

December 10 2016 - Volume 54 Number 14 - Edition 1721 - ISSN 899-9733

IRCA welcomes Paul Gough in Ephrata PA... DX and report often!! No CDXR reports this time. We are looking for a new editor for DXWorldWide-West, DX Test Coordinator and backup Editor-in-Chief. "DX Monitor" deadline – every Monday 6 PM PLT.

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2017 CONVENTION

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

Arizona DXers GetTogether – THIS SATURDAY

The AZ LF DXers Group is an extremely informal gathering of primarily LW and MW DXers. Our next extremely informal gathering will be for lunch on December 10 at 11:30am at Mimi's Cafe, 839 N Promenade Parkway, Casa Grande AZ. Casa Grande is half way between Tucson and Phoenix. Visitors, residents and those that accidentally walk into the room are all very welcome. Any questions, please contact me at: w7swl@yahoo.com Bob Coomler W7SWL, Tucson AŹ

World Radio TV Handbook 2017

Published 5 December 2016 - Order your copy today!

We are delighted to announce the publication today of the 71st edition of WRTH. For full details of WRTH 2017 and to order a copy please visit our website at www.wrth.com where you can also order the B16 WRTH Bargraph Frequency Guide on CD and Download. WRTH 2017 is also available for pre-order, for readers in the USA, from Amazon or Universal Radio in Ohio. I hope you enjoy using this new edition of WRTH and the new CD. Best regards, Nicholas Hardyman, Publisher



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

DATE OF COLUMN: December 3, Column data span: November 19-December 3. Data courtesy of Stationintel.com, FCC database and member contributions.

CALL CHANGES

FREQ	OLD CALL	CITY OF LICENSE	NEW CALL
980	WPGA	Perry, GA	WDDO
	WEGO	Winston-Salem, NC	WTOB
1130	WOFC	Murray, KY	WBZB
1330	WVHI	Evansville, IN	WBGW
1520	WBYM	San Juan, PR	WRSJ
1560	WRSJ	Bayamon, PR	WBYM

FORMAT, SLOGAN AND SILENT STATUS CHANGES

FREQ CALL **CITY OF LICENSE NEW INFORMATION** 570 KCFJ Alturas, CA was adult standards, now variety 1050 KORE Springfield-Eugene, OR was silent, now Fox Sports Radio, adds slogan "1050 Fox Sports Eugene" WHSC was silent, now Fox Sports Radio, adds slogan: "Fox Sports Radio 1050" Conway, SC 1060 WIXC Titusville, FL was talk, now news-talk old slogan: "Heart and Soul of Memphis", new: "Heart and Soul of Memphis" (??-ye ed) old slogan: "KWEL AM 1070 and FM 107.1", new: "KWEL AM 1070 and FM 107.1" (??-ye ed) was unknown format, now urban adult contemporary and urban gospel, adds slogan: "1230 The Blaze" was silent, now ESPN Radio Network, adds slogan: "ESPN Fayetteville" 1070 WDIA Memphis, TN KWEL Midland, TX 1230 WEZO Augusta, GA WFAY Fayetteville, NC Burns, OR Flowood, MS KBNH now silent **WPBQ** was talk, now new unknown format 1240 old slogan: "KELK AM 95.9 and 1240", new: "Today's KELK" KELK Elko, NV Seaford, DE was 80's hits, now adult hits 1280 WSUX 1330 WBGW Evansville, IN adds new unknown network old slogan: "The Light 1340 and 1400", new: "The Light 1340 and 1400" (??-ye ed) old slogan: "The Light 1340 and 1400", new: "The Light 1340 and 1400" (??-ye ed) 1340 WPOL Winston-Salem, NC WKEW 1400 Greensboro, NC 1410 WMYR Fort Myers, FL changes city of license from Fort Myers to Fort Myers (??-ye ed) 1430 WDAL Dalton, GA was Španish religion, now country, adds slogan: "Bulldog Country 1430" 1450 KSKE Buena Vista, CO now silent WFBX Spring Lake, NC adds Fox Sports Radio was Westwood One Good Time Oldies, now Westwood One Classic Hits, old slogan: "Good Time Oldies 1450", KGFF Shawnee, OK new: "KGFF 100.9/1450" was silent, now National Public Radio news/talk, adds slogan: "Texas Public Radio" KCTI Gonzales, TX was silent, back on with new unknown format was religious teaching, now talk, adds slogan "The Talk To Me Station" 1480 KRXD Dallas, TX **WWBC** 1510 Cocoa. FL was urban gospel, now adult alternative, old slogan: "Faith Radio", new: "Modern Rock And No Commercials" 1590 WFTH Richmond, VA

(Note: more 'repeating' slogans from Stationintel.com, I'll just continue reporting them as they are reported-ye ed).

MEMBER CONTRIBUTION

Eric Bueneman of Hazelwood MO sends along the following dated 11/28/16:

KXFN 1380 St Louis MO is now back on the air with Christmas music from Salem Music Network, with SRN News at :45 past the hour. This station will likely go Southern Gospel after the holidays.

Well, had a job interview for a test engineer job on the James Webb Space Telescope at the Space Telescope Institute in Baltimore MD on Tuesday 11/29, and on the same day I got a job offer from there! I have accepted the job and am tentatively scheduled to start work Monday December 12th. Job should last at least 3 years and then I'll be absorbed into the university personnel at the time which will have other jobs. We'll take it from there in 2019 when we get to that point. So a good holiday now! Hope your DX this Xmas season is great, we just got out of Thanksgiving weekend and Black Friday/Cyber Monday, hope you all bought nice radios to DX with! Send any tips you may have to the respective columns, or this one if appropriate. 73's. Bob Wien



WDXR DEADLINES: Each Friday. Please use Eastern Local Time. **REPORTERS FOR THIS ISSUE** (RB) Rick Barton-PO Box 5503-Peoria AZ 85385 desertmoon dxshack@inbox.com RadioShack DX-375, Hammarlund HQ-180A, Panasonic RF-2200, Terk loop (BB) Bill Block-Prescott Valley AZ billblock@cableone.net Drake R8, Wellbrook ALA1530LNP John Johnson-2922 S Olivewood, Mesa AZ 85212 John_Johnson@prodigy.net (JCJ) Icom IC-R75, Wellbrook ALA1530LNP (JP) Jon Pearkins-Edmonton AB jon@pearkins.com Sangean HDR-18, 2010 Acura RDX radio (NP) Nigel Pimblett-331 5th Street-Dunmore AB T1B 0J9 nige2730@telus.net Perseus SDR, Wellbrook Phased Array (NP-AB1) DXing in Lamont AB Perseus SDR, Beverage antenna 590 KTIF CA, San Bernardino 11/28 1740 break from "Larry Elder" talk show to local traffic report and local spots. Good signal on RF-2200. (RB-AZ) ND, Jamestown heard 11/28 at 2159 with "Classic Country KSJB." (BB-AZ) 600 KSJB 720 WGN IL, Chicago heard 11/28 at 0738 with "WGN Sports." (BB-AZ) NV, Reno 11/28 2305 ending newscast, local spots and good ID by man. Promo for morning show by morning host Ross Mitchell (can't mistake 780 KKOH that voice). Good on RadioShack DX-375. (RB-AZ) 810 KSWV NM, Santa Fe heard 11/28 at 1956 with "KSWV Santa Fe, New Mexico." (BB-AZ) WCCO MN, Minneapolis heard 11/28 at 0758 with traffic report and weather. (BB-AZ) 830 SK, Saskatoon 12/1 1925 French dominant. (JP-AB) 860 CBKF-2 870 WWL LA, New Orleans 12/1 1948 ID alone after tentative KFLD and KLKQ switched to night power. (JP-AB) NE, Lexington 12/1 1945-1949 carrying KSFO's Savage Nation then local ads. (JP-ĂB) KRVN 880 AB, Edmonton 12/1 1952 back on the air after about an hour. (JP-AB)
 MB, Brandon 12/1 1904 ID into C&W over KRVN and tentative KJJR on day power; signal so strong it slopped to 870 on car radio. (JP-AB) CHOT CKLQ BC, Dawson Creek 12/1 1944 undoubtedly the C&W all alone after SS station(s) switched to night power. (JP-AB) 890 ?CJDC? 920 KVEL UT, Vernal 11/30 0050 break from Dennis Prager show to local promos "104-point-5 FM and 9-20 AM KVEL. Very good on RF-2200. (RB-AZ) KIXZ TX, Amarillo heard 12/1 at 0836 with weather report and "KIXZ." (BB-AZ) 940 NM, Albuquerque heard 11/27 at 0859 with "KKIM" then weather report. (BB-AZ) 1000 KKIM UT, Roy 11/28 1015 fair and steady on RF-2200, well after local sunrise, with Christmas music. First log of Christmas music this season. (RB-AZ) 1120 KANN KRDU CA, Dinuba 11/28 surfaced on 1130 at 1905 with Central Valley weather and "KRDU Dinuba, Fresno, Visalia, your inspiration station" into religious 1130 program. New for me. (JCJ-AZ) CA, Palm Springs 11/30 0130 Michael Savage talk show, strong & steady on RF-2200 while nulling CHRB and KGEM from the north. (RB-AZ) CO, Boulder heard 11/29 at 0821 with "AM 1190 Boulder-Denver." (BB-AZ) 1140 KNWQ KVCU 1190 SK, Weyburn 11/28 mixing with KVCU, local KNUV nulled. 2328 with country music, "All your country favorites right here on AM 1190" and "AM CFSL 1190" slogans. 0001 with "Today's hits AM 1190 Weyburn a Golden West Radio station." New for me. (JCJ-AZ) WY, Afton 11/14 2001 ID as "Black Mountain Country" then back to country music. (NP-AB1) KRSV 1210 AZ, Winslow 11/27 good with local KOY nulled, 2200 out of country music with "Your country radio station KINO Winslow, Arizona" into CBS 1230 KINO AZ, WinSlow 11/27 good with local KOY hulled, 2200 but of country music with "roun country radio station Kive withsiow, Puzona into ozer News. News for me. (JCJ-AZ)
NM, Gallup 11/26 good with local KOY nulled. 0023 with oldies, "Night and day rockin' oldies KYVA" along with a "KYVA" jingle and "Night and day rockin' oldies KYVA is the fun place to be" between songs. News for me. (JCJ-AZ)
KS, Garden City 11/27 1948 "Newsradio KIUL" ID during break in college football pre-game. (NP-AB1)
ID, Idaho Falls heard 11/29 at 0843 with "Sunny 1260 and 690." (BB-AZ)
NM, Santa Fe heard 11/28 at 0824 with "Talk 1260 KTRC." (BB-AZ) **KYVA** 1240 KIUL 1260 KEIR KTRC WY, Powell heard 11/29 at 0830 with "KPOW." (BB-AZ)
 CA, Long Beach heard 11/27 at 0858 with "KFRN Los Angeles." (BB-AZ)
 WY, Laramie heard 11/28 at 1949 with "Newstalk KOWB." (BB-AZ) KPOW 1280 KFRN KOWB 1290 KFKA CO, Greeley heard 11/28 at 0848 with traffic report, then at 0851 "Newstalk 1310 KFKA." (BB-AZ) 1310 KIFM CA, Sacramento heard 11/26 at 0844 with an ad for a car dealership in Sacramento, then at 0847 "ESPN 1320." (BB-AZ) 1320 CO, Derver 11/28 2100 ads, then ID at 2101 as "1340 KDCO Derver, 104-7 K284C1 Derver..." also listing Loveland stations. (NP-AB) WY, Rock Springs heard 12/2 at 0844 with "Southwest Wyoming ?? KRKK??" (BB-AZ) OR, Ontario heard 11/28 at 200 with "Cool Oldies KKOO Ontario-Boise." (BB-AZ) CA, Eureka 11/13 0700 ID out of a jumble as "This is Immaculate Heart Radio, KIHH Eureka...." (NP-AB) 1340 KDCO 1360 KRKK 1380 KKOO 1400 KIHH CO, La Junta 11/27 2035 popped up for several minutes with ID, weather, then ad for position with Cherry Creek Radio. New for me. (NP-AB) CO, Canon City 11/27 2033 "Fremont County weather on AM 1400, KRLN," then jingle IDs. (NP-AB) IA, Le Mars 11/28 1958 "Rhinestone Cowboy," then ID at the hour "1410... KLEM. This is 1410 KLEM Le Mars and on 96.9 FM." (NP-AB) TX, San Antonio 11/27 1955 ad in English for law office, then ID "KEDA Radio," and back to Tejano music. (NP-AB) KBLJ KRLN 1410 KLEM 1540 KEDA CO, Colorado Springs 11/28 0945 break from religious program to man with traffic report, weather for Colorado Springs. Steady with good signal on RF-2200. (RB-AZ) 1580 KFCS NM, Albuquerque 12/1 0845 string of local spots "...in New Mexico," very good. (RB-AZ) CA, Moreno Valley 11/28 0040 man and woman in dialog on religion issues in English. Strong steady with a few deep fades on RadioShack DX-1600 KRKE 1670 KHPY 375. This station is usually in Spanish but they have some English programs on Sunday nights. Note: the DX-375 formerly belonged to my mother. who gave it to me a few years before she passed away. I always try to log a few stations on it each year this day - her birthday. (RB-AZ) (What a wonderful tradition, Rick.-NJ) 1690 KFSG CA, Roseville 11/29 1030 man in Vietnamese or Hmong. Very good and steady well after local sunrise. (RB-AZ) UnID 890 UNID 12/1 1907-1920 Spanish one or both KYWN and KMJE on day power. (JP-AB)

Thank you to our WDXR reporters this week! - Nancy 12/2 1900



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

TUNING THE DIALS THIS ISSUE:

(KK-VA) Kraig Krist (KG4LAC), Manassas VA

Winradio G33DDC software-defined receiver, Wellbrook ALA1530S+ Imperium loop

ACROSS THE DIAL

540 WFLF FL, Pine Hills – 11/24 0600 noted with "News Radio WFLA" ID by a male announcer. The signal was noted mixing with WGTH, two unidentified Spanish language stations and an unidentified Country station. (KK-VA)

ON, Owen Sound - 11/24 0649 noted with this ID by a male announcer: "The Oldies You Want. The Info You Need, CFOS." The signal was noted 560 CFOS

570 WWNC 580 WIBW

 ON, Owen Sound – 11/24 0649 noted with this ID by a male announcer: "The Oldies You Want. The into You Need, CFOS." The signal was noted mixing with WFIL, WFRB, WVOC and unidentified stations with a Country format and Spanish language programming. (KK-VA)
 NC, Asheville – 11/24 0730 noted with mention of "America's First News" by a male announcer. In checking the WWNC Web site, "America's First News is aired 0600-0900. The signal was noted mixing with WSPZ, Radio Reloj (Cuba) and an unidentified Spanish Language station. (KK-VA)
 KS, Topeka – 11/24 0557 noted with this announcement by a male announcer: "Stay Connected with the News You Need, WIBW... WIBW News Radio-dot-com.... The New 104.9". The signal was noted mixing with WCHS, WHP, WHYM and WTCM. (KK-VA)
 MI, Traverse City – 11/24 0648 noted with mention of Michigan Fitness-dot-org by a male announcer. The signal was noted mixing with WCHS, WHP, WHYM and WTCM. (KK-VA) WTCM

WHP, WHYM and WIBW. (KK-VA) (Kraig, this is definitely WTCM; WELO is in Tupelo MS; that's way too far from MI's southern border. CKWW doesn't air Detroit commercials, as a rule. Sister station CKLW 800 got in trouble with the CRTC for running Detroit instead of Windsor spots many years ago. WTCM is the only Michigander on 580 - eb)

TN, Rockwood - 11/24 0637 noted with a Country format, "Call us at Radio 580... 354-2000" mention by a male announcer. The signal was noted WHYM wixing with WCHS, WHP, WIBW and WTCM. (KK-VA) **WV**, Charleston – 11/24 0720 noted with "The Voice of Charleston is 580 WCHS" ID by a male announcer. The signal was noted mixing with

WCHS

WV, Charleston – 11/24 0720 noted with The voice of charleston's 500 works in by a male announcer. The signal was noted mainly man WHP, WHYM, WIBW and WTCM, (KK-VA) NE, Omaha – 11/24 0641 noted with ESPN Radio programming, station promo, mention of AM 590 ESPN Radio by a female announcer, promo for Nebraska's sesquicentennial in 2017, mention of "Nebraska Impact" by a male announcer, *Husker History* by a male announcer at 0655. The 590 KXSP signal was noted mixing with WLES and unidentified stations with vocal music, one in English and the other in Spanish. This is new to the logbook at Manassas. (KK-VA) (Your English vocal music station may be WJMS Ironwood MI; your Spanish language station is from Cuba. - eb)

EDITOR'S NOTES

Thanks to Kraig for his logs this week. WTCM has made it to my shack on several occasions; KXSP is a nighttime regular at my location, even with a local on 590. 73 and good DX from NØUIH



+Occasionally peaking to fair from 1121 to 1239 12/05. (RA-OK)

- 792 AUSTRALIA 4RN, Brisbane, ABC National. 'Just there' with ABC news fanfare at 1300 11/28. Very slightly better at 1400. (NP-AB) +11/29 was very close to audio, but otherwise it was just an assortment of so-so carriers. (NP-AB)
- 801 UnID. Slow English language vocal by a woman at 1412 12/02. Pretty sure it was a Christian song, which would strongly suggest Guam. (NP-AB) 819 DPR KOREA Pyongyang, KCBS. 11/29 Noisy, crappy signal but a bit of Pyongyang in there. https://www.youtube.com/watch?v=qMahmFSBDdU.
- (PW-AK) JAPAN JONK, Nagano, NHK1. Talk by man in Japanese at 1442 12/02, //594. (NP-AB)
- 828 JAPAN JOBB, Osaka, NHK2. Language lesson, //774 etc at 1410 11/30. (NP-AB)
 - +Language lesson, //774 etc at 1412 12/01. (NP-AB)
 - +t Mild het under WCCO-830 at 1308 12/02. (RA-OK)
 - +First noted at 1316 12/02 with man in Japanese. Very good later, about as good as 774 this morning. (NP-AB)
 - +Het at 1228 12/03, very strong (sadly no audio) at 1330. (RA-OK) +Heard at 1409 12/03 with talk. (BB-AZ)

 - +First noted at 1300 12/03 with time pips, then few seconds of music before going into language lesson. The strongest TP at 1300. (NP-AB)
 - +Was only in audio for about five minutes today, starting around 1456 12/04 with language lesson. (NP-AB)
 - 12/05 het, no audio in WCCO-830 slop. (RA-OK)
- 837 JAPAN JOQK, Niigata, NHK1. First noted with traces of woman talking at 1325 12/02. Up to fair by 1348 with man in Japanese, //594. (NP-AB)
 - UnID. Traces of talk at 1437 12/01. (NP-AB) +Heard at 1417 12/03 with talk not sure who. (BB-AZ)
- UnID. Talk by a man at 1439 12/02. (NP-AB) 846
- 873 DPR KOREÁ Sinuiju, KCBS. 11/29 Pretty good signal with a little side chatter from nearby stations. https://www.youtube.com/watch?v=zUdYKu95GTo. (PW-AK)
 - JAPAN JOGB, Kumamoto, NHK2. Heard at 1412 12/01 very poor. (BB-AZ)
 - +12/02 Man and woman conversing in Japanese, //774 etc. (NP-AB)
 - +Heard at 1420 12/03 with talk. (BB-AZ)
- JAPAN JOHK, Sendai, NHK1. Man in Japanese at 1439 12/02, //594. (NP-AB) 891
- 909 UnID. 12/02 Traces of man talking under monster splatter from Drumheller on 910. (NP-AB)
- UnID. Heard at 1416 12/03 with talk not sure who. (BB-AZ) 927
- 945 JAPAN NHK1 synchros. Man speaking in Japanese at 1442 12/02, //594. (NP-AB)
- +Heard at 1419 12/03 with very weak talk. (BB-AZ)
- 954 JAPAN JOKR, Tokyo, TBS. 11/29 song or promo music ending with woman talking. Pretty good signal https://www.youtube.com/watch?v=wEbavCs8oFo. (PW-AK)
- +Man speaking in Japanese at 1437 12/02. (NP-AB)
 972 REP KOREA HLCA, Dangjin. Poor at 1317 12/02 with man in Korean. Mostly fair from 1400 to 1500, with short peaks to good. (NP-AB) +Weak het in KCFO-970 QRM at 1322 12/03. (RA-OK)
 - +Heard at 1407 12/03 with talk. (BB-AZ)
 - +Heard at 1422 12/04 with talk. (BB-AZ)
 - +12/05 het, no audio. (RA-OK)
- 1008 UnID. Bits of audio at 1501 12/02. Likely JONR, Osaka. (NP-AB)
- REP KOREA jammer. With poor signal at 1322 12/02. It's been some time since last heard. (RA-OK) 1053
- +Poor-to-fair signal still audible at 1337 12/05. (RA-OK)
- 1071 UnID. 12/02 Poor, pretty certain it was Japanese, but did not seem // with 594. (NP-AB)
 - +Heard NHK style time pips at 1300 12/03, but little else. JOFK? (NP-AB)
- JAPAN JOHB, Sendai, NHK2. 12/02 Man and woman talking during language lesson, //774 etc. (NP-AB)
 MARSHAL ISLANDS V7AB, Majuro. Weak signal, but the vocals had a distinct island flair, so assume Marshalls. This at 1057 12/03. (NP-AB)
- 1116 AUSTRALIA 4BC, Brisbane. Bits of audio every so often between 1156 11/14 and 1400. (NP-AB) +First noted with time pips at 1300 11/28, then into news by a woman. In and out over the next 90 minutes with short peaks to fair level. (NP-AB)
 - +Usual talk programming noted at 1413 11/29. (NP-AB)
 - +Nothing earlier, but reached audio at 1146 11/30 with man talking. (NP-AB)
 - +Poor, with woman caller to talk show at 1411 12/01. (NP-AB)
 - +Heard today, with man talking at 1259 12/03, then time pips and into news by woman. (NP-AB)
- UnID. 12/02 Man talking. Suspect it wasn't 4BC today. Too weak to be 100% certain of language, but the cadence sounded typically Japanese. (NP-AB) 1170 UnID. 11/29 Whoever this is, is blasting in over semi local 50kw KJNP 1170 (300 miles to my east). You can hear KJNP well underneath whatever/whoever
- I have on 1170! https://www.youtube.com/watch?v=ZPPC4gGBxGY. (PW-AK) 1188 JAPAN JOKP, Kitami, NHK1. Poor, with woman in Japanese at 1259 12/03, then NHK time pips. (NP-AB)
- UnID. Traces of talk by a man at 1328 12/02. (NP-AB)
- 1242 JAPAN JOLF, Tokyo. 11/29 Pretty strong signal as usual. Sounds like the same programming heard on 1260 https://www.youtube.com/watch?v=6nNP4fAMI-k. (PW-AK)
- +Just bits of talk by woman in Japanese at 1352 12/02. (NP-AB)
- 1260 UnID. 11/29 Pretty good signal, with men talking, sounds like part of a morning show or something. https://www.youtube.com/watch?v=65lbNeVB2fw. (PW-AK)
- 1287 JAPAN JOHR, Sapporo, HBC. Fair to good, with pop song in Japanese at 1453 12/02. (NP-AB)
- 1314 JAPAN JOUF, Osaka. Bits of man and woman conversing in Japanese at 1454 12/02. (NP-AB)
- 1377 UnID. 11/29 Excellent signal with only a slight bit of noise. 1377 audio: https://www.youtube.com/watch?v=0UOMwvY214Y. (PW-AK)
- 1386 UnID. 11/29 Pretty good signal with a slight bit of noise. Music playing. Audio here: https://www.youtube.com/watch?v=gJ2JY_uyzhU. (PW-AK)
- 1440 UnID. 11/29 Pretty strong signal and no noise or interference really to speak of 1440 Audio: https://www.youtube.com/watch?v=6qg3vevka-E. (PW-AK)
- 1548 AUSTRALIA 4QD, Emerald. Just like yesterday, heard the ABC news fanfare at 1400 11/14, but little else. (NP-AB)
- 1566 REP KOREA HLAZ, Jeju, FEBC. 11/29 blasting the doors off here as usual with 250,000 watts and 6 towers

https://www.youtube.com/watch?v= 0bOKhYxG70. (PW-AK)

- +Woman in Chinese at 1444 11/30. (NP-AB)
- +Fair/good with hymn, then woman in Japanese at 1357 12/01. (NP-AB)
- +Heard at 1418 12/01 very poor. (BB-AZ)
- +This one was not really any better than the past couple of days. First noted at 1319 12/02 with man in Japanese. (NP-AB)
- +Trace of signal in XERF-1570 splash at 1326 12/02. (RA-OK)
- +Barely audible in XERF-1570 splash at 1300-1310 12/03. (RA-OK)
- +Heard at 1418 12/03 with talk. (BB-AZ)
- +Fair with Christmas hymn at 1257 12/03, then talk in Japanese. (NP-AB)
- +Heard at 1420 12/04 with talk. (BB-AZ)
- +Nothing earlier, but came up to fair with man in Chinese at 1449 12/04. (NP-AB)
- Barely audible traces in XERF-1570 splatter at 1250-1304 12/05. (RA-OK)
- 1575 THAILAND Ban Phachi, VOA. No trace of audio until 1442 11/28 when I heard woman in SE Asian language for a couple of minutes. (NP-AB) +Presumed the one with traces of talk at 1445 11/30. (NP-AB)
- 1593 CHINA Changzhou, CNR1. Surprised to hear this one as the strongest TP of the day with woman talking at 1445 11/30. (NP-AB) +Heard at 1419 12/04 with talk. (BB-AZ)

UnID. 11/29 A bit noise but lower side of good signal with a man talking https://www.youtube.com/watch?v=wtwtZ5zqM s. (PW-AK) +Nothing like as strong as CNR1 yesterday, with just traces of talk at 1449 12/01. (NP-AB)

- +(CNR?) traces of a signal at 1325 12/03. (RA-OK)

ODDS AND ENDS

11/29 (via eGroup). Here's a little bit about different jammers on the South Korean side of things for those who are interested. I have been sifting through 40 hours of unedited recordings of East Asia MW over the past week or so and can now view them in a more organized fashion than when I presented on the same topic in Madison last August (for the few of you who attended) with basically no preparation whatsoever. I'll leave the North Korean side of things for another time as they have their own unique sounds, especially the big metro Pyongyang frequencies (891, 900, 1143, 1467, 1566, and 1584, not to forget the freaking 75 kHz-wide 711 that wipes out a fair chunk of the Seoul daytime band).

I'd like to share nine clips. Some are experimental while others are 24/7 permanent. The experimental site south of Seoul just came online with 24/7 full-power jamming with the obvious end result of their long-term testing and I'm not including that in here, though it's not drastically different from what's heard here (just more annoving).

First, here's the most basic form of the jammer the ROK has been using for some time. It's just the raw sound with nothing additional added in yet. This was at the experimental site 7 miles from my FM site. http://www.beaglebass.com/dx/external/Jammer_Basic.MP3

Next, this is the standard jammer that has been used more or less for the past year in Seoul. Note the same sound with sirens added. There are minor differences now and then. http://www.beaglebass.com/dx/external/Jammer_Standard.MP3

My arch-nemesis, the hum jammer. They're using these on multiple frequencies and via skywave and groundwave, I cannot identify the locations and they clog otherwise-listenable frequencies from China. This particular 855 and one İs on near the coastal http://www.beaglebass.com/dx/external/Jammer_Hummer.MP3

This is the Gimpo siren jammer, THE most powerful jammer in Korea at 250kw, aimed south and on 16 1/2 hours a day, yet still stupidly leaving a full hour a day unjammed. While it's the most heard in the country, the dinky Seoul jammer 16 miles away is the one that gets out across the entire globe but can barely cover a 50-mile radius in Korea. We suspect its power is going up to the sky (or due north) as opposed to covering the ground as it should be. http://www.beaglebass.com/dx/external/Jammer_Siren.MP3

Put them all together - the basic, standard, siren, and hummer, and you end up with this. This is a single jammer near the experimental site, meaning they have added it all together into one signal for that day anyway. http://www.beaglebass.com/dx/external/Jammer_Angry.MP3

This one was heard in mid-June from the southern experimental site. I'm not even sure how to describe it... like a rubber band rapidly hitting something over and over. Annoyingly effective, but just a test. Never heard before or since. http://www.beaglebass.com/dx/external/Jammer_Static.MP3

This one is used at tourist sites along the DMZ. This is recorded less than 10 miles from the tower of 50kw 810 KCBS while standing beside the North Korean customs booth a half mile from the actual border, but a 60dBu silent signal very close by is muffling it. These are mounted on little sticks on the side of buildings like 10-watt transmitters. http://www.beaglebass.com/dx/external/Jammer Low Power.MP3

My favorite of all: the "now you hear it, now you don't, ha ha!" jammer from the southern experimental site. 1 min 40 sec of jamming, 40 seconds of no jamming, repeat. Local 657 Pyongyang can be heard in the lack of jamming, at noon. http://www.beaglebass.com/dx/external/Jammer_Intermittent.MP3

And lastly, there is the jammer warfare with the two sides jamming each other. The video game-like jammer is 819 Pyongyang. The other jammer is the standard Seoul jammer. http://www.beaglebass.com/dx/external/Jammer Warfare.MP3

Chris Kadlec

12/02 (via eGroup). All the jammers (except the video game one, which is 819's short off-air period between daily sign-off and the dead air/tone before sign-on) are South Korea. I'll post the North Korean ones perhaps tomorrow.

The 1053 jammers are complicated, as is that whole busy frequency - the busiest, by far, in Seoul. The main two are Seoul and Gimpo. The Seoul one is the one everyone always hears overseas, but it doesn't get out well locally. I'm not sure if it's directional, but I'm going to guess not. The tower site has 19 towers, whereas the Gimpo site is 4 large towers in a line, exactly similar to the site in Jeju-do. The 1053 siren jammer is on 16 1/2 hours a day with very clear on/off times. The Seoul jammer had been 24/7 for the longest time, but lately has been turning off. It turned off tonight at 11:19pm local (1419 UTC) leaving Shenyang and Yanbian to fight it out, but I'm hearing one of the new Hwaseong jammers in the distance, though not from there. A few jamming sites have gone online in the past two weeks across the country. I try to stick to Seoul, which my publication covers, and ignore the other areas or else I'd go insane.

The Gimpo jammer, while I have no absolute proof of it (they don't share this information, obviously) is aiming south. Why? The purpose of jammers isn't to defeat the signal they're up against. You don't aim *at* the signal you're jamming. AM radio - even FM - doesn't work like that. So aiming it northwest would be a futile effort against a 1,500kw powerhouse. 1053 Haeju clocks in at 75-80dBu at my DX site in Incheon, 61 miles from its tower. Clear water path does damage. There is no defeating that signal and it's a ridiculous attempt to hope to. So the point of the jammers is to cover the signal by any means necessary to the majority of the population. 50% of the nation's population - 26 of 51 million - live in the Seoul metro area. The aforementioned main Seoul site does a half-decent job at covering the most densely populated area. On the east side of the city, the Taereung experimental site fills in a few areas if necessary. The Hwaseong jammer site (which went full power on 11/21 after a year-plus of testing) is now taking care of the south and far south suburbs. The purpose of the Gimpo siren jammer is to cover Incheon. Incheon is a major city that is connected to and is part of the Seoul metro area and it's a coastal city. 1053 with that open water path really blasts into there and that jammer has a wider and louder signal that really is catered to the coastal areas. Gimpo is along the border, so if you want to cover the Korean population, the only way to aim is south (the other jammer is 16 miles to the east, so no reason to aim in the direction of Seoul, which is already covered). Furthermore, the tower site is just barely in Gimpo a short distance from the sea; basically it's right beside Incheon itself. And if I'm right, once upon a time, the site was *on* the sea. Incheon has been reclaiming and like mad over the years, so the coastline extends further and further out.

I'm not sure about 1566 and rebroadcasting audio. It may be another phenomenon, though things change year by year in the area. 1566 is a horrible frequency in Seoul. It's nearly impossible to get a clear signal on FEBC Jeju. There is a ridiculous amount of interference from Yanbian and the Pyongyang jammer (//1467 siren jammer which also decimates that frequency) really makes things muddy. Of course, I'll post that jammer with the rest of the North Korean ones soon. In 2015, I could get a very strong Jeju signal, but something changed by 2016; I think Pyongyang increased its power. Chris Kadlec, Seoul AM Listening Guide

12/03 (via eGroup). To follow up on my recent posting about South Korean jamming, here's some examples of what's going on north of the border, including an FM bonus clip. A radio acquaintance is operating a KiwiSDR node about 8 miles to the south of my Seoul location, but those 8 miles are just enough to lose the Pyongyang jammers that were typical within the city, so my recordings may actually be relatively rare and likely some of the only examples of North Korean jammers on many of these frequencies. They may exist here and there in the local Korean DX community (seemingly unlikely as well) but not in the international forum for sure, especially as bringing a radio into the DPRK as a tourist is quite highly discouraged by the government – though it has been allowed – as it aids in the spread of... well, foreign signals they obviously don't want people hearing in the case you (purposely) leave it behind.

I'm unaware of the power these jammers are running but a few are very high-powered. It's hard to know as they are naturally jamming local Seoul signals and other Korean skywave signals, so there is a fair bit of CCI sometimes and it's not as easy to null out AM signals that like to ride on top of one another unlike FM. If anyone has picked up these jammers on these frequencies across the Pacific, please let me know. On the other hand, you may be hearing these noises and not knowing the origins. Now you will.

All recordings are from the Seoul-Incheon metro area, which lies immediately on the North Korean border (north suburbs lie just a few miles from the border).

One of the more impressive jammers is the 75 kHz-wide jammer on 711. It broadcasts from either the Haeju tower site or Anak tower site. The recording starts on 684 and goes up to 756 where 711 is the center of the jammer and the frequency it jams, 711 KBS 1 Radio Seoul at 500kw. The recording is taken on the coast 11 miles from the local tower site. http://www.beaglebass.com/dx/external/Jammer_711_75kHz.MP3

The same jammer on 711 sounds different depending on the signal strength. The same is true for every jammer. They get highly distorted when under a signal or when weak, making it very difficult to tell the true pattern of the sound. Here are two examples of the 711 jammer which shows that: When the jammer signal is heard strong enough, you can hear its true sound: http://www.beaglebass.com/dx/external/Jammer_711_Strong.MP3

However, when the jammer is weaker and/or the local signal is too strong, it sounds more like a hum, disguising its full sound (which will also be heard with 1566 later): http://www.beaglebass.com/dx/external/Jammer_711_Weak.MP3

This is the so-called "video game" jammer (my original observation of what it reminded me of, which Paul Walker also called the same thing in his own post later). This one is the KCBS flagship station, 819 in Pyongyang. I've recorded it instead on local 2850 to silence the annoying local jammer. This is the sign-off of KCBS and the sign-on of the jammer. http://www.beaglebass.com/dx/external/Jammer_819.MP3

This is Pyongyang's jamming of 891 Busan, another KBS 1 Radio signal. They highly dislike KBS 1 Radio to the point where two signals are even jammed in downtown Kaesong (just outside the Seoul suburbs) on FM as well; hear that at the end of this posting. 891 Busan is from 194 miles away and 250kw, but is not strong at all in Seoul. It's hard to hear clearly to start with and this jammer is actually quite weak and not extremely common to hear as the others. http://www.beaglebass.com/dx/external/Jammer_891.MP3

Here's the jammer on 900. which is moderately common. The main signal is MBC Seoul under 10 miles away. http://www.beaglebass.com/dx/external/Jammer_900.MP3

This one is only able to be heard atop the buildings in downtown Seoul, never at ground level (Henan, China can be heard behind it often at ground-level instead). This is local 972 at 1,500kw, 40 miles away and aiming north right at me nonetheless. You can null it out atop the buildings to the point you can hear the Pyongyang jammer behind it. http://www.beaglebass.com/dx/external/Jammer_972.MP3

Another example of a hard-to-hear jammer, this is the jammer of local 500kw 1134 south of Seoul, 21 miles away. It's almost certainly parallel to the 1467 and 1566 laser jammers and very likely from the Anak tower site. 1134, like many local stations, turns off for a few hours every night, and that's the only time the DPRK jammer can be heard, usually in the null of Tokyo. http://www.beaglebass.com/dx/external/Jammer_1134.MP3

This jammer is on most of the day, as well as the off-air hours of 1143 Radio Free Korea, which only broadcasts for skywave. I've recorded it here during the actual broadcast of RFK instead of during the off-air hours when it blocks Jilin Story Radio, which at 10kw is always behind RFK. RFK's tower is 6 miles from my location and is a relatively poor signal to begin with, always with another station behind it. http://www.beaglebass.com/dx/external/Jammer_1143.MP3

This is one jammer that is so strong that it's impossible to shake. I don't think I've ever been able to listen to 1467 (an unusually strong coastal 50kw Mokpo KBS 1 Radio 192 miles to the south) without this jammer in with it. During talk, it's always heard. Music, it still comes in. Usually the two signals are simultaneous and both equally as strong. This is a laser jammer //1566 and likely 1134 too. http://www.beaglebass.com/dx/external/Jammer_1467_Laser.MP3

The 1566 frequency is a real mess in Seoul. FEBC Jeju comes in well if you aim right at it but this jammer always finds its way in there. Yanbian is equally as strong and destroys whatever is left of a listenable signal. This is an example of what a laser jammer sounds like when there is heavy interference on the signal. It's //1467 but took me about 6 months to make that connection. FEBC is religious. The DPRK outlaws religion and the station, though only 250kw and from a far distance, aims north for many hours, hence a jammer. http://www.beaglebass.com/dx/external/Jammer_1566_Laser.MP3

I call this one the helicopter jammer as it sounds like a helicopter or else an off-balance washing machine on a drying cycle. The first clip is upon sign-off, which comes halfway through the clip. It's manually turned off a while after 1am, never at the same time. What it's jamming is just beyond me. There are two 1kw KBS 1 Radio statistics in the far south that barely make it to Seoul. However, 1584 is a frequency of the Korean-language network in Harbin, China, though 1476 (Sound of the Great Northern Wildnerness) is far stronger with more stations. So that's a bit of a mystery, but the jammer can be heard even in the south of Korea and looks pretty interesting on the SDR. http://www.beaglebass.com/dx/external/Jammer_1584_1.MP3

And here's the same jammer. Sometimes the pitch of the tone changes a tad week to week as revealed in my different recordings of it, but this one sounds like a helicopter about to crash. It starts low and goes higher before starting again. I heard this pattern only once though. http://www.beaglebass.com/dx/external/Jammer_1584_2.MP3

And lastly, here's an example of a typical FM jammer, which exactly mirrors those used in Seoul (though Seoul's on 92.5 was expanded a few years ago to be much wider and more of an annoying pest). This is 90.3 Kaesong, which broadcasts from the big tower at the south end of the main downtown strip, recording from my long-time Kaesong AM/FM site on the river immediately on the border, close enough to watch the North Korean farmers in their field. The jammer blocks HLKA-SFM Yongmunsan, which runs parallel to the Seoul signal of KBS 1 Radio, the one North Korea isn't a fan of. That signal is 50 miles away while the jammer is 15 miles from my location. The second Kaesong FM jammer is 99.5 vs. HLKM-SFM, another mountaintop KBS 1 R signal near the border. Ótherwise, all other Seoul stations are free for listening in Kaesong, though until recently, the city hosted many South Korean workers who commute to North Korea daily to work in the factories across the border, so it's nothing Kaesong residents are unfamiliar with. http://www.beaglebass.com/dx/external/Jammer_90_3.MP3 Chris Kadlec, Seoul AM Listening Guide

12/4 (via eGroup). You may have better audio on that 1035 frequency than can be heard in Korea if you can get one station in well with just echoes in the background.

This is how 1035 sounds locally from Seoul, and by locally, I mean it's a skywave local, the only station(s) on the frequency. The main station is from Dalian (50kw), 303 miles across the water. The rest are just lower-power CNR-1 repeaters. But as you can hear from the clip, it's basically unlistenable as a local aside from being right in Dalian itself or near one of the repeaters.

CNR1 does a crappy job with synching as compared to Korean and Japanese stations (Japanese ones are especially superb with that). Plus, CNR goes off the air at 1405 UTC mid-sentence every night. They could improve. But I could say the same about some of the other networks in Shandong, Liaoning, and Jilin. Some are downright creepy sounding. http://www.beaglebass.com/dx/external/CNR_1_1035_Dalian.MP3

And a good example of a listenable echo signal in a hilarious sort of way (one station is a few *seconds* behind). This is the Sound of the Great Northern Wilderness network on 1476 (Heilongjiang/Harbin-based //873, a station that broadcasts Chinese half the time and Korean - only half-understandable by South Koreans as it's a North Korean dialect used up there – the remainder of the time). This clip is a radio story in Korean. Echo-y to say the least. http://www.beaglebass.com/dx/external/Sound_of_the_Great_Northern_Wilderness_1.MP3

The 500kw Pyongyang Broadcasting/KCBS time-share signal out of Kimchaek, North Korea is a little dizzy or drunken currently and is... wandering off its kilter.

At 5:30am local sign-off (2100 UTC), the signal was half-steady in the neighbourhood of 804, smack between the 801 and 810 jammers with a clear signal. It has been drifting between 803.85 and 804.25, sometimes just zigzagging a bit and at other times outright instantaneously hopping from one side of 804 to the other. It's running an open carrier after sign-off as usual. 15 minutes after sign-off, it briefly ran a tone for about 5 seconds shown on 802.9 and 804.9 and continued about its business before recentering itself right on 804.0 a moment later then again started stumbling around. At the 5:58am local time (2128 UTC) KCBS sign-on, it pretty much has continued, rather stable on 804.25. It would later migrate to 803.87 where it was toward 7am, until it wandered again, down to 803.50 by 10am local time.

I'm not sure if this move is in response to the new jammers or not, but it's an interesting development nonetheless. The transmitters, especially in the east coast cities, aren't known for their greatness, but it's hard to ignore the fact that the signal is clear with nothing blocking it due to this fact. There is a hum on 801 that I cannot identify, but feel it's jammer-related (open jammer perhaps; it happens) and it's heard on 804 too – the daytime jammer would be heard clearly later on 801 – but the Kimchaek signal itself is clearly centered on 804 and heard well on 803 and 805. SDR shows this in an interesting fashion. Here are a few SDR views of this oddness.

http://www.beaglebass.com/dx/external/804_Kimchaek_SDR_1.jpg - Wandering signal http://www.beaglebass.com/dx/external/804_Kimchaek_SDR_2.jpg - 6:15 pre sign-on tone http://www.beaglebass.com/dx/external/804_Kimchaek_SDR_3.jpg - Drunken signal http://www.beaglebass.com/dx/external/804_Kimchaek_SDR_4.jpg - Slipping signal http://www.beaglebass.com/dx/external/804_Kimchaek_SDR_5.jpg - 6:30 sign-on tones Chris Kadlec

THANKS TO THESE REPORTERS

BILL BLOCK, Prescott Valley AZ BB-AZ Drake R8 NP-AB NIGEL PIMBLETT, Dunmore AB

Perseus SDR with a Wellbrook Phased Array PAUL WALKER, Galena AK (via eGroup) PW-AK

Grundia Satelit 750. Lowe HF225. 2 225 foot long wires, Wellbrook ALA 1530 LNP RICHARD ALLEN, near Perry OK WR-G313e, ALA1530LNP-NA. C Crane Skywave and Tecsun PL-380 with an 8-inch FSL antenna. RA-OK

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

The first draft of the report from my 3 hour mini-DXpedition to Orleans, Cape Cod, MA on 9 NOV 2016 has been uploaded. The link is: http://www.qsl.net/wa1ion/doc1/orleans_20161109.htm

I have a few UnIDs just put on RealDX so I will update corresponding entries as information comes in. A report formatted for the NRC and IRCA international DX columns is expected to be released by Wednesday or Thursday.

This outing occurred during the same timeframe as the PEI DXpedition and within a couple of weeks of other activities in New Jersey, Prince Edward Island, and Newfoundland.

Results of some of the other important East Coast DXpeditions this month can be found via links below.

PEI: http://www.bamlog.com/2016pedx.htm, ME: http://realmonitor.com/am_logs_qh8.php, NJ: http://www.radiodxing.com/

All comments, corrections, or questions about the report are welcomed. Mark Connelly, WA1ION, South Yarmouth MA, USA



Geomagnetic Summary November 1 2016 through November 30 2016 Tabulated from email status daily (K @ 0000 UTC.)

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Date	Flux	Α	κ	Space Wx										
11/ 1	77	10	3	no storms	11/11	78	13	3	minor, G1	11/21	75	6	3	no storms
2	76	15	4	no storms	12	78	19	4	no storms	22	77	12	4	no storms
3	76	18	4	no storms	13	78	21	4	no storms	23	78	13	2	no storms
4	77	5	1	no storms	14	77	11	3	no storms	24	79	24	4	minor, G1
5	77	3	0	no storms	15	77	7	2	no storms	25	81	32	3	moderate, G2
6	76	5	1	no storms	16	81	4	2	no storms	26	81	12	2	no storms
7	77	4	0	no storms	17	79	4	1	no storms	27	83	10	2	no storms
8	77	3	1	no storms	18	78	3	0	no storms	28	85	8	3	no storms
9	80	7	2	no storms	19	77	3	1	no storms	29	86	5	2	minor, R1
11/10	80	14	3	no storms	11/20	76	4	1	no storms	11/30	84	3	0	no storms
Gx – G	eomagr	netic S	Storm I	_evel	Rx – Ra	dio Bla	ckout	s Leve	el	Sx – Sol				1 Level

Coming to a Radio Near You!!

The bowl lineup (all times are EST):

Dec 17 — New Mexico Bowl, New Mexico vs Texas-San Antonio, Albuquerque NM, 2 pm (ESPN)

Dec 17 — Las Vegas Bowl, Houston vs San Diego State, Las Vegas NV, 3:30 pm (ABC)

Dec 17 — Camelia Bowl, Toledo vs Appalachian State, Montgomery AL, 5:30 pm (ESPN)

Dec 17 — Cure Bowl, Arkansas State vs Central Florida, Orlando FL, 5:30 pm (CBSSN)

Dec 17 — New Orleans Bowl, Southern Mississippi vs Louisiana-Lafayette, New Orleans LA, 9 pm (ESPN)

Dec 19 — Miami Beach Bowl, Tulsa vs Central Michigan, Miami FL, 2:30 pm (ESPN)

Dec 20 — Boca Raton Bowl, Memphis vs Western Kentucky, Boca Raton FL, 7 pm (ESPN) Dec 21 — Poinsettia Bowl, BYU vs Wyoming, San Diego CA, 9 pm (ESPN)

Dec 22 — Famous Idaho Potato Bowl, Idaho vs Colorado State, Boise ID, 7 pm (ESPN)

Dec 23 — Bahamas Bowl, Old Dominion vs Eastern Michigan, Nassau, Bahamas, 1 pm (ESPN)

Dec 23 — Armed Forces Bowl, Navy vs Louisiana Tech, Fort Worth TX, 4:30 pm (ESPN)

Dec 23 — Dollar General Bowl, Ohio vs Troy, Mobile AL, 8 pm (ESPN)

- Hawaii Bowl, Middle Tennessee vs Hawaii, Honolulu HI, 8 pm (ESPN) Dec 24 -

Dec 26 — St Petersburg Bowl, Mississippi State vs Miami (Ohio), St Petersburg FL, 11 am (ESPN)

Dec 26 — Quick Lane Bowl, Boston College vs Maryland, Detroit MI, 2:30 pm (ESPN2)

Dec 26 — Independence Bowl, North Carolina State vs Vanderbilt, Shreveport LA, 5 pm (ESPN2)

Dec 27 — Heart of Dallas Bowl, North Texas vs Army, Dallas TX, noon (ESPN)

Dec 27 — Military Bowl, Wake Forest vs Temple, Annapolis MD., 3:30 pm (ESPN)

Dec 27 — Holiday Bowl, Minnesota vs Washington State, San Diego CA, 7 pm (ESPN)

Dec 27 — Cactus Bowl, Baylor vs Boise State, Phoenix AZ, 10:15 pm (ESPN)

Dec 28 — Pinstripe Bowl, Pittsburgh vs Northwestern, Bronx NY, 2 pm (ESPN)

Dec 28 — Russell Athletic Bowl, Miami (Fla.) vs West Virginia, Orlando FL, 5:30 pm (ESPN)

Dec 28 - Foster Farms Bowl, Indiana vs Utah, Santa Clara CA, 8:30 pm (FOX)

Dec 28 — Texas Bowl, Kansas State vs Texas A&M, Houston TX, 9 pm (ESPN)

Dec 29 - Birmingham Bowl, South Florida vs South Carolina, Birmingham AL, 2 pm (ESPN)

Dec 29 — Belk Bowl, Virginia Tech vs Arkansas, Charlotte NC, 5:30 pm (ESPN)

Dec 29 - Alamo Bowl, Oklahoma State vs Colorado, San Antonio TX, 9 pm (ESPN)

Dec 30 — Liberty Bowl, TCU vs Georgia, Memphis TN, Noon (ESPN)

Dec 30 — Sun Bowl, North Carolina vs Stanford, El Paso TX, 2 pm (CBS)

Dec 30 - Music City Bowl, Nebraska vs Tennessee, Nashville TN, 3:30 pm (ESPN)

Dec 30 — Arizona Bowl, South Alabama vs Air Force, Tucson AZ., 5:30 pm (ASN)

Dec 30 - Orange Bowl, Florida State vs Michigan, Miami Gardens FL, 8 pm (ESPN)

Dec 31 — Citrus Bowl, Louisville vs LSU, Orlando FL, 11 am (ABC)

Dec 31 — Tax Slayer Bowl, Georgia Tech vs Kentucky, Jacksonville FL, 11 am (ESPN)

Dec 31 - CFP Semifinal: Peach Bowl, Alabama vs Washington, Atlanta GA, 3 pm (ESPN)

Dec 31 — CFP Semifinal: Fiesta Bowl, Clemson vs Ohio State, Glendale AZ, 7 pm (ESPN)

Jan 2 — Outback Bowl, Iowa vs Florida, Tampa FL, 1 pm (ABC)

Jan 2 — Cotton Bowl Classic, Wisconsin vs Western Michigan, Arlington TX, 1 pm (ESPN)

Jan 2 — Rose Bowl Game, Penn State vs Southern California, Pasadena CA, 5 pm (ESPN)

Jan 2 — Sugar Bowl, Oklahoma vs Auburn, New Orleans LA, 8:30 pm (ESPN)

Jan 9 — National Championship Game: Semifinal winners, Tampa FL, 8:30 pm (ESPN)

IRCA TIS/HAR LIST (Winter 2016)

The IRCA TIS/HAR LIST lists all US and Canadian TIS/HAR stations, by frequency, including call letters, state (province,) city, county, licensee, address, coordinates, expiration date and dates of DXM/DXN reports/sources. It has been updated with FCC data, DXM, DXN and DXer reports, and on-line listings through March 1 2016.

The 2016 IRCA TIS/HAR LIST is posted on the IRCA website for all to download. The link is: http://www.ircaonline.org/TIS 2016.pdf.

For those preferring a hard copy, one can be ordered from the IRCA. Prices: IRCA/NRC members – \$9.50 (US), \$11.00 (Canada) \$12.50 (México), \$14.00 (rest of the world). Non-IRCA/NRC members – add \$2.00.

IRCA Mexican Log, 20th Edition (Winter 2015)

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

Prices: IRCA/NRC members - \$9.50 (US), \$11.00 (Canada) \$12.50 (México), \$14.00 (rest of the world). Non-IRCA/NRC members - add \$2.00.

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

In its nearly 200 pages you will learn about the principles underlying the design of successful receivers, antennas and receiving accessories, find reviews of the best commercially available DXing equipment in different price ranges, as well as detailed instructions for building one's own antennas and other DXing aids. Although it focuses on the technical backdrop to medium wave DXing, it will also be of interest to serious shortwave listeners and low band radio amateurs. Prices: IRCA/NRC members – \$15.00 (US), \$16.50 (Canada) \$18.00 (México), \$20.00 (rest of the world). Non-IRCA/NRC members – add \$2.00.

IRCA Slogans List (September 2016)

This completely revised Slogans List includes radio slogans from the US and Canada (over 4500). The 2016 IRCA TIS/HAR LIST is posted on the IRCA website for all to download. The link is: http://www.ircaonline.org/slogans.htm

Sunrise/Sunset Maps

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

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

IRCA Foreign Log

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

An Introduction to Broadcast Band DXing

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

IRCA Reprints

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

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

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

"DX Monitor" on DVD

IRCA's regular bulletin "**DX Monitor**" Volumes 1 through 49 in .pdf format on 2 DVDs. Re-live the days gone by and re-introduce yourself to the former members who helped make the IRCA great!! NOTE: You will NEED a DVD reader to open the .pdf files. These files were TOO LARGE to use regular CD's. Prices: **IRCA/NRC members** – \$15.00 (US), \$16.00 (Canada) \$16.50 (México), \$17.50 (rest of the world). **Non-IRCA/NRC members** – add \$2.00.

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

NRC Antenna Pattern Book, 7th Edition

The 7th Edition of the **NRC Antenna Pattern Book** is now available. This all new edition prepared by NRC'er Paul Swearingen is an all-inclusive book of patterns for both Day and Night operation of stations in the USA, Canada and selected foreign stations. The data for the book comes from the 34th Edition of the AM Radio Log and NRC'er John Callerman's comprehensive Mexican station listing.

The book comes shrink wrapped in 8½ by 11 three hole punch format for placement in your own three ring binder. There are 240 pages and the book has maps covering 530 through 1700 kHz depicting the lower USA, Canada and Mexico. Hawaii and Alaska are shown on separate maps at the end of the book.

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