance of my backyard, I'm thinking of putting up just one antenna up for both MW and Amateur Radio. I could put up an 80m Dipole, but I might even see about a 160m Dipole. Any thoughts or opinions on the matter would be appreciated. Does anyone else use just a single antenna? Ira Elbert New, III Watkinsville, Georgia.

From: Bob Young bobyoun53@hotmail.com Subject: Re: Antenna Options

I have used a 160 M dipole for both receiving and transmitting on the ham bands and receiving MW. The 160M dipole is quiet and has a lot of gain for MW (it's a little directional especially on the high end) and with a tuner can be used for 160M-10M with your transmitter. Get a good phaser and a LW and you got yourself a steerable high gain MW system. Bob Young Millbury, MA KB1OKL

From: "Frederick R. Vobbe" fvobbe@realoldiesradio.com Subject: Re: Antenna Options

I use a TTFD on 80-10 ham, and it works great for MW DX too. Just a little less signal off the ends. Fred.

From: d1028gary@aol.com Subject: 9.1 Foot (2.8 Meter) Medium Wave Box Loop Demonstration Video

Hello All, For those interested in fanatical antenna experimentation, a demonstration video of the 9' sided PVC-framed MW box loop here has been uploaded to YouTube at <http://www.youtube.com/watch?v=sucVAdOKkkl> This antenna was the largest of the box loops made here in the 2009 experimentation, and was used to receive several TA's on a barefoot Ultralight radio here on the west coast during the 2009 Fall season. The video demonstrates its inductive coupling gain to a barefoot Sony ICF-2010 receiver, boosting the signal of fringe AM day timer 1070-CFAX in Victoria, B.C.(10 kW at 99 miles) from no LED signal indication (barely above the noise level) up to all 10 signal LED's lit up on the ICF-2010. 73 and Good DX, Gary DeBock (in Puyallup, WA, USA)

Subject: 4 Foot Portable MW Tuned Passive Loop Demonstration Video

Hello All, Designed to allow apartment dwellers and others to enjoy medium wave DX'ing with a large, effective box loop, a portable 4' PVC-framed loop has been developed which will fit easily in a cramped car trunk (or closet) when disassembled. This tuned passive loop (and its PVC base) can easily be assembled within a couple of minutes, and was the antenna used to receive 30 South Pacific DX stations (from Tahiti, New Zealand, Australia, Fiji and Tonga) on a \$50 Ultralight radio during the August 2010 Lincoln City (OR) DXpedition. At a \$50 construction cost, it is designed to provide maximum DX'ing fun for the cost. A demonstration video of the loop's 2 minute assembly and DX'ing effectiveness has been uploaded to <http://www.youtube.com/watch?v=auu3OGI8rgk&feature=plcp> In the video, the theory behind the loop's constant symmetry is explained, and a weird antenna fanatic assembles the loop and base quickly. The assembled 4' PVC loop then demonstrates its inductive coupling gain on a barefoot Sony ICF-2010 model, boosting the signal of fringe Canadian daytimer 1070-CFAX (10 kW at 99 miles) from no signal LED's at the noise level up to a strong-signal 8 LED level. This portable 4' PVC loop is a variant of the fixed 4' model described in the detailed PVC Loop experimental article kindly posted by Craig Healey at <http://www.am-dx.com/ThePVCLoopOverallArticle.pdf> For those interested, detailed construction procedures for this portable 4' version should be available shortly. 73 and Good DX, Gary DeBock (in Puyallup, WA, USA)

This Month's DX Tool Box Web Site is:

The Information Station Specialists is our site of the month. They are located at:

<http://www.theradiosource.com/index.htm>

YES this is a commercial site and NO I am not promoting their products in any way. What is interesting about the site for me is the site map that they have. Go to the bottom of the page (The top link is sometimes flakey) and click on the SITE INDEX link. This will take you to a long list of articles on the site's pages. The three pages I found of use to BCB DX'ers were:

<http://www.theradiosource.com/nps-stations.htm> A list of National Parks stations

<http://www.theradiosource.com/articles-news-ears-across-america.htm> A list of Alert stations

<http://www.theradiosource.com/articles.htm> Articles on all sorts of stations.

These are nice listings of stations they have set up. It might help out on some of those UNID stations we all have in our log books. The lists are not complete lists for TIS/HAR stations in any way but it is a nice listing of stations that are known to exist as the company has done the installs. Also the stories of the stations as well as picture and maps of transmitter locations is a great help in the articles section.

73 for this time Shawn

Remember On A Clear Day You Can Hear Forever



Follow @NRCDXNews on Twitter!



Twitter can be used to disseminate hot MW DX tips to the DX community

To read tips: go to www.twitter.com and search for #mwdx

To send tips, write a tweet (140 characters max) and include the tag #mwdx

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FSL Antenna Design Optimization

All-out Experimentation to Determine Weak-Signal Performance Potential

By Gary DeBock, Puyallup WA, USA March 2012

Introduction: The publication of Graham Maynard's ferrite sleeve antenna article in March of 2011 kicked off a torrent of experimentation in the Ultralight radio enthusiast group, as hobbyists quickly discovered the DXing potential of the new design. Massive orders were placed for Russian surplus ferrite and Chinese Litz wire, while wholesale lots of swimming floatation aides were drafted into service as ferrite padding material. Each individual experimenter had his own ideas about FSL design, and backed them up with serious financial outlays. Multiple design optimization questions went unanswered in the process, but since the new antennas seemed to be working fairly well for everyone, attempts to bridge opinion gaps were few and far between.

One school of thought held that coil diameter was the most important gain factor, while another was that ferrite size and weight was paramount. Ferrite rod versus ferrite bar opinions were also diverse, and even Litz wire variables became part of the controversy. Any newcomer wishing to build an FSL antenna had no shortage of advice – the only problem was which advice to follow.

This experimental free-for-all continued for a full year, with various (and diverse) FSL antenna designs published in the process. The performance variables needed to be sorted out in detailed A/B experimentation, conducted by an experimenter with a completely open mind, and with no axe to grind. Although all of my previously-published FSL designs had been based on ferrite rod components, I recalled that a large supply of Russian surplus 100mm x 20mm x 3mm ferrite bars had been received here for some time, and had gone unused. In a serious effort to bridge opinion gaps and provide complete clarity to the design factors influencing any FSL's weak-signal DXing performance, it was time to wipe the slate clean and test out all possible variations of the antenna – letting the chips fall where they may.

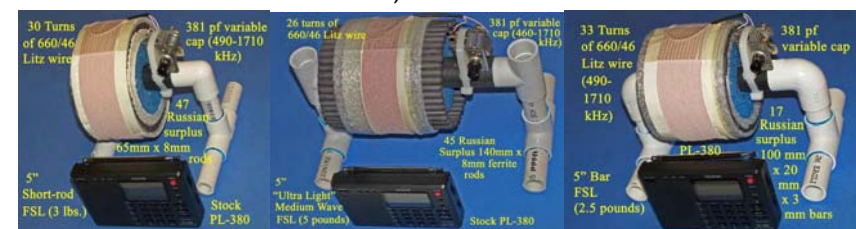
Experimental Objectives: The ambitious agenda of the testing included all experimentation necessary to judge the weak-signal performance of ferrite rods compared to ferrite bars, to judge the weak-signal performance of large-diameter FSL models compared to smaller-diameter models with more ferrite weight, and if at all possible, to establish a design formula which could accurately predict the weak-signal DXing performance of any FSL antenna model before it was constructed (as well as rate the effectiveness of any existing model). These were challenging goals, but I was determined to continue the experimentation (and build as many test models as necessary) until complete clarity of all the design optimization factors was reached.

In order to carry out this agenda seven new FSL test models were built, including a diverse variety of ferrite bar models, short ferrite rod models and long ferrite rod models. Deliberate use was made of common material like Russian surplus ferrite (of 400 permeability), single coils composed of 660/46 Litz wire, a common 381 pf variable capacitor and standard PVC-pipe frames. Each test model was constructed with a coil diameter shared by other models using dissimilar ferrite material (bars, short rods or long rods) so that the performance differences between each ferrite type would become obvious. Finally, all test models would be judged in relative weak-signal performance outdoors in an open-air test range, competing with each other in the reception of at least four fringe daytime DX test stations on frequencies throughout the AM band. During this testing relative-reception MP3's would be recorded for each antenna match up, with the antennas switched in the middle of the recording (within 7 seconds, so that the fringe station's signal level would not change). Both FSL test models would be placed on a 5' PVC base for equal elevation, and the antennas would be separated by at least 50 feet so that there would be no possibility of interaction. Additionally, in cases where a relative-strength deadlock was apparent between two FSL test models, a reference antenna (4' sided PVC air core loop) would be used to check if either test model had better performance against the reference antenna. In summary, every possible preparation was made to provide equal testing parameters for accurate relative performance results.



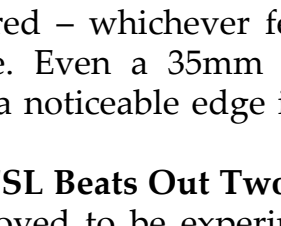
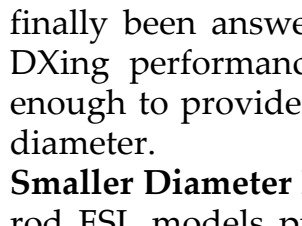
Three Diameter Classes: The test models were divided into 3", 5" and 7" diameter classes. The 3" class included a 200mm long-rod model (3.5"), a 100mm bar model, and a 65mm short-rod model. The 5" class included a 140mm long-rod model, a 100mm bar model, and a 65mm short-rod model. Finally, the 7" diameter class included a 140mm long-rod model and a 100mm bar model.

Each diameter class would first have relative performance tests against other antennas of the same class, then the top performers in each class would have match ups against each other. With the diverse mix of rods, bars and diameters in the test models, it was presumed that obvious patterns of superior performance would emerge – and they quickly did.



Ferrite Rods or Bars – Which are Better? In each diameter class a clear pattern emerged immediately, with every model having a longer ferrite material (rod or bar)

beating out every model with a shorter ferrite material (rod or bar). The thickness or weight of the ferrite material was irrelevant – even though the 65mm rod models had greater weight and ferrite thickness than the 100mm bar models, they lost out to the bar models every time. But this had nothing to do with any superiority of the bar models – to even the score, the 100mm bar models always lost out to the 140mm and 200mm rod models. So the question of rods or bars had



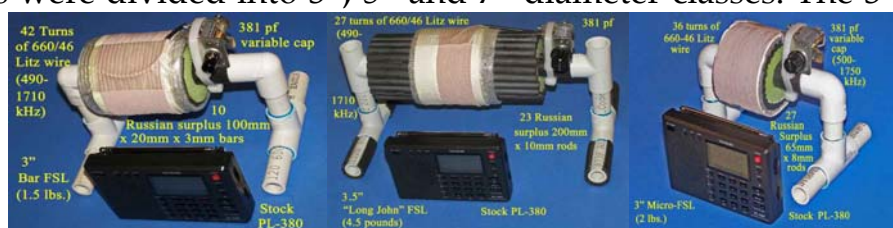
finally been answered – whichever ferrite material was longer had the superior DXing performance. Even a 35mm or 40mm advantage in ferrite length was enough to provide a noticeable edge in weak-signal performance, for a given coil diameter.

Smaller Diameter FSL Beats Out Two Larger Diameter Models: The 65mm short-rod FSL models proved to be experimental duds, losing out to every other FSL model in their respective diameter classes. But before final elimination from the competition, the 5" short-rod (65mm) model was matched against the 3.5" long rod (200mm) model – and was clearly inferior to it. The 3.5" long-rod (200mm) model not only outpaced the 5" short-rod (65mm) model, but clearly outperformed the 5" bar model (100mm) as well. This was the first experimental proof that a smaller diameter FSL could outperform a larger diameter FSL – and another indication that ferrite length was extremely important to overall DXing performance.

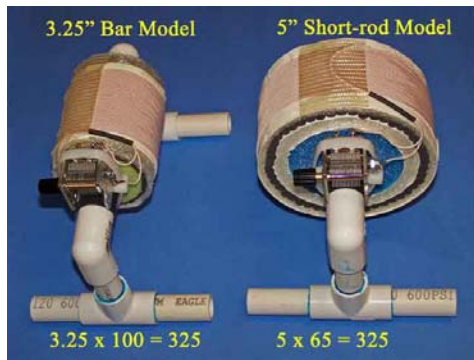
The "Odd Couple" DXing Deadlock: With the overachieving 3.5" long-rod (200mm) model running roughshod over two of the 5" diameter FSL models, it was given a shot at the 7" diameter bar (100mm) model. In what was probably the most important FSL match up in the entire project, the two completely different antennas deadlocked in performance on all 5 of the test signals. This was the first weak-signal deadlock in 10 different FSL match ups, so it was quite a surprise. Both antennas were then tested against the 4' air core reference loop – and both FSL's deadlocked with it, also! There was now no doubt that the DXing performance of these two radically different models was identical, which certainly was a puzzle considering their polar-opposite design.

But when I looked at both models closely, I finally noticed a very peculiar relationship between them... the 3.5" long-rod model's ferrite length (200mm) was twice that of the 7" bar model (100mm), while the 7" bar model's coil diameter was twice that of the 3.5" long-rod model! Could this mean that ferrite length was equally important to coil diameter in determining an FSL's overall performance? It certainly was in these two FSL models – the two models each had their own design advantage, which was resulting in a DXing deadlock!

After stumbling on this concept, I quickly made up a provisional formula to predict an FSL's overall DXing performance: In comparison to other models having equal component parameters (Litz wire type, coil orientation, and ferrite permeability), an FSL's coil diameter times its ferrite length would determine its overall weak-signal capability. Since every current FSL experimenter used inches to measure coil diameter and millimeters to measure the Russian surplus ferrite length, I decided to risk the wrath of purists and simply multiply the two dissimilar measurements together in my formula, which in the case of the 7" bar FSL worked out to an equation of $7 \times 100 = 700$ points. In the case of the 3.5" long-rod FSL the equation worked out to $3.5 \times 200 = 700$ points, an identical figure.



But wait – I knew that the 5" Mini FSL model (composed of the 140mm long ferrite rods) had also deadlocked with the 4' air core reference loop, which meant that its performance also was identical to these two deadlocking FSL models. Here was now yet another FSL model which had a design pretty much in the middle of the two radically different models, with equal performance. Theoretically, it should then have the same performance "score" as the other two FSL models in the new equation. It was with some excitement that I quickly did the math... $5 \times 140 = 700!$ All three performance scores agreed with each other, and I was thrilled that the new formula had accurately predicted the 5" Mini-FSL's participation in a 3-way DXing deadlock (as shown in the large group photo of the three FSL's together, at the beginning of this article).



Further Confirmation of the FSL Performance Formula's Accuracy: When considering the results of all the FSL test model match ups conducted previously, I finally realized that the new performance formula could have accurately predicted all of the experimental results before any of the test models had even been constructed! But there was one test model match up that had not been tried yet, which was to provide the final confirmation of the formula's accuracy. The 5" short-rod (65mm) model was an under-performer, and had never been matched against the 3" bar (100mm) model. However, the apparent performance formula scores of these two models were extremely close (325 and 300, respectively), and it was time to see how they shook out in an actual weak-signal Shootout. Before running this final confirmation test I carefully measured the actual diameters of the two models, though – and was very lucky to find that the 3" bar model was actually a little bit larger than 3", having a coil diameter of 3.25"... giving it a dead-even performance score with the 5" short-rod model! I didn't even need to modify either model, to have another two FSL antennas which (theoretically) should be equal in weak-signal performance, according to the new design formula.

Once again, it was with some excitement that I set up both FSL test models on their 5' PVC stands in the back yard test range, eager to see if the performance formula had once again clearly predicted the final result. After receiving the very first fringe signal (540-Burien TIS) on both models I knew that I could have saved my trouble... switching between the two antennas on the MP3 recording produced no change in signal quality at all. It was another rare performance deadlock of two diverse FSL test models – accurately predicted by the new performance formula.

Experimental Wrap Up: The objectives of the testing had all been met, and accurate weak-signal design factors for the FSL antenna had finally been determined. To summarize, here were the new discoveries:

- 1) There is no weak-signal advantage to be gained by using either ferrite bars or ferrite rods. The only performance factor related to ferrite is the *length* of the ferrite material, whether it is in bar or rod form. For a given FSL coil diameter, as long as the ferrite permeability is identical, longer ferrite material will always outperform shorter ferrite material, and the weight and thickness of the ferrite material is irrelevant to weak-signal performance (this was proven in seven FSL match ups.)
- 2) The *length* of the ferrite material in an FSL antenna is equally important to its coil diameter in providing weak-signal performance. An FSL with twice the ferrite length of another FSL model can still match its weak-signal performance even with a coil diameter half the size of the other model (proven in the case of the 3.5" long-rod model and the 7" bar model.)
- 3) Assuming that all component parameters (Litz wire type, coil orientation and ferrite permeability) are identical between two FSL antenna models, the weak signal performance of any FSL antenna in relation to another can be accurately determined by multiplying the coil diameter times the length of the ferrite material in the sleeve. This product gives a "Performance Score" which can accurately predict the weak-signal reception capability of any FSL antenna in comparison to other FSL models having the same component parameters (proven in three FSL match ups here, with identical signals in switched MP3 recordings.)

Summary: The ability to accurately determine an FSL antenna's DXing performance even before construction opens up a fascinating new perspective on design improvements. Aided by the new performance design formula, a hobbyist can concentrate on building highly effective models at a minimum cost and weight. The FSL antenna's great advantage in relation to other antenna types is its ability to provide low noise, high gain performance from an extremely compact size – and this new design formula emphasizes compact effectiveness, proving that ferrite length is equally important to coil diameter in DXing performance. Future FSL antenna models that combine both ferrite length and coil size are the wave of the future, and now that definite answers have been found for most of the design controversies, we can proceed to design and build our new models with complete assurance of success!

Relative Strength "Shootout" MP3 Links

For determination of the design factors influencing an FSL antenna's weak-signal performance, four of the FSL test model match ups were considered very important. These four match ups (with the design factors clarified by the results), as well as the detailed MP3 recording links for each of these important FSL test model match ups, were as follows.

- 1) 3.25" Bar model (100mm ferrite length) outperforms 3.25" Short-rod model (65 mm ferrite length)

Longer ferrite sleeve material is superior in performance to shorter ferrite sleeve material, even if the shorter material is heavier and thicker than the longer material.

(3.25" Short-rod FSL reception for first 18 seconds, followed by that of the 3.25" Bar FSL)

- 540-Burien TIS (15 Watts at 25 miles) <http://www.mediafire.com/?jqja5qneh3f9chl>
 790-KGMI (5 kW at 140 miles) <http://www.mediafire.com/?fbobcmhv4d27c47>
 1230-KWYZ (1 kW at 80 miles) <http://www.mediafire.com/?76nglcufzz1c7pd>
 1430-KBRC (5 kW at 110 miles) <http://www.mediafire.com/?76nglcufzz1c7pd,lzzz0bamjdt3jgg>



- 2) 3.5" Long-rod model (200mm ferrite length) outperforms 5" Short-rod model (65 mm ferrite)

A smaller diameter FSL model can outperform a larger diameter FSL model if the smaller diameter model has a ferrite sleeve length much greater than that of the larger diameter FSL.

(5" Short-rod FSL reception for the first 18 seconds, followed by that of the 3.5" Long-rod FSL)

- 540-Burien TIS (15 Watts at 25 miles) <http://www.mediafire.com/?y6j2q0p4e76po6c>
 1230-KWYZ (1 kW at 80 miles) <http://www.mediafire.com/?i6575pbpkimg4vw>
 1410-CFUN (50 kW at 160 miles) <http://www.mediafire.com/?1v8qa3g3j0dcth3>
 1430-KBRC (5 kW at 110 miles) <http://www.mediafire.com/?z13ba6dg6pd65ab>



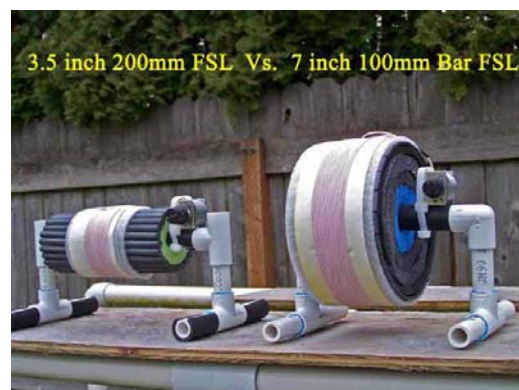
- 3) 3.5" Long-rod model (200mm ferrite length) deadlocks in weak-signal performance with 7" Bar model (100mm ferrite length)

The ferrite sleeve length of an FSL model is of equal importance to its coil diameter in determining weak-signal performance. An FSL model with twice the ferrite length of another model can match its weak-signal performance even with a coil half the diameter of the other FSL model.

Assuming that component parameters (Litz wire type, coil orientation and ferrite permeability) are identical, any FSL antenna's weak-signal performance in relation to another FSL antenna can be accurately determined by multiplying its coil diameter times its ferrite sleeve length, and comparing this "Performance Score" with that of the other FSL model.

(7" Bar model FSL reception for the first 18 seconds, followed by that of the 3.5" Long-rod FSL)

- 540-Burien TIS (15 Watts at 25 miles) <http://www.mediafire.com/?bbuzgs8c819wsrj>
 750-KXL (50 kW at 150 miles) <http://www.mediafire.com/?87d0ccexi81yhaw>
 1040-CKST (10 kW at 160 miles) <http://www.mediafire.com/?i8d4jdd4q2vctml>
 1070-CFAX (10 kW at 90 miles) <http://www.mediafire.com/?ghh0omngnn5o9le>
 1410-CFUN (50 kW at 160 miles) <http://www.mediafire.com/?lgfq7r9763g59h8>



- 4) 3.25" Bar model (100mm ferrite length) deadlocks in weak-signal performance with 5" Short-rod model (65mm ferrite length)

The "Performance Score" formula can accurately predict the identical weak-signal performance of two FSL antennas, even when they have different coil diameters and ferrite sleeve lengths.

(5" Short-rod model FSL reception for the first 18 seconds, followed by that of the 3.25" Bar FSL)



540-Burien TIS (15 watts at 25 miles) <http://www.mediafire.com/?5n7vm2upt1zxfn9>
 750-KXL (50 kW at 150 miles) <http://www.mediafire.com/?ok82g3ey77bxncr>
 1070-CFAX (10 kW at 90 miles) <http://www.mediafire.com/?1cy43cahub24ylh>
 1410-CFUN (50 kW at 160 miles) <http://www.mediafire.com/?1v8qa3g3j0dcth3>

FSL Test Model Specifications

Model	Ferrite Size	Ferrite Wt	Total Wt	Construction Cost*	Performance Score**
3" Short rod	65 x 8mm	1.5 lbs	2 lbs	\$45	195
3.25" Bar	100 x 20 x 3mm	1.0 lbs	1.5 lbs	\$40	325
3.5" Long rod	200 x 10mm	4.0 lbs	4.5 lbs	\$95	700
5" Short rod	65 x 8mm	2.5 lbs	3.0 lbs	\$65	325
5" Bar	100 x 20 x 3mm	2.0 lbs	2.5 lbs	\$50	500
5" Long rod	140 x 8mm	4.0 lbs	5.0 lbs	\$90	700
7" Bar	100 x 20 x 3mm	3.0 lbs	4.0 lbs	\$65	700
7" Long rod	140 x 8mm	6.0 lbs	7.0 lbs	\$130	980

* Total cost of components (excluding shipping charges) as of March 2012

** Coil diameter (in inches) times ferrite sleeve length (in millimeters)

Once again a dedicated member of our group has reached the awesome level of 1000 stations heard on Ultralight radios – proving once again that DXing skill, patience and determination can not only compensate for basic equipment, but provide the foundation for a major boost in hobby satisfaction.

Richard has been a major contributor to our ULR group since its formation in early 2008, DXing with excellent results in a rural Oklahoma location near the center of the continent. Our Ultralight group co-founder John Bryant was also a resident of Oklahoma, and took a special interest in Richard's DXing success (as well as that of Kirk Allen, another Okie DXer). Together they formed the "Three Amigos," and had special success in DXing Latin American stations from their excellent central location. The loss of John and Kirk has hit our ULR group pretty hard, but Richard's success in finally reaching the 1000 station level would have made both of them very proud.

Richard's success in receiving Asiatic TP's in Oklahoma on his barefoot SRF-T615 has been a source of amazement to the local TP-chasing gang, and his daily TP-DXing reports during the past few Fall Seasons have inspired and fascinated many readers of the IRCA list. He has also been a pioneer in the new sport of Ultralight Longwave DXing, astonishing almost everyone by being the first Ultralight radio DXer in North America to receive Longwave TA signals – on a tiny PL-360 (with a hot-rod antenna) over a thousand miles from the Atlantic Ocean.

Congratulations, Richard, and we salute you for your outstanding contributions to our Ultralight Radio group, and the general AM-DXing community.

73, **Gary DeBock** (in Puyallup, WA, USA) Ultralight Radio Group Co-Founder

Richard Allen, 36°22'51"N / 97°26'35"W, (near Perry OK USA)

I was able to log station #1000 on my barefoot Sony SRF-T615.

4/27/12 1100 UTC 880 kHz XEPNK, Los Mochis, Sinaloa, México (2 kW @ 1611 km / 1001 mi). Heard at 1100 with woman saying "ochenta ocho A M", the national anthem of México at 1100-1102, and the recently adopted anthem of Sinaloa at 1102-1104. A brief, mostly unreadable announcement by woman at 1104, followed by a woman singing romantic song at 1105. I listened until 1132. The signal strength was poor with moderate QRM from Grupo Fórmula station XEV. Also slight QRM from KRVN.

After four years and one month, XEPNK became ULR station #1000 (#989 barefoot), México #181 and Sinaloa #13.

From rural northern Oklahoma I've been able to hear stations in 19 countries on four continents using an Ultralight. I've yet to hear any signals from Oceania or South America.

My furthestmost reception is HLAZ, 1566 kHz, Jeju, Republic of Korea, at 11004 km / 6838 miles. Using a barefoot receiver it is JOGB, 873 kHz, Kumamoto, Japan, at 10820 km / 6723 miles.

My original intent was never to see how many stations I could log with an Ultralight Radio. It simply evolved in that direction as I continued to listen. Originally it was the challenge of hearing signals from Asia and Europe on a pocket size receiver. That first occurred a few months later when I heard JOUB, Akita, Japan, on 747 kHz. Hearing faint Japanese talk here in Oklahoma on a tiny SRF-T615 receiver that first time remains the most exciting moment in this adventure. I think the only thing that could possibly beat it would be to hear Australia.

Along the way I had the opportunity of knowing two fantastic Oklahoman radio hobbyists who are sadly no longer with us. And many more due to the internet. My thanks to all who have offered advice and encouragement.

Best wishes and good DX. **Richard**

Confirmed DXer

Phil Bytheway phil_tekno@yahoo.com
9705 Mary NW
Seattle, WA 98117-2334

I goofed last time and set my deadline AFTER the last issue deadline. Brain has been reset (ie DXN schedule checked). Next deadline 8/1/12 pb

- 560 WFIL Philadelphia PA. eQSL certificate received in 46 days for the February 12 2012 DX Test. Report was emailed to Rene Tetro rtetro@pobox.com. Copy of eQSL is at my website, www.kg4lac.com in the USA section. (KK-VA)
+ Personalized QSL certificate pdf received by email in 43 days, for email note during DX test reception with link to online mp3 audio clip at www.bamlog.com/domestic2012.htm logbook, signed Rene F Tetro, Director of Engineering and IT, WFIL. (BC-NH)
- 610 CKYL Peace River AB. PPC on 4th f/up for 2007 reception. Rec'd 14 months after last f/up in 2011. V/S Kent Schumaker, Ops Mgr. CKYL is my northernmost logging on MW. (JW-CO)
- 670 KBOI Boise ID. Received f/d QSL card in 14 days for email report, laser printed onto photo paper, along with several pictures of the transmitter site v/s "Randall Rocks". (MW-NM)
- 680 WPTF Raleigh NC. Prepared eQSL confirmation received in 1 day from Brian Freeman, Program Director and Operation Manager. Emailbfreeman@curtismedia.com. Also, in 4 days received package in postal mail containing WPTF souvenirs including signed photo, coffee mug, coffee scooper, golf tee and lip balm. (KK-VA)
- 690 WOKV Jacksonville FL. Confirmation letter signed by Mike Dorwart, Program Director and 2 WOKV pens received in 7 days for postal report and \$2.00 US. Sent to WOKV AM 690, Mike Dorwart Program Director, 8000 Belfort Parkway, Suite 100, Jacksonville FL 32256. (KK-VA)
- 850 WKIX Raleigh NC. Prepared eQSL confirmation received in 2 days from Bill Whitley, General Manager McClatchey Broadcasting Company. Email bwhitley@mclatcheybc.com. (KK-VA)
- 1070 KVKK Verndale MN. PPC in 6 days for f/up. V/s John Doe (really!). (JW-CO)
- 1130 WACQ Tallassee AL. P-d letter + map, sticker and promo sheet. V/s Fred Randell Hughey owner (has owned WACQ 33 years!) Rcvd in 18 days MS. (TJ-TN)
- 1180 KERN Wasco-Greenacres CA. PPC on 5th try in 11 days. V/s Brett Reckamp. P.D. (JW-CO)
- 1290 KUOA Siloam Springs AR. PPC in 8 days for f/up. V/s ??, G.M. (JW-CO)
- 1510 KSPA Ontario CA. PPC in 9 days on 4th try. V/S illegible. (JW-CO)
- 1550 KRPI Ferndale WA. P-d card for DX Test. V/s David Harris CE. Rcvd + sticker in 9 days. SASE. (DJ-TN)
+ Received a QSL card for the KRPI 1550 test in today's mail. Signed by David Harris. Very pleased with this. Washington QSL #2. KOMO 1000 received in 2005. Thanks to all involved in this test! (JR-NY)

BC-NH **Bruce Conti**, Nashua NH
DJ-TN **David Jones**, Nashville TN
JR-NY **Jim Renfrew**, Holley NY
JW-CO **John Wilkins**, Wheat Ridge CO
KK-VA **Kraig Krist**, Manassas VA
MW-NM **Mike Westfall**, Los Alamos NM

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Order e-DXN in addition to (or instead of) your subscription to the paper edition, and get DX News in PDF form (and in full living color!) a full week before the masthead publication date.

You can use the opportunity to order publications too – just a single check is necessary.

A New Kindle eBook - *QSLing the World - A How-to Guide* Now Available

Teak Publishing is proud to announce the release of their first Kindle eBook - *QSLing the World - A How to Guide* by Gayle Van Horn, a *Monitoring Times* columnist and the shortwave frequency manager for the magazine.

QSLing the World - A How-to Guide is a comprehensive resource and reference ebook for any radio hobbyist who is interested in acquiring a verification of reception from almost any type of radio station, whether it is broadcast, utility, amateur radio, satellites, or clandestine!

For many radio listeners who tune to shortwave, broadcast (AM/FM/TV), VHF/UHF scanner spectrum, or the amateur radio bands, the main objective of listening is to collect stations for the listener's logbook. While some radio hobbyists are program listeners who just listen for the content being broadcast, there is a large segment of the hobby who collect written proof that they have monitored the stations they have received or talked to.

These participants in this portion of the radio hobby attempt to QSL or verify the reception of the stations they hear or work. They do this by sending them a report of reception or their verification card in the hope that the station staff will return a card or letter (a.k.a. a QSL) verifying the radio reception. Along with QSLs, some radio hobbyists also collect station memorabilia that may include such items as frisbees, bumper stickers, pennants, decals, T-shirts, or anything associated with the station logo, slogan or call sign.

This new 140 plus page Kindle eBook covers the "how-to's" of QSLing, drawn from Gayle's 30 plus years of experience in the radio hobby. This includes best general practices in logging, reporting, and mailing a station reception report.

Should you try to send a report in a language you don't speak? What enclosure should you include with your reception report? How long should you wait for a reply from the station? Should you send a second report? This book answers these common questions and much more.

Finally, Gayle addresses an often-neglected question – what do you do with your QSL cards and letters after they start to accumulate? This and more is now available in this new edition of *QSLing the World*.

And there is no need to worry if you do not own a Kindle reader. You can still read our new Kindle electronic reader edition or any Kindle books anywhere with Amazon's free reading apps.

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This Kindle eBook sells for \$2.99 US, and is also available internationally through Amazon's various international servers. The book can be purchased at Amazon.com at <http://amzn.com/B0083M2O4W>.

You can view Gayle's author page at <http://amazon.com/author/gaylevanhorn>

This second edition of *QSLing the World*, now in Kindle eBook format, is the most comprehensive compilation of trends and tips on the art of QSLing ever published for the radio listening hobby. It is a must-have reference in any hobby radio shack if you want to QSL the stations you are hearing on your radios.

NOAA Space Weather Outlook

Issued June 25 – For the period June 25-July 21, 2012

Solar activity is expected to begin the period at very low to low levels and remain so until around July 3. Beginning on July 4, a chance for M-class flares will exist when old Region 1504 (S17, L=087) is expected to return.

No proton events are expected at geosynchronous orbit, though a slight chance may exist when Region 1504 returns.

The greater than 2 MeV electron flux at geosynchronous orbit is expected to begin the period at normal to moderate levels, and remain so through July 2. Flux values are expected to increase to high levels on July 3-8 due to recurrent coronal hole high speed stream effects. Normal to moderate levels are expected to return from 9 July through the remainder of the period.

Geomagnetic field activity is expected to begin the period at mostly quiet levels and remain so through June 28. On June 29, a possible Co-rotating Interaction Region is forecast to produce mostly unsettled levels with a chance for active conditions prior to the onset of a coronal hole (CH) high speed stream. CH effects are expected to produce unsettled to active levels with a chance for minor storm periods on June 30 through July 3. On July 4-5, quiet to unsettled levels are expected as the CH effects wane. Mostly quiet conditions with isolated unsettled periods are forecast from July 6 through the end of the period.

(From <http://www.swpc.noaa.gov/ftplib/weekly/WKHF.txt>)



NRC Convention 2012

The 2012 joint NRC/WTDA convention will be held from Friday, August 3 to Saturday, August 5, in Bridgeport, West Virginia. The convention location is the Days Inn and Suites located at 112 Tolley Drive, Bridgeport, WV 26330, close to the Rt. 50 and I-79 exit.

Reservations need to be made by **Friday, July 20** by calling 304-842-7371. You must use this direct number to the hotel and you must tell them you are with the NRC Convention to receive the reduced room rate. If you are attending from the WTFDA you must also tell them you are with the NRC. The cost of the room for each night is \$79.94 which includes all taxes. Rooms are scarce and will not be available at the NRC rate (or likely even at all) after the deadline date.



Registration is \$45.00 for members and \$25.00 for your spouse or guest. Please make your checks out to "National Radio Club." This price includes a buffet dinner for the Saturday banquet and your chips, soft drinks and, of course, beer for the weekend. And probably free pizza on Friday night. Send your registration and auction items to Bill Swiger, 1 Casey Lane, Bridgeport WV 26330-9454. If you have any questions you may email me at ridgeradio@cebridge.net.



A tour is planned for noon on Friday, Aug. 3, at our local 911 Center. And we will hopefully be touring a local TV station and a radio station with times to be announced at a later date.

Bring your receivers as we will probably have some antennas strung through the back parking lot and down over a steep hill towards I-79.

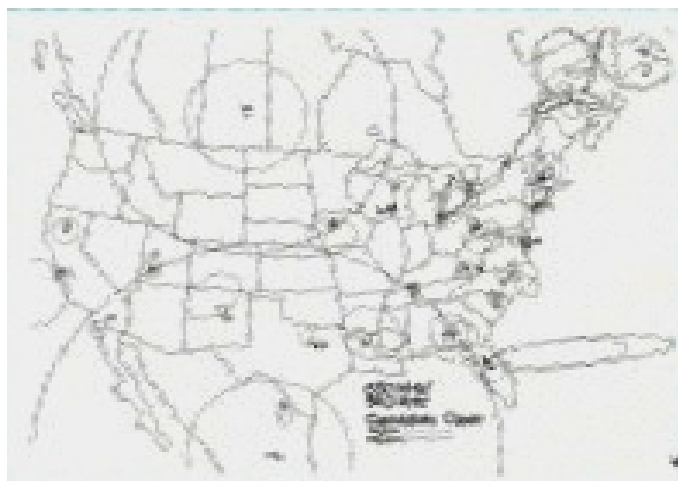
We are looking forward to seeing old friends and meeting new ones. Come to "Wild Wonderful West Virginia" and see what "Almost Heaven West Virginia" is all about.

The NRC Antenna Pattern Book

The sixth edition of the NRC AM Station Antenna Pattern Book now for the first time includes daytime and "graveyard" antenna patterns.

The station list is based on the 26th Edition of the NRC AM Radio Log updated as of 11/1/2005.

Stations in the Lower 48 and Canada, plus Mexican stations in states bordering the U.S. and other easily heard stations are included. Alaska and Hawaii are found in a separate section.



To order: \$16.95 to NRC members (US/Canada); \$22.95 to US non-members; \$28.50 to Canada non-members and all overseas. Canadian orders: PayPal or postal M.O. only. Colorado residents add 3.5% sales tax.

National Radio Club, P.O. Box 473251, Aurora CO 80047-3521

National Radio Club

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• **DX News – David Yocis, Publisher/Editor** <NRCDXNews@gmail.com> – 1245 Thirteenth St. NW, #105 – Washington DC 20005; 202-415-3011 [leave voice mail]. (Contributions to DX News only)

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