

DX News

•Serving DX'ers since 1933•

Volume 60, No. 3 - Oct. 26, 1992 (ISSN 0737-1659)



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CPC Test Calendar

Call	Freq	Date	ELT Time
WLYN	1360	Oct. 26, 1992	0330-0440
WSMI	1540	Oct. 28, 1992	0100-0110
WRIV	1390	Nov. 2, 1992	0530-0600
KBOA	830	Nov. 5, 1992	0100-0130
WWLS	640	Nov. 7, 1992	0100-0130
KMFI	1470	Nov. 9, 1992	0200-0500
KNAK	540	Nov. 23, 1992	0200-0230
WSMI	1540	Nov. 28, 1992	0030-0100
WLMA	1150	Nov. 28, 1992	0030-0100
KCNO	570	Nov. 30, 1992	0330-0400

No new tests were scheduled this week.

From the Publisher ...

I thought I had covered everything last week, except for one minor peeve of mine. I like to recycle manila envelopes (until they fall apart, hi), but when the flaps is glued down, I have to slit the end. I would recommend to all that a piece of tape over the flap (and the clasp not threaded through the hole) is quite sufficient to hold items in manila envelopes, unless you're mailing ball bearings.

If the text IDXA in this issue sounds a little weird, it's because I supplied it for Dan, simply because I had all the pertinent information for it, including the back issues for the historical research. Our thanks to Dan for resurrecting this column, which has about a 35-year history, if not more.

DXChange... We're a little light on pertinent information this week, so we'll include these two faintly radio-related items. Frank Merrill - P. O. Box 669 - Macomb, IL 61455 is looking for radio promo 45 rpm records (no quantity too large), for which he'll trade promo items such as surveys, bumper stickers (many pre-1975), flyers, business cards, keychains, logo buttons, T-Shirts, coverage maps, and perhaps even cash. Contact him for details.

César Objio - Calle Enrique Henriquez 69 - Santo Domingo - Dominican Republic still is offering a 60-minute merengue tape, narrated in English, for US\$10/6E/20DM/ 15Sw.F/1250 Y, sent by registered Air Mail postage worldwide.

GTG - Ray Arruda's annual Thanksgiving GTG at The Lower Deck - 47 Burt St. - Acushnet, MA, will be

held Saturday, November 21, 1992, from noon to ???.

ANARC - The NRC is still a member of ANARC, which has shown definite signs of coming to life under vigorous leadership from Interim Coordinator Richard D'Angelo. Elections to the Executive Council are being held, and a revision of the constitution to simplify it is underway.

At one time, ANARC was notorious for its promotion of shortwave clubs, the number of members which did dwarf other clubs such as BCB, utility, longwave, and FM/TV interests. But several of the shortwave clubs have lost nearly half of their membership to other interests, and now the NRC is the fourth-largest club affiliated with ANARC. According to D'Angelo, the total membership of ANARC clubs is about 8,200, with the largest club almost at 2,100, compared with the NRC's 665. 18 clubs currently hold membership with ANARC.

As NRC's ANARC representative, I'm going to keep a close watch on ANARC's evolution. I've already sent a number of suggestions to Richard, and any NRC member who has suggestions should send them directly to the publisher.

Start making plans to travel to Enfield, CT, for Ron (Mr. Tact) Musco's bash next September, a/k/a the NRC 60th Anniversary Convention. I know I wouldn't miss it! 73.

DX Time Machine

From the pages of *DX News*:

50 years ago ... from the Oct. 10, 1942 *DXN*: Steve Mann, Hanover, NH, reported that the evening of Oct. 6 was excellent for LA DX, with the following heard: WPRA-990, LR1-1070, HJAN-1190, LR5-830, HJCR-1200, YV1RF-1120, and a Brazilian on 1040; LR5 was Q5 R8 [R5 S8] at 7:30 pm.

25 years ago ... from the October 21, 1967 *DXN*: Ron Schatz published a list of Mexican BCB stations.

10 years ago ... from the October 25, 1982 *DXN*: Carlton Lord, Corning, NY asked for help in locating historical information for the NRC 50-year anniversary book on which he was working.

AM Switch

Jerry Starr
c/o WHOT Radio
4040 Simon Road
Youngstown, OH 44512-1320

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

CALL LETTER CHANGES

None!

APPLICATIONS/GRANTS FOR NEW STATIONS

None

APPLICATIONS FROM EXISTING FACILITIES

None

GRANTS TO EXISTING FACILITIES

- 590 WWLX TN Lawrenceburg: reduce power to 600 watts, changes in antenna system
- 1050 KMIS MO Portageville: reduce power to 600 watts, changes in antenna system
- 1060 KFIT TX Sunset Valley: changes in antenna system
- 1240 KMCL ID McCall: relocate transmitter site
- 1290 KPHP OR Lake Oswego: reduce day power to 3500 watts, relocate daytime transmitter site, remain U2 (cancels CP for 5000/5000 U3)
- 1500 KBRN TX Boerne: relocate transmitter site

OTHERNESS

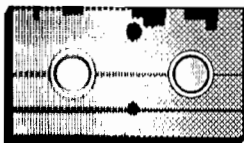
- 780 KRDA UT Springville: construction permit for new station is CANCELLED, permit had expired and FCC refused to reinstate it.
- 850 KWOF ID Waterloo: station is SILENT
- 950 KRRP LA Couchhatta: silent station is ON THE AIR
- 1010 KPSSL CA Thousand Palms: station is SILENT
- WCNU FL Crantville: silent station is ON THE AIR, returned 9/21/92
- 1240 KRAL WY Rawlins: station is SILENT
- 1260 WALM MI Albion: silent station is ON THE AIR
- WRIP SC Lake City: it had to happen, the day after we mailed out last week's column WVLC made its long-awaited call change to WRIP, see last week's Otherness if this means nothing to you.
- 1390 WKH IL Avon Park: silent as WAPR, station is ON THE AIR
- 1470 WHUI KY Shepherdsville: station is SILENT again, had only returned from a four year silence a few months ago
- 1510 KDKO CO Littleton: station was silent for less than a week and, after a day of transmitting test tone, returned to the air 10-8-92.

THANKS: Wayne Heinen, Jack Parks, Gerry Bishop, Mountain Journal

AM and Good DX, Jerry & BKF Jerry Starr & Buffalo K. Fooman

Now available: the highlights of the
1992 NRC Convention on video!

Five hours, 25 minutes of the Omaha convention on a T-160 VHS tape, taped by Eric J. Wesolowski. \$20.00. Also available: Omaha Radio, about two hours, on a T-120 VHS tape, also \$20.00. (\$5.00 from each order will be donated to the NRC.) Please specify which tape and order from NRC Publications; NY orders, please add sales tax



Domestic DX Digest

North: Bill Hale

495 Creekview Drive - Meridian, ID 83642-3241

South: Duncan Shaw

3131 S. McClintock B111 - Los Angeles, CA 90007

East: Dave Braun

11 Mill Bend Acres - Wyoming, DE 19934-9523

DX Catches in the U. S. and Canada, with 24-hr. ELT



DDXD-North

MEDIUM WAVE RAMBLINGS

- Remember, we're weekly now. So don't delay getting your loggings in as the 30 day limit is back in effect as of now!
- E-Mail via FidoNet may be sent to me at 1:347/17. Leave your message in *General Messages* or *Ham_Tech* areas. Phone in your last-minute tips and loggings to me at 208-888-7398.

SPECIAL

- 580 KFXD ID Nampa - Add this one to the TV News Simulcast List. Carries the 6:00 and 10:00 PM (local) KTVB Channel 7 evening newscasts. [Ed.-ID]

TIS & GOOFY STUFF

- 530 CFHS ON Fort Francis - 9/27 0539 - Fair signal with continuous loop of info in Ft Francis. Under CIAO. (SSF-MB)
- 1619.7 KVGB KS Great Bend - 9/27 0050 - Good signal (spur) with *The Country Cousin* legal ID at 0100. (SSF-MB)

BEACONS

- 521 TO KS Topeka - 9/27 0544 - Fair signal. (SSF-MB)
- 524 UOC IA Iowa City - 9/27 0526 - Fair signal. (SSF-MB)
- 526 OJ KS Olathe - 9/27 0522 - Fair signal. 1st time heard. (SSF-MB)
- 1700 CRJ BR Marabá - 9/26 2352 - Fair signal. (SSF-MB) [Not so fast, boys!! My source shows CRJ as being at Carajas, Brazil (S6° 7' W50° 0'), not Marabá (S5° 22' W49° 8') and their NDB on 370 with MRB as a call. You might want to // . Let me know what you come up with - Ed.]

WBUS
AM 1400 / FM 97.5

MIDNIGHT TO 0800 HOURS ELT

- 580 CFRA ON Ottawa - 9/27 0645 - Good with oldies music, CFRA ID, local ads. Over/under CKY. Very rare. (SSF-MB)
- 630 WDGY MN St Paul - 9/27 0633 - Poor with WDGY ID, C&W music. Under CKRC. New for us. (SSF-MB)
- CHED AB Edmonton - 9/27 0703 - Poor with CHED Edmonton ID & news. Under CKRC. Very rare. (SSF-MB)

- 680 CHFA AB Edmonton - 9/27 0628 - Good with classical music || 1050 & 690. Radio Canada nighttime program. (SSF-MB)
- 740 KCBS CA San Francisco - 9/27 0554 - Good with KCBS ID, talk about California coast. Rare here. (SSF-MB)
- 1340 WHAR WV Clarksburg - 9/29 0340-0350 - With oldies, call letter ID at 0346. Poor, taken out by WLVL sign-on(?) at 0350. (DT-ON)
- 1560 WPAD KY Paducah - 10/4 0605 - In and out with satellite nostalgia, usually fading at ID time. Finally at 0635 a good ID *Your memory station, WPAD.* Fair → poor in KNZR null. Last logged as WDXR in 1970s during Bakersfield silent period! (BH-WA)

0800 TO 1600 HOURS ELT



- 950 KTBR OR Roseburg - 10/4 1050 - Rock oldies, Roseburg ad, long promo for wedding anniversary contest, address and phone number as in new Log given twice, *Classic Top 40, KTBR*, then KTBR weather, more oldies. Call change here, ex: KYBS (not logged as KRBS). Good in null of KJR sportstalk. (BH-WA)

1600 TO 2400 HOURS ELT

- 570 WSYR NY Syracuse - 10/4 2350 - Under looped WKBN with ID. I can't get a sharp null when looping them, but signal levels under WKBN were strong enough to break through this night. (RF-OH)
- WNAX SD Yankton - 10/4 2351 - Under looped WKBN with TC and ID → C&W. New for SD #3. (RF-OH)
- 790 WMRZ FL South Miami - 9/7 2130-2200 - With Sinatra's *My Way*, call letter ID at 2100, news. Poor under 2 unIDs (CIAO moved to 530). (DT-ON)
- WSGW MI Saginaw - 10/4 1855 - Faded up above others with ID, local ad, WSGW program promo. 1856 → talk. New. (RF-OH)
- 800 KSOS UT Brigham City - 10/5 2210 - Doo-wop oldies, 800 KSOS ID, DJ Don Crawford on your 50s rock and roll radio station, local ads, PSA, *Oldies Ogden, KSOS*, more oldies. *Kool Gold* not mentioned but this is the SMN Kool Gold feed. Good atop religion, presumed KPDQ. (BH-WA) [I don't think they are *Kool Gold* all the time. Hearing them while passing thru the area a couple of times in the past two months, I've heard local chatter for prolonged periods and even CNN Headline News there in the mornings - Ed.]
- 870 WHCU NY Ithaca - 10/4 1905 - Good atop frequency with ID and ads. 1907 → sports talk. (RF-OH)
- 920 WTTM NJ Trenton - 9/7 2039-2112 - Poor with Dallas-Washington NFL game. Local ad for Foxrun Cafe in Wilmington. WHJJ/CFLS QRM. (DT-ON)
- 1040 CKST BC Vancouver - 10/5 2227 - Strong with album rock, *Modern Rock Radio, Coast 1040*, mentioned *Cable 88.5*, ad cluster included live music guide, 2231 admitted *Coast 1040, our call letters are CKST*, more music. Notorious non-IDer since change from CIMA. Worth waiting it out! (BH-WA)
- 1070 WKOK PA Sunbury - 9/13 2332-2400 - Oldies music on *Oldies WKOK*. News at Midnight. Poor under CHOK. Verie in. (DT-ON)
- 1260 WEZE MA Boston - 9/29 2133-2200 - With *Radio Bible* (Yasu), weather, lots of Boston addresses and WEZW mention. Poor, over WNDR. No WRIE. (DT-ON)
- 1280 WNAM WI Necedah-Menasha - 9/29 2035-2115 - With oldies, ID and WNAM *Weather* at 2110. Poor, over/under two others. (DT-ON)
- 1340 WMSA NY Massena - 9/28 2055-2200 - With oldies. Sign-off including calls, *1000 watts and transmitter 9 miles south of downtown Massena* followed by SSB. Poor under unID. (DT-ON)
- 1360 WKOP NY Binghamton - 9/28 2008 - With stock market report, business advice program with callers. Poor under unID with C&W. (DT-ON)

- 1380 WPHM MI Port Huron - 9/25 2120-2142 - Local play-by-play of a football game. Ad for *Tri-County Printers* on Blue Ridge Hwy in Marysville. Poor over/under CKPC. (DT-ON)
- 1580 WBCP IL Urbana - 9/30 2311-0004 - With jazz, ID at 2352 *Greatest music of all-time on 1580, WBCP*. News at Midnight. Poor with no CBU QRM. 10 watts? (DT-ON)

REPORTERS

- SSF-MB Shawn Axelrod, Wayne McRae (& Larry Shewchuk of CIDX) Seven Sisters Falls, MB; R-70 w/PLAM board & 4 kHz filter + 2 3' and 1 4' box loops
- RF-OH Rich Frcho Willoughby, OH; Drake R8, JRC NRD-515, LA-36 loop, LW
- BH-WA Bill Hardy Aberdeen, WA; Yasu FRG-7, Radio West Loop, Delco radio in '92 Chevy Astro
- DT-ON Don Trelford Scarborough, ON;
- Ed.-ID Editor, N5SZC7 Meridian, ID;

GRAVEYARD DX UPDATE

1490 kHz:
 WDLB WI Marshfield Don Trelford Scarborough, ON 538

Totals:	1230	1240	1340	1400	1450	1490	Total
MIKE KNITTER Cambridge, WI	9	9	6	8	11	10	53
MIKE KNITTER Rapid City, SD	5	3	3	4	6	8	29

ABBREVIATIONS AND SPECIAL SYMBOLS USED IN DDXD - North

|| :parallel with or to → :into :00:on the hour AC:Adult contemporary AP:Associated Press BBD:big band BRN:Business Radio Net C&W:country & western CFL:Canadian Football League CHR:contemporary hit radio CID:code ID CL:call letter ContChr:contemporary Christian EZL:easy listening EE:English FF:French GOS:gospel IRN:Interstate Radio Net LSR:local sunrise LSS:local sunset NBA:National Basketball Assn NHL:National Hockey League NFL:National Football League NPR:National Public Radio OC:open carrier POL: political PSRA:pre-sunrise authority PSSA:post-sunset authority QRM:man-made interference QRN:natural interference QTH:location REL:religious ROK:rock 'n' roll RS:regular schedule S:stereo SID:singing ID SRS:sunrise skip SS:Spanish SSB:Star Spangled Banner SSS:sunset skip TC:time check TT:test tones UG:urban contemporary UPI:United Press International

73, Bill

DDXD-South

NEWS AND VIEWS

Mike Hardester checks in this time with some items from a trip to Pennsylvania. Good to hear from you, Mike!
 Jeff Kitz mentions that he may be moving shortly, and is not sure of what conditions he will be facing at his new QTH, so we may not be hearing from him for a while. Your reports are always welcome, Jeff, whenever you can manage.
 The Columbus Day holiday allowed me some time to DX a Monday morning, good conditions to the north, unless the Canadians were all on special due to their Thanksgiving!

SPECIAL

- 850 WNIS VA Norfolk - 9/28 1446 In fair/good, some fading, with "You're listening to Rush Limbaugh on News Talk 850 WNIS." 50,000 watt CP now on the air, new! WRMR/WJAC still dominate at night. (JK-VA)
- 1080 WEEP PA Pittsburgh - 9/27 1830 Original calls back, in loud with "Classic Country AM-1080 WEEP." Strongest signal here from Pittsburgh, four times that of KDKA. Not illegally staying on at night anymore, signoff at 1945. (JK-VA)
- 1600 WKEN DE Dover - 10/12 0000 Sunday night signoff at 0000, all other nights 0100. (DB-DE)

0000 to 0800 ELT

- 600 WCAO MD Baltimore - 10/12 0108 noted with signoff mentioning studio and transmitter locations, was back on by 0123. Noted same announcement and signoff at 0205. (DB-DE)
- 1000 WLUP IL Chicago - 10/12 0149 noted off. (DB-DE)
- 1440 WBBC VA Blackstone - 10/12 0708 heard ID as "B-93.5 FM" into news. (DB-DE)
- WHIS WV Bluefield - 10/12 0710 ID popped up over WBBC and mess of others. (DB-DE)

0800 to 1600 ELT

- 600 WFRM PA Coudersport - 9/30 noted on visit to city in AM. The following items were noted: ABC news on the hour and local news following; "Radio PA News" on the half hour and local news following; promo for "Paul Harvey News," but if times announced, didn't hear/note them; later in day, noted with Pittsburgh Pirates baseball; SLOGANS: "AM 60," and "Where the music is"; and during a local bulletin board (For Sale/Wanted/etc.) mention of "Send your announcements to us at Box 309, Coudersport, 16915." Not parallel 96.7. (q.v.) (MH-PA)
- 720 WWII PA Shiremanstown - 10/1 0755-0830 noted with following items mentioned: SLOGANS noted: "Love 7-20 AM," "One Heart Ministries," "W W 2 News," and "Listener supported Christian radio"; CBN news on the hour and locally produced news on half hour; ID on hour with mention of "Shiremanstown-Harrisburg"; the announcer mentioned "It's October 1st and we need your help." Went on to say the station had no money to pay bills and asked for donations with address: One heart Ministries, P.O.Box 1162, Camp Hill, PA 17001-1162. (MH-PA)
- 1000 WLNL NY Horseheads - 10/12 0809 On tune in heard "Now, back to more music on WLNL." Into REL music with a country twang. (DB-DE)
- 1250 WBRM NC Marion - 10/12 0823 Many local ads with mentions of Marion, sounded like REL music afterward, over the one I was trying to ID, someone with CNN news. (DB-DE)
- 1590 WCBG PA Chambersburg - 10/1 1020 noted simulcasting (presumed) WGLL in Mercersburg on 92.1 with ID's for "WCBG 15-90 and 92.1 Gold." Spots were the same, but promos different. (MH-PA)

1600 TO 2400 ELT

- 810 WQIZ SC St. George - 10/1 1840-1847 noted on SSS with sign-off with female announcer, gospel music, scripture reading, ID with cities of "St. George-Charleston" mentioned; power of 5000 watts; and to return to air at 6 AM, then off. No SSB, etc. Fair/poor with QSB. This on US-70 near New Bern. (MH-NC)
- 900 CHML ON Hamilton - 9/27 2105 in good with "right now, it's 15 degrees Celsius <fade> Fahrenheit from Canada's first choice for news, CHML," then mostly NOS. (JK-VA)
- 960 WRNS NC Kinston - 10/1 1800-1830 noted not simulcasting WCTI-TV Channel 12 news during this time as per promo on TV. WCTI has promo for this station and others simulcasting the 1800 and 2300 news, and noted/reported previously. This date, WRNS simulcasting its FM outlet (WRNS-FM 95.1). (MH-NC)
- 1020 WPEO IL Peoria - 9/27 1959 in over KDKA with "Here's the latest WPEO Accu-weather," then gospel. Accu-weather on a REL station? (JK-VA)
- 1060 WNOE LA New Orleans - 9/27 2107 in with CW over XEEP/KYW, and the "CMA Music Award Highlights," "Country 101" ID's. A good verifier. (JK-VA)
- 1070 WNCT NC Greenville - 10/1 1800-1830 noted simulcasting WNCT-TV Channel 9 news in this time frame. (MH-NC)
- 1080 WFTD GA Marietta - 9/27 1945 in with signoff, mentions of 10 kw power, transmitter location, etc. (JK-VA)
- 1090 KAAyt AR Little Rock - 9/27 1839 in poor with REL/CW/GOS music, WBAL fade-in at 1848. (JK-VA)
- 1110 CKTY ON Sarnia - 9/27 2117 in loud again, way over WBT! (JK-VA)
- 1130 WRRL WV Rainelle - 9/27 1930 in fair, over/under KWKH/WCXIt, with signoff "WRRL is an equal opportunity employer." (JK-VA)
- 1180 WHJM TN Knoxville - 10/1 1920 in good with signoff "You have been listening to super-powered WHJM, Knoxville, Tennessee..." (JK-VA)
- 1190 WBDY VA Bluefield - 10/1 1911 in loud with CW and "Y-106" ID's, over weak WOWO/WLIB. (JK-VA)

- 1280 WWOK IN Evansville - 9/30 2018 in good with NOS/BFL and "that's 40 years of great songs on WWOK." (JK-VA)
- 1440 WAJR WV Morgantown - 9/27 1948 in with "CMA Bluegrass Country Music Awards. (JK-VA)
- 1580 WVBEt KY Georgetown - 9/30 2305+ In with BBD/NOS/CLA and "I'm Dave Rafferty playing Lexington's greatest favorites." Very loud, sounding like 50kw - "WQXR clone!" Now, did I miss a call letter change? WTKT? (JK-VA)

TIS

- 530 ????? NC Welcome Center; I-95 at NC/VA border. TIS operation noted 9/27 at 1010 with male announcing test for NC Department of Transportation HAR system. On 10/1 at 1547 noted similar test, but with female announcer. Both tests announced "This test is being conducted June 13th at 12:47 P.M." Range is 10+/- miles on either side of border. (MH-NC)
- 530 ????? VA Richmond TIS on I-95 into city still operational. Range does not seem to be as great as before. This on 9/27 and 10/1. (MH-VA)
- 530 WQC885 VA Kings Dominion on I-95, 9/27 and 10/1 - still not heard. Have traveled this route several times over past couple of years and have yet to hear this station. (MH-VA)
- 530 ????? VA Markham/Linden area (I-66): bits of audio noted here at 1115. Shenendoah National Park TIS (on 1610 kHz) noted during this time frame. Don't recall having previously heard audio on 530 kHz in this area before. Manassas? (MH-VA)

REPORTERS

- MH-NC,PA,VA Mike Hardester, on the road: GMC Sonoma Truck Radio/Antenna
- JK-VA Jeff Kitze, Dillwyn, VA: Sony CFM-140III AM/FM/Cassette - 100% Barefoot
- DB-DE Dave Braun, Wyoming, DE: R2000, Palomar Loop. Sony AN-1

DDXD-East**BITS AND PIECES**

We've got quite a column this week! I'm sorry that this did not appear last week - I forgot that the weeklies were upon us! Deadlines are now every Friday. Got some good DX here - you just have to wait until one of your locals goes off the air, hi.

SPECIAL

- 1510 (KDKO) CO Littleton - First noted silent on 9/15. Supposedly the IRS confiscated the stn, which owed many \$\$\$ in back taxes. Came back on sometime on 9/18 w/usual UC format, and begging for donations to save the stn. Logged 3 new ones while they were silent!!! (JW-CO)

unID's AND unID HELP

- 540 unID 9/9 1950 Stn relayed local KMJI-FM (Magic 100.3) to 2005, then began relaying KQXI-1550. Then announcer broke in w/events calendar for Rocky Mountain Speedway. Not real strong, but fade free, suggesting local or semi-local pirate. Wayne Heinen, about 20 air miles east of me could not hear the stn. Heard this night only. (JW-CO)
- 650 unID 9/29 2220 All SS calling themselves KAH-ERES-EQUIS (KRX). Very loud during day with a power reduction at 2220, then very weak. (BK-CA) (KRDX-650 Rancho Cordova, // KRCX-1110. Been on the air about a year now. -djs)
- 1620 unID First heard 9/23 2351 w/SS music, YL announcer with rapid Radio???? ID, to vocal mx, peaked NE/SW, another carrier just below (about 1619.8) creating weak het; 2359+ echo-effect ID, again caught only Radio part; EE vocal mx 0008, ID at 0009 sounded like Radio Eight; Noted the next morning weakly at 0839 fading up/down, gone at 0844 (BW-OK)

MIDNIGHT TO 0800 ELT

- 620 KTAR AZ Phoenix - 9/28 0148 Live phone-in talk show with AZ Senator Tom Patterson, lots of IDs between phone calls; promo for Paul Harvey News and Comment on KTAR Newsradio 620, ABC Radio News at 0200, local nx, ID at 0209 KTAR 620 AM Newstalk Radio. (SHP-CA-1)

- 1030 KTWO WY Casper - 9/26 0106 strong with "End of the World" preacher, full ID (a real rarity!) to CW mx (BW-OK)
- 1050 KMBA NM Los Ranchos de Albuquerque - 9/26 0053 in XEG null, too weak but solid call IDs into ads (BW-OK)
- 1190 KEX OR Portland - 9/17 0123 w/Tom Snyder Show, Oregon State Treasurer political spot, good ID at 0133, *This is 1190 KEX Portland*, commercial for First Stop Video and Dole 100% Juices at 0143. (SHP-CA-2)
- 1270 KESS-t TX Fort Worth - 9/12 0003 presumed w/SS and *Radio Case* phonetically to Mexican-style mx (BW-OK)
- 1510 KGA WA Spokane - 9/16 0727 More or less dominant w/fair signal w/CW mx; 0759 ID as 15-10 KGA *Spokane-Coeur d'Alene* & into ABC News. Easy with KDKO off. (JW-CO)

0800-1600 ELT

- 550 KCWR CA Bakersfield - 9/13 1549 with giveaway promo at 1552 *Win a 1993 Jeep Grand Cherokee 4X4 on Real Country KCW*. CW programming, ID at 1556 AM 55 KCW, better ID at 1606 KCW... *first on your dial with Bakersfield's Best Country... thanks for listening to AM 55 KCW*. (SHP-CA-3)
- 1190 KNBA CA Vallejo - 9/18 1343 with CWM programming, ID at 1344 KNBA with *Petterson until 11:00*, promo spot for Renaissance Pleasure Faire at the Black Point Forest in Novato, good ID at 1359 *This is KNBA 1190, Vallejo*, into local nx at 1400.
- 1510 KLLB UT West Jordan - 9/16 0845 GOS mx; 0859 canned ID *The New KLLB West Jordan serving Wasatch Front with America's Best Gospel*. Good on peaks w/QSB/QRM. (JW-CO)
- 1510 KANS KS Larned - 9/16 0910 Local nx, weather just ending; local ads. Fair at best in QRM. New catch, KS #45. (JW-CO)
- 1590 WAIK IL Galesburg - 9/25 0852 w/ sports trivia, call ID, ads for grain elevator and landscaping business into oldies. Topping freq 0854 but rapid fade and gone by 0900. (BW-OK)

1600 - MIDNIGHT ELT

- 580 KMJ CA Fresno - 9/13 1608 with repeat of Fri Sept 11 Rush Limbaugh Show, ID at 1623 *This is KMJ News Radio 58*, commercial spots at 1624 for Chrysler and The Sierra Network, voice-over ID by Rush Limbaugh (the great one - djs) himself *This is the Rush Limbaugh Show on KMJ Newsradio 58* at 1624. (SHP-CA-3)
- 1250 KZEP TX San Antonio - 9/12 2335 w/K-ZEP ID, pop music, mentions of San Antonio, mixing w/ KURB (BW-OK)
- 1250 KURB AR Little Rock - 9/12 2340 with *Little Rock's B 98.5*, into pop music (BW-OK)
- 1500 KSJX CA San Jose - 9/15 2207 Presumed with Japanese or Korean Talks, music. Weak but clear with no sign of usual KSTP. No splatter problems with KDKO silent. (JW-CO)
- 1510 KIRV CA Fresno - 9/15 2159 Noted singing ID in QRM, not much else. Fair in QRM with KDKO off. New catch, CA #73. (JW-CO)
- 1510 KFNN AZ Mesa - 9/16 2135 BRN features; sign off ann. at 2131 w/ID as *KFNN Mesa-Phoenix*. Dominates around sunset w/KDKO off. (JW-CO)
- 1510 KNSE CA Ontario - 9/16 2134 SS music to 2140, then Dodgers pre-game show. Female w/ID at 2158 in EE *This is KNSE Ontario-Pomona*. New Catch CA #74. (JW-CO)

CONTRIBUTORS

- (SHP-CA) Stephen H. Ponder Houston, TX Toshiba RP-F11 AM/FM/SW Portable
(SHP-CA-1) In Fresno, CA
(SHP-CA-2) In Yountville, CA
(SHP-CA-3) In Huntington Lake State Park, CA
- (BW-OK) Bruce Winkelman Tulsa, OK R390A, Quantum Loop
(JW-CO) John Wilkins Wheatridge, CO Kenwood R-1000, 4' Box Loop
(BK-CA) Bob Karchowski Sunnyvale, CA

The Answer Man

Got a question about radio? Send it to NRC's Answer Man: Russ Edmunds - 753 Valley Rd. - Blue Bell, PA 19422-2052. No question is a dumb question, and Russ will answer all, from basic to highly technical. Watch for the answer in *DX News!*

International DX Digest

Foreign DX Catches. Times are UTC; for ELT, subtract 5 hrs.

George McLachlan and Dave McBride win the new season's Double Dip DX award by submitting TA and TP loggings from the same listening site. Your reward? Hustle right on down to your local Golden Arches and ask for your free servings of ketchup - condiments compliments of IDXD!

PAN-AMERICAN

- 550 JAMAICA RJR, Montego Bay, 10/3 0433 - Good, mostly atop the frequency with loop pointed south, with typical RJR stuff (mix of reggae music and listener call-in). RJR IDs and promos at 0442. New for Jamaica #5. [RF-OH]
- 660 ST. LUCIA R. St. Lucia, 9/30 0128-0141 - Phone-in program about the St. Lucia Crisis Centre under WFAN and an unID station in Spanish. SIO 322. [JB-NF]
- 760 VENEZUELA Doble Q (YVQQ), Puerto La Cruz, 9/29 2303-2312 - Long ad string, promo for Sunday morning music program, ID at 2311 then lottery ad/result, SIO 233. [JB-NF]
- 770 COLOMBIA RCN Bogotá, 9/30 0019-0103 - Mainly talk and ads, "RCN" IDs, best around 0100 with pips, many IDs then news, SIO 333. [JB-NF]
- 780 VENEZUELA R. Coro 10/5 0445 - Heard with Mexican music and standard R. Coro slogan occasionally fading up under WBBM. What made this unusual was that I heard it on my stereo tuner with no antenna and notoriously bad AM! [JR-NY]
- 830 ST. KITTS & NEVIS, Trinity Broadcasting, 9/29 much of the evening - I didn't really stop to take notes, but this was loud and clear, and definitely on 830, as Connelly suggested in a recent issue. David Crawford (DX South Florida #277) had this on 830 back on 8/9, still IDing as "R. Paradise" and still announcing "825". [JB-NF]
- 870 PUERTO RICO R. Voz (WVOZ), San Juan, 9/29 2316-2325 - Spanish talk program with discussion regarding presidential campaign. Mixing with unID Spanish station, SIO 322. [JB-NF]
- 895 ST. KITTS & NEVIS Voice of Nevis, Bath Village, 9/29 2326 - Noted in passing with pop music. SIO 242. [JB-NF]
- 910 VENEZUELA "RQ-910" (YVRQ), Caracas, 9/29 2328-2343 - Mainly talk, jingle at 2330 then commentary about terrorism, ID at 2334 followed by economic news sponsored by Banco de Caracas, SIO 322. [JB-NF]
- 1280 BERMUDA VSB2, Hamilton, 9/29 2228-2237 - Religious music and talk over a ZY (presume Tupi) and a Spanish station, ID at 2322 then program "Turning Point" More commonly logged outlet on 1160 was good, too. SIO 433. [JB-NF]
- 1435.4 BRAZIL unID, 9/29 2205-2220 - Fair reception of this off-frequency ZY, so I followed it for a while hoping for an ID, mainly Portuguese talk about Color de Melo, however no luck. SIO 343-2. [JB-NF]
- 1450 BERMUDA VSB1, Hamilton, 9/29 2149-2201 - Pop/dance tunes, ads for RCA and a restaurant in Hamilton, nice ID just before top of hour, pips and BBC World Service news at 2200, SIO 4444 at 2149. [JB-NF]
- 1450 BRAZIL unID, 9/29 2156 - Suddenly, but briefly, faded up over Bermuda with football play-by-play in Portuguese. Although some Brazilian biggies like Globo 1220 were audible, I had no luck IDing any smaller ZY stations, SIO 322. [JB-NF]
- 1580 PUERTO RICO Radio Jefe (WMTI), 9/29 2240-2255 - Tight harmony LA music, timechecks "en Manatí", ads for companies in Manatí, canned ID at 2249, SIO 333-2. [JB-NF]
- 1620 UNID 9/30 0500-0530 - Spanish speaking and English speaking stations, weak signal. [MR-CA] (Maybe some sort of TIS at the Mexican-US border? Seems like I remember hearing one while in San Diego that alternates English and



580 Khz 1,000 Watts

Spanish warnings about pedestrians on the freeways in the vicinity of the San Ysidro-Tijuana border crossing. Although the next logging makes stranger things seem possible! - Jim)

TRANS-PACIFIC

- 1620 AUSTRALIA RPH, 9/28 1145-1230 - Female announcer, short (10 minute?) talk segments separated by musical selections. ID of sorts following guitar selection after 1205 "You are tuned to RPH network travel - in Brazil - and you've just heard (fade) Africa (?) by Eduardo Sanchez (?) from the record Brazilia (fade)..." Gone by 1230. [DX*MB]

TRANS-ATLANTIC

- 1313 ANGOLA EP da Huila, Lubango, 9/29 2122-2139 - Man in Portuguese, pop music, then woman in African language and African highlife music. Established parallel with Benguela 1502 2137. Deep fades, SIO 242. [JB-NF]
- 1314 NORWAY 9/27-28 2345-0030 - Noted with female announcer, vocals about one half hour before local sunset. Audio quality excellent at times through about 0030, but gone soon after that. [DX*MB]

QSL INFORMATION

BRAZIL: R. Guarujá Paulista 1550 f/d ppc, very pleasant 3 page letter from v/s Marcelo José Gonçalves Melo, Depto. Técnico, and 6 postcards in 61 days following f/up with \$1. Original report was 10 months ago with cassette and \$1. The letter complains that Color de Melo is turning the country to chaos, and that technically things are very difficult at the station. Nevertheless, they have had reports from Argentina, Finland and South Africa. Some WRTH info is wrong: station is 5 kW days and 1 kW nights (1900-0600 local time). The CEP (postal code) in the address should be 11400, not 11420; the name of the Gerente Comercial is Jovanir Batista Rampazo. [JB-NF]

CONTRIBUTORS

- [MR-CA] Mike Riordan, Goleta CA; Panasonic RF 2200, Select-A-Tenna.
[JR-NY] Jim Renfrew, Rochester NY; HQ-150 and Radio West Loop.
[RF-OH] Richard Frcho, Willoughby OH; Drake R8, JRC NRD-515, AL-36 Loop, LW.



- [DX*MB] George McLachlan with Dave McBride near Lewis, Manitoba (about 80 km east of Winnipeg); NRD 535, beverages.
[JB-NF] Jean Burnell, St. John's NF; Icom R71A, 200 meter antenna at 190 degrees (Cochrane's Pond).

Daytime Bandscan (Bilhausen, Germany; 8/24/92 1330-1450 UTC)

- 520 unID German, possibly // 801, very weak
531 MDR Leipzig, excellent
549 DLF Thurnau, fair
567 SFB1 Bern, weak
576 NDR Schwerin, strong
594 HR Frankfurt, excellent
612 NDR Kiel, weak
630 GG Dannenberg list, not // 828, fair
639 Ceskoslovensky Roz., Prague, weak
648 BBC Orfordness, fair
666 SWF Rohrdorf, weak
675 NOS Lopik, weak
684 RIAS Hof, strong
693 Ostdeutscher Rundfunk (probably), weak
720 WDR Langenberg, weak
747 NOS Flevo, fair
756 DLF Braunschweig, excellent
783 MDR Burg, strong
828 NDR Hannover, excellent
855 RIAS Berlin, weak
882 MDR Wachenbrunn, strong
936 R. Bremen, fair
972 NDR Hamburg, weak
990 RIAS Berlin, weak
1008 NOS Flevo, fair
1017 SWF Rheinsender, weak
1044 MDR Dresden, weak
1062 Danmarrks R., Kalundborg, very weak
1143 unID, unID language, very weak
1269 DLF Neumunster, weak
1323 R. Moscow Wachenbrunn, strong
1422 unID, very weak
1440 R. Luxembourg, weak
1539 DLF Mainflingen, weak
1575 DLF Burg, fair
1593 WDR Langenberg, weak

The receiver used was a DX-440. The internal ferrite bar of this set can achieve very good nulls.

Rádio Vale do Rio Madeira Ltda.
RUA BARRAGEM 70 JUREKA 60000000
670 KHZ O.M. ZYH 207
Av. do Rio Madeira, 1500
Humaitá - Amazonas

TRANS-ATLANTIC, TRANS-PACIFIC & DEEP SOUTH AMERICA
LOGGINGS IN DX NEWS VOLUME 59 (1991-92)

(compiled by Jim Renfrew, National Radio Club IDXD Editor)

This is a review of international loggings from Volume 59 (1991-92) of the National Radio Club's DX News. The emphasis here is on Trans-Atlantic (TA) and Trans-Pacific (TP) loggings from East Coast North America (ECNA) and West Coast North America (WCNA). Caribbean, Central America, Colombia and Venezuela loggings from ECNA are omitted, as these are relatively common, but loggings from Argentina, Brazil and Bolivia are included because they are quite difficult.

Many of the loggings submitted were shown as tentative or presumed by the original reporters, especially loggings of "hets". I have decided to include these without any special notation.

Each entry shows the frequency followed by the Volume 59 issue number that the logging appeared in. If you do not have the back-issues referenced here (with program descriptions, times, etc), you may still make good use of this list in determining the most likely targets from your location during the coming season. A general rule of thumb is that TAs can be heard best at your local sunset or European/African sunrise, and that TPs can be heard at or after your local sunrise.

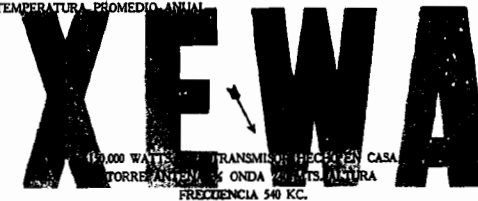
The Newfoundland DXpedition of November 1991 (Mark Connelly, Jean Burnell, and Neil Kazarsow) resulted in extensive loggings, too numerous to be listed here. Consult DX News 59-11 for a complete record of the loggings. However, Jean Burnell's other loggings from Newfoundland are included. The Newfoundland location is vastly superior to other East Coast sites used by IDXD reporters, so be cautious in choosing your DX targets from this list.

Brian Vernon's loggings from the northern tip of Baffin Island are given separate treatment as "North Coast North America".

EAST COAST NORTH AMERICA

ALBANIA	1395 (18/26), 1458 (19)
ALGERIA	153 (5/18/20), 549 (8/29), 891 (3/8/14/18/20/21/24/25/27/29), 981 (14/18), 1422 (27)
ANGOLA	1088 (8/18/27), 1295 (27), 1313 (12), 1367 (14/18/28), 1502 (27)
ARGENTINA	870 (18), 1030 (23), 1350 (27)
ASCENSION IS.	1485 (12)
AUSTRALIA	1620 (3/4)
AUSTRIA	1476 (13)
AZORES	693 (14), 836 (14), 837 (8/19/27), 909 (27), 1259 (27), 1503 (12/18/26/27), 1566 (14/18/21)
BELGIUM	1188 (28)
BELORUS	1566 (27)
BOLIVIA	1550 (27/28)
BRAZIL	980 (26), 1000 (23), 1040 (12/23), 1060 (12), 1100 (27), 1110 (28), 1120 (28), 1190 (12/28), 1200 (12), 1220 (12), 1280 (27), 1290 (27), 1300.5 (12), 1420 (27), 1430 (27), 1450 (27), 1470 (27), 1550 (12)
BULGARIA	1161 (23)
CANARY ISLANDS	720 (12), 837 (18), 882 (8/27), 1008 (18/19/27), 1098 (14/18), 1098 (27)
CIS	1449 (28)
COTE D'IVOIRE	1492.7 (26)

21°C TEMPERATURA PROMEDIO ANUAL



CROATIA	1134 (8)
CZECHOSLOVAKIA	1098 (27), 1287 (13)
ECUADOR	880 (18)
EGYPT	1107 (18/19/21/27), 1593 (18)
ENGLAND	882 (18/20/29), 1089 (18), 1215 (18), 1296 (13/26), 1431 (20), 1458 (18/23/27), 1548 (18/20/21/26/29)
FRANCE	162 (5/20), 1467 (1), 1557 (21)
GABON	1554 (12/18)
GERMANY	183 (20/24), 1269 (13/18), 1422 (26), 1539 (21/29), 1575 (21/25), 1593 (1/4/12/18/21/25/29)
GIBRALTAR	1458.2 (12)
GREECE	1386 (28)
GUINEA	1404 (11/18)

IRAN	1566 (27)
IRELAND	252 (24), 612 (28), 1278 (13/28)
JORDAN	1494 (26)
LESOTHO	1197 (1/12/27)
LIBYA	1251 (18)
LUXEMBOURG	1440 (26)
MADEIRA	1503 (13), 1530 (27)
MALTA	1557 (27)
MAURETANIA	1349 (1/14/18/19/25/27)
MOLDAVA	1548 (20)
MONACO	1467 (18/27)
MOROCCO	153 (6), 171 (6), 594 (10), 612 (8), 702 (8/10), 711 (8/14), 819 (10/25/27), 828 (10), 999 (21), 1044 (8/10/14/18/27), 1053 (14), 1080 (19), 1187.9 (27), 1325 (18)
NETHERLANDS	1604 (27), 1611 (23), 1615 (19/27), 1616 (20), 1617 (27)
NIGER	1125 (12)
NORWAY	1314 (13/18/21)
OMAN	1413 (23)
POLAND	1503 (18)
PORTUGAL	666 (8), 783 (10/26), 963 (18/27), 981 (20), 1035 (29), 1062 (8/14/18), 1562 (18), 1575 (26/27)
RUSSIA	1089 (20), 1467 (18), 1494 (26)
ST. HELENA	1548 (12)
SAUDI ARABIA	1512 (18), 1521 (15/21/24/29)
SCOTLAND	1458 (18)
SENEGAL	765 (1/3/4/7/8/14/20/25/27), 1287 (12), 1367 (23)
SIERRA LEONE	1206 (12)
SPAIN	639 (29), 747 (27), 774 (3/14/18), 792 (19/27), 838 (3), 855 (3/18/29), 900 (27), 954 (27), 999 (14/18/21/23), 1008 (19), 1017 (19), 1026 (18), 1071 (19), 1098 (18), 1107 (14/18/27), 1116 (18/19), 1125 (18/19), 1134 (18/27), 1143 (23), 1161 (19), 1179 (14/18), 1215 (27), 1296 (13/21), 1305 (13/18/29), 1314 (18), 1539 (26), 1548 (1), 1575 (4), 1584 (21/25/29), 1602 (20/29)
SPANISH MOROCCO	1359 (19/28)
SPANISH SAHARA	Old freq 1355 (18/23), new freq 1544 (28) (Probably Algeria)
SWEDEN	1179 (13/20)
SWITZERLAND	765 (18), 1566 (1)
TAHITI	738 (3)
TOGO	1394 (12)
TUNISIA	1566 (13/26)
TURKEY	181 (18)
UKRAINE	1431 (28)
URUGUAY	1420 (27)
VATICAN	1530 (4/18/21/24/26/29), 1611 (4/29)
YUGOSLAVIA	774 (10)
UKRAINE	1404 (26), 1431 (27)
UNID TA	702 (1), 1179 (1), 1241 (13), 1293.3, 1449 (27), 1458 (12/27)
UNID TP	747 (3), 1566 (3), 1575 (3)
UNID SA	1530 (27)

WEST COAST NORTH AMERICA (underlined loggings are from Hawaii)

AUSTRALIA	531 (28), 603 (25), 612 (28), 702 (28), 738 (28), 765 (28), 774 (28), 828 (28), 837 (28), 873 (28), 1026 (28), 1098 (28), 1107 (28), 1548 (28), 1575 (28), 1620 (18/28)
FIJI	891 (28), 1206 (28)
HAWAII	830 (28)
JAPAN	747 (28), 774 (28), 828 (10/28), 837 (28), 1008 (25/28), 1287 (28), 1314 (28), 1386 (28), 1575 (24)
MALAYSIA	1475 (28)
MARSHALL IS.	1224 (29)
NEW ZEALAND	648 (24), 675 (24), 720 (24), 756 (25), 783 (28), 981 (25), 1008 (28), 1026 (28), 1035 (28), 1215 (28), 1296 (28), 1630 (18)
NORTH KOREA	657 (24)
RUSSIA	720 (10)
SOUTH KOREA	1566 (10/28)
TAHITI	738 (28)
THAILAND	1575 (24)
TONGA	1017 (28)
UNID TP	576 (28), 585 (28), 756 (27), 747 (28), 945 (28), 963 (28), 1008 (27), 1017 (27/28), 1035 (28), 1135 (27), 1161 (28), 1332 (28), 1413 (28)

NORTH COAST NORTH AMERICA

RUSSIA	234 (14), 846 (14)
U.A.E.	729 (14), 1314 (14)

For Beginners

Jack Woods - P. O. Box 1003
Waldport, OR 97394-0514

Information and advice of interest to inexperienced DX'ers

Our NRC AM Radio Logbook is the recognized standard reference for listings of medium wave broadcast stations in Canada and the USA. However, those DXers who hunt for medium wave signals from other countries need a source of international listings. The *World Radio TV Handbook*, usually referred to in *DX News* and elsewhere as the WRTH, provides listings of radio and TV broadcast stations throughout the world. For those DXers interested in foreign DX, and not familiar with the WRTH, the following is my review of the 1992 edition of the *World Radio TV Handbook*.

The WRTH is a commercial publication. It has been published annually for about 45 years. The editorial offices are in the Netherlands. The publisher is Billboard Limited, London. In size, the WRTH measures about 5.75 x 9 inches, and is about one inch thick. It packs a lot of information into 590 pages of fairly small print.

The largest section in the book is entitled "World Radio". Over 300 pages in length, it is a listing of radio broadcast services throughout the world, with the world divided into several geographical areas, and the countries in each area listed in alphabetical order. In addition to listing the broadcasting stations in the several services (long wave, medium wave, shortwave, FM), both government-owned and private, it includes such data as station mailing addresses, names of the key management and technical personnel, the languages broadcast, and the times of broadcasting in the various languages. Also included are maps of each section. The medium wave listings for North America are not complete. The low power Canadian relay transmitters are not included and stations with output powers under 10kW in the United States are not included, so the WRTH does not replace the NRC AM Radio Logbook for domestic medium wave DX information.

A section of the handbook entitled "Long and Medium Wave Stations" contains 90 pages of station listings for the world, arranged by region and in numerical order by frequency. Omitted from these listings are the stations in the United States and Canada on the local frequencies 1230, 1240, 1340, 1400, 1450, and 1490 kHz except those (Canadian) stations running more than 1kW power. Also left out are certain other low-power stations in the USA and Canada. The WRTH refers the reader to the NRC AM Radio Logbook for complete listings.

Probably the most widely-read section of the WRTH is the one that contains the reviews of consumer electronics. For 1992, there are reviews of about ten receivers presently offered for sale on the world market. Included are the Drake R8 and the JRC NRD-535, and a range of portable receivers, some selling for less than 100 US dollars. The writers of the reviews are knowledgeable people who claim to have one of the "largest measuring laboratories in Europe". These WRTH reviews are written for the non-technical reader and are in a style which has been much-copied by technical writers in other radio-oriented publications (including, yes, some who write for *DX News*).

The WRTH contains some advertising. It is not excessive and is generally restricted to the first part of the book. In my opinion the advertising adds to the interest of the book. The WRTH changes little in format from year to year. It can be found in some libraries. The primary sales agent for the United States (and perhaps for Canada) is Watson-Guption Publications, 1515 Broadway, New York NY 10036. It is sold also by some mail-order dealers in radio receivers and related products. The cover price of the 1992 edition is \$19.95. The 1993 edition is expected to be available about the first of the year.

In the Beginning

John D. Bowker

The complete list of U. S. broadcast stations on the indicated frequency as published by the Federal Radio Commission in 1934. "S" = shared; "SH" = Specified hours; "T" = Transmitter location; "D" = Daytime operation only; "U" = Unlimited time

Frequency (kc)	Call letters	Main studio and transmitter location	Power	Time designation
1480, high power regional.	WKBW	Buffalo, N.Y.----- T---Amherst Town- ship.	5 kw-----	U.
1490, high power regional.	KOMA WCKY	Oklahoma City, Okla. Covington, Ky.----- T---Crescent Springs.	5 kw----- 5 kw-----	U. U.

International DX Achievements

Daniel Bartek, Jr.

308 E. 2nd Street
Wahoo, NE 68066-1906

International DX totals listed periodically in different categories

Year	DX'er	Location	Last Update	Total Veries	All Ctries	All Forgn	NA	SA	Eur	OC	AF	Asia
1975	Bartek, Daniel, Jr.	NE	1976	23	2							
1968	Bytheway, Phil	WA	1982	457	9	20						
?	Callarman, John	?	1970	740	50	138	72	20	17	20	3	6
?	Casamassima, Anthony	NY	1966	124	3	13	12	1				
1933	Cooper, Ernest	NY-MA	1980	4142	79	760	528	131	88	7	6	
1958	Dangerfield, Ben	PA	1981	422	118	323	84	44	148	8	31	8
?	Dellit, Sam	Australia	1978	362	37	218	109		5	80	1	23
1962	Edmunds, R. J.	NJ	1969	226	10	56	53	1				
?	Erickson, Don	CA	1982	442	6	9	8			1		
?	Falconer, Jeff	ON	1976		49	1175		44				
?	Fela, Joseph	NJ	1965	738	24	35	19	4	11		1	
1933	Geary, Kermit	PA	1965	4581	82	780	415	173	115	59	18	
1934	Gustafson, Hilding	IL	1984	862	112	316	68	36	114	61	23	14
?	Heinen, Wayne	NY	1981	882	18	116	109	2	5	1		
1976	Higgins, Earl	IL	1981	60	7	5	4		1			
1946	Holbrook, Hank	MA	1982	2528	101	704	270	93	147	49	26	2
1969	Karchevski, Bob	MA/CA	1975	204	24	141	112			6		
1962	Kerfoot, Tim	ON	1975	342	13	259	255	2	2			
1974	Knitter, Mike	WI	1983	936	17	53	45	8				
1941	Kruse, Len	IA	1971	4080	15	77	61	3		13		
1965	Long, John	CT	1968	101	29							
1947	Luton, Relfe	NC	1973	1049	23	142	102	4	3	33		
1960	Lynch, Don	MA	1980		9	157						
1952	McIntosh, Eric	NZ	1965	686	63	635	301	2	45	253	4	81
1958	Merriman, Alan	VA	1974	1460	89	314	171	42	82	3	12	4
?	Millar, Roy	WA	1967	1705	65	429	260	25	16	79	1	48
?	Moore, Ray	MA	1967	81	53	79	33	9	26	6	5	
?	Morris, Stan	MA	1975	3922	82	424	218	62	104	14	14	2
1973	Mount, Paul	OH	1978	225	6	25	22	2				
1962	Musco, Ron	CT	1985	1121	28	36	29		6		1	
1976	Renfrew, Jim	NY	1984	928	38	51	44	7				
1964	Reynolds, Bruce	?	1977	1103	28	121	111	6	2	2		
1960	Rugg, Andy	QC	1986	1512	62	183	79	48	51		5	
?	Sampson, John	NJ	1965	445	54	72	23	6	38	1	3	1
1963	Scrimgeour, Gray	CA/ON	1971	526	47	440	354	10	18	31	1	26
1964	Sorensen	ON/MA	1975	537	13	385	375	1	9			
1954	Starr, Jerry	OH	1974	1209	51	194	134	34	20	3	3	
1931	Steele, Sid	IL	1982	3001	35	286	256	10	2	3		1
1975	Swearingen, Paul	KS	1992	667	21	82	30	16				
?	Taylor, Pete	?	1966	1091	55	262	111	10	15	77		49
1931	Wheeler, Frank	PA	1982	1732	25	78	68	7	1	2		
1977	Vernon, Brian	YU	1981	314	39	232	7	1	63	106		55
1958	Wesolowski, Ernie	NE	1977	1898	24	168	153	6		7	1	1

Welcome back to the return of IDXA! After over two years, we're back again. The listing above is simply a tabulation of all current NRC members who have contributed sometime, throughout the years, to this column. As you can see, many have not updated in some time, including the editor of this column, possibly just because we stopped counting.

A little history ... the records (on 5x8" cards) go back to September, 1956, when Fred VanVoorhees listed records in what was called then "Supremacy Ratings". He turned the column over to Charles P. Atherton in February, 1957, who was followed by Hank Wilkinson in September, 1960; Norm Maguire, November, 1965; Paul Swearingen, November, 1980; Malcolm Maxwell, March, 1983; Mike Knitter, March, 1987; and Dan Bartek, October, 1989. The current database

contains all the information listed above for current NRC members, whether or not they have updated their records recently.

The rules for this column are simple. Just count all your foreign (non-U.S./Canada, or non-home-country for foreign NRC'ers) paper or taped verifications, separate them into categories by continents, and add them up (for the foreign total). Don't list "heard" stations. Add your total domestics (for the "Veries" column). Also, include the first year you started keeping veries, plus the best verie for each continent, and specify what area(s) you've DX'ed from in creating these totals. Write it down and send it all to the address above, and that's it, except for updating once a year.

IDXA will be published every even-numbered month, alternating with Don Erickson's DDXA, which will be published six times per year each odd-numbered month, starting in November. (Get your updates to Don at 6059 Essex St. - Riverside, CA 92504-1599.) Next month's IDXA will list North American achievements, featuring your best catch from NA, and other continents will be listed in the order above. 73, Dan.

October 7, 1992

Radio World

USA Digital Presents AM, FM In-Band DAB

Success Credited to DSP Chip from the Military

by Alex Zavistovich

NEW ORLEANS It may be considered a programming show, but the highlight of 1992 NAB Radio Show was technology-in-band digital audio broadcasting (DAB) technology.

DAB developer USA Digital Radio provided fixed on-air tests of its Project Acorn in-band, on-channel systems during the NAB convention here in September. Both FM and an AM technologies were demonstrated. WWNO (FM), an NPR affiliate in Crescent City, provided the channel for the FM demo, and WNOE offered the AM component.

USA Digital said its DAB system will offer AM broadcasters a 96 dB signal to noise ratio, stereo and a frequency response from 20 Hz to 15 kHz. The system also provides a "RBDS-type" data channel capability.

Listening to In-band AM

Those who listened to the demonstration were able to compare the USA Digital in-band AM signal, broadcast from the convention center on 1660 kHz, to the same programming on WNOE's 1060 kHz signal.

For the AM test broadcast, a studio signal was fed from WNOE via a 15 kHz RE8720 stereo tie line digital encoder from RE America. The encoder fed the signal via two standard telco copper pairs to the RE8730 tie line decoder at the convention center.

The digital signal then passed through a Corporate Computer Systems (CCS) MUSICAM encoder. After the requisite error correction and interleaving functions, the now 126 kilobit per second (kbps) bitstream was transmitted via a newly-developed Xetron digital transmitter at 1660 kHz. Power was 50 W.

On the receive end, the signal went through an RF amp to an IF amplifier and digital carrier recovery stage. After error correction and de-interleaving, the signal, now at 96 kbps, passed through a CCS MUSICAM decoder to a power amp for A/B monitoring in the convention center.

Results encouraging

The listeners were able to compare the AM analog signal versus the in-band digital signal. Most listeners said they were impressed by the digital feed.

The FM demonstration was similar to that presented by USA Digital in Las Vegas in April. The digital signal was combined with WWNO's analog signal,

and then the digital and analog signals were delivered on-channel, within the WWNO RF mask.

An experimental 2 kW solid state FM transmitter and combining system was provided for the demonstration by Harris Allied Broadcast Division. Other equipment used for the broadcast included a CCS MUSICAM encoder and an EDI digital exciter.

WWNO's analog signal is 50 kW while the DAB signal had an 50 watt ERP. The digital signal was about 40 dB down from the station's analog signal.

According to Tony Masiello, VP of technical operations for CBS—which is part of the USA Digital consortium, along with Gannett Broadcasting and Group W—the technology is possible because of a technology developed by the military.

Defense-related technology

The technology is called "acoustic charged transport" or "ACT," a microchip developed by the Defense Advanced Research Projects Administration (DARPA), Masiello said. The ACT gallium-arsenide chip is capable of digital signal processing speeds of 360 MHz—faster than seven Cray computers, according to USA Digital.

The ACT chip, to be built into DAB receivers, will be available in commercial quantities for \$7 to \$10 each, Masiello said.

The listeners were able to compare the AM analog signal versus the in-band digital signal. Most listeners said they were impressed by the digital feed.

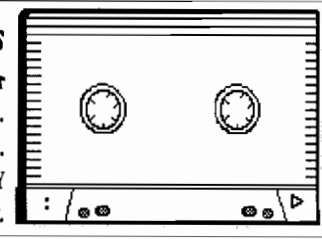
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Target DX

Bruce Conti
46 Ridgefield Drive
Nashua, NH 03062-1174

DX'ing 'smart', with shared tips and requests by NRC members

Another DX season is underway. I hope everyone had an enjoyable summer. Target DX is looking for contributors. If you have some tips or suggestions to help guide the rest of us in the right direction for better DX, write them down and send them in!

SUGGESTED TOPICS FOR CONTRIBUTORS

Atmospheric condition indicators - I use 1550 as a high-band indicator and 700 low-band for Latin American / Caribbean DX. If CBE and/or WLW are weak, then I'll spend some time looking for southern DX.

State target lists - What are my best bets for Oregon?

Other target lists - Sunrise or sunset skip, Monday morning, parallels, trans-Pacific,...

Tech tips - Selecting and setting up remote DX sites, aiming Beverage antennas, or apartment DX tips for example.

QSLs - Targeting stations from Venezuela that verify, or "How do I get a verie from Radio Coro (hi)?"

SWLs - COME ON DOWN!

One of the long term goals for many shortwave listeners (SWLs) is to verify all countries. While some SWLs will go after utilities or ham radio operators for veries, there is a certain breed of SWL who prefers to chase broadcast stations exclusively. A broadcast station transmits program material for all to hear, while utility or 2-way ham communications are intended for specific persons or services, not directed to the general public. For the broadcast SWL, there is one minor problem. Not all countries have SW outlets! So here's a target list of mediumwave broadcast stations from countries without shortwave, heard in North America on a regular basis. The list is compiled from loggings reported in International DX Digest and my personal logbook, with the help of the World Radio & TV Handbook.

ANGUILLA - The Caribbean Beacon's religious programs at 1610 are widely heard as far as the Rockies. 690 is also worth a shot.

AZORES - A tough catch from east coastal locations, 837 and 1566 have been logged.

BAHAMAS - The ZNS station at 810 has been heard from the eastern seaboard to Ontario.

BELIZE - Word is that this country's only SW outlet will be down for a while. Radio One - 830 is probably your best bet. They've been logged in the northeast and Canada.

BERMUDA - VSB3 on 1160 is heard in the northeast and on the coast, relaying the BBC World Service.

BRITISH VIRGIN ISLANDS - ZBVI-780 can be heard on the east coast. Move inland and this one isn't as easy to catch.

CANARY ISLANDS - Mark Connelly seems to have good luck from coastal Massachusetts catching the stations at 837 and 1098.

CAYMAN ISLANDS - Radio Cayman at 1555 is a good split frequency to try for, heard from the east coast to the Rockies, also possible on the west coast.

DOMINICA - Try for the Dominica B'casting Corp. at 595 with programs in English, heard from Florida to New England, and out to the midwest when conditions are right. Try VOI-860 too.

GRENADA - From Florida to Ontario, 535 is a good split frequency to try for, with local and BBC programs.

GUADELOUPE - If you're hearing French on 640, it's likely to be RFO, possible on the eastern seaboard, but tough west of the Appalachians.

JAMAICA - JBC's "Radio One-derful" at 700 is the most widely heard, reaching beyond the Mississippi and north to Ontario. The RJR stations at 580 and 720 are also good targets.

MARSHALL ISLANDS - A possible west coast target, 1224 can be heard in Hawaii. Also try 1098.

MONTSERRAT - Radio Montserrat has been logged on the east coast at 885.

PUERTO RICO - WIAC-740 or WKAQ-580 seem to be the most widely reported stations in the east.

ST.KITTS - Radio Paradise-825 is an easy catch on the east coast, and has also been logged in the plains states. Radio ZIZ-555 and VON-895 are also good splits to try.

ST.LUCIA - Radio Caraibes Int'l-1090 is heard in the east, best when WBAL and Canada are knocked out by aurora. The xmitter is on St.Lucia, but the studios are in Martinique.

ST.PIERRE ET MIQUELON - This little island in the Canadian maritimes is actually a territory of France. 1375 has been logged in the midwest.

ST.VINCENT - Another good split frequency station to try for, 705 is heard from Florida to New York and the Canadian maritimes.

TURKS & CAICOS - Look for religious programs from the Atlantic Beacon on 1570 that have been heard into New England and New York state.

US VIRGIN ISLANDS - WSTX-970 and WVWI-1000 are your best bets on the eastern seaboard. WSTX has made it into New Hampshire on auroral nights.

Quite the target list, but not much in Pacific or trans-Atlantic targets. The highest concentration of countries without shortwave reported in DX News are from the Caribbean, so the east coast has the advantage. While using loops and phased wires with high-end receivers will

definitely give you the edge, many of these stations can be heard on barefoot portables given the right conditions.

Pass this list on to your SWL friends to help them up their country-count, and then sign 'em up for membership in the NRC! 73s

Radio Waves

News of the industry, of interest to DX'ers

Laura McCusker

Oakbrook Manor #23E
Ravena, NY 12143-1017

...Greetings and autumn salutations to all static lovers! Welcome to the new season ... Over the summer Arbitron issued revised guidelines that clarify its position on stations "pushing the envelope" of acceptable efforts to affect the outcome of audience surveys. Stations received mailings detailing recent activities by various stations which Arbitron says "may be" in violation of the revised guidelines. The mailing encouraged stations to avoid potential problems by having their promotions "prereviewed" by Arbitron for guideline compliance ... Here are a few winners of the 1992 Marconi Awards. The awards recognize outstanding stations and personalities in various market size and format categories. Legendary Station of the Year is WCCO-AM, Minneapolis. Stations of the Year by market size - Major market: KGO-AM San Francisco; Large market: WLW-AM Cincinnati; Medium market: WMT-AM Cedar Rapids; Small market: KFGO-AM Fargo, ND. All the major awards taken by AM's! Nice to see. Other AM winners - Big Band/Nostalgia Station of the Year: WPEN-AM Philadelphia; MOR: WCCO again; News/Talk: KGO-AM again; Religious/Gospel: KNOM-AM Nome; Spanish: KWKW-AM L. A. ... The self-proclaimed King of All Media, Howard Stern, continues to spread across the country. He debuted on KEGL Dallas and WENZ Cleveland last month. Howie is expected to debut in Atlanta, Boston, and Chicago in the not-too-distant future. he's now heard in 5 of the Top 10 markets as well as 7 of the Top 25 markets ... On a related note, starting October 5, WMMR-FM Philadelphia added sportstalk to its morning show, in hopes of competing more strongly against WYSP's Howard simulcast. Sports caster Howard Eskin was

hired away from WIP to join the morning show. Current morning host and frequent Stern target John DeBella is expected to stay, although he's currently negotiating his contract ... The museum of Broadcast Communications in Chicago recently announced five new inductees into its Radio Hall of Fame, f/k/a the Emerson Radio Hall of Fame. New inductees: actor Don Ameche, countdown kaiser Casey Kasem, Detroit morning man J. P. McCarthy, ABC radio pioneer Leonard Goldenson, and "The Grand Ole Opry", the nation's longest-running live music and variety radio show. The new members will be inducted at a black-tie ceremony Nov. 15 in Chicago (it's not known if the Opry has a black tie) ... In the "no comment" department, in a surprise move, infamous former L. A. police chief Daryl Gates is the new afternoon talk show host on KFI-AM. Fired, despite having the top-rated afternoon show in the L. A. market, was area favorite Tom Leykis. Leykis was let go with no notice, prompting a flood of calls from angry listeners. Gates is spreading his particular brand of charm from 3-6 pm weekdays ... And finally, for those of you who missed my 5-minutes of fame (apart from this column, of course, which is good for at least 5 minutes), a letter I wrote to *Baseball Weekly*, concerning baseball and DX'ing, got a mention in the Oct. 6 issue. Unfortunately, the NRC did not get a mention, despite the fact that the letter was written on NRC stationer. Go figure! I gave it my best shot, always trying to be the NRC goodwill ambassador ...

Until next time, good autumn DX to all!

Sources: *Radio Business Report*, *Radio and Records*, Leykis article hot off the press from the *LA Times*, courtesy Mike Riordan.

It may not be perfect ...

but the NRC Log, 13th Edition is, simply, the best there is because of your contributions. Why not make the updaters and 14th edition even better? Send all corrections and changes to Wayne Heinen - 4131 S. Andes Way - Aurora, CO 80013-3831. Thanks!

Building the Broadcast Band

Thomas H. White – February 22, 1992

The history of AM broadcast band in the United States spans seventy years. This is a review of its first decade – how it was established, initially evolved, suffered through a chaotic period when government regulation collapsed, and finally was reconstructed by the newly formed Federal Radio Commission, along lines that are still visible today.

Technical Antecedents

Guglielmo Marconi's pioneering wireless work, begun in the late 1800's, developed an important principle which more than twenty years later would help determine which wavelengths would be available for broadcasting. Marconi's most significant early discovery was of the "groundwave" radio signal. This was a key development, which made longrange signalling using electromagnetic radiation practical for the first time. Prior to Marconi, all electromagnetic radiation was thought to act similarly. Like light, it was believed to normally travel through the air in a straight line until absorbed or reflected. What Marconi stumbled across was that, for longer wavelengths with a properly constructed antenna, some of the radio waves, instead of just "going through space", actually "travelled along the ground", following the contour of the Earth. Thus, the Earth could be used as a guide, carrying signals over the horizon to distant points. Moreover, it turned out the ocean was an even better conductor than soil for transporting radio waves to distant points.

It was found that the longer the radio wavelength, the better the Earth acts as a conductor, and the greater the range for a transmission of a given power. For this and other early work, Marconi shared the 1909 Nobel Prize for physics. And for 25 years following his pioneering work the groundwave signal was the most important factor in determining the desirability of a given radio wavelength.

United States Government Regulation

In the United States the use of wireless initially was unregulated – anyone could operate a radio transmitter anywhere, at any time, on any wavelength. And most utilized the longwave signals that travelled so well across land and sea. Naturally severe interference occurred with everyone trying to use the same wavelengths. Eventually some people decided to do something about it. Because these people were the United States

government, the action took the form of legislation to regulate radio, enacted in 1912.

A year earlier a Radio Service had been established in the Department of Commerce and Labor's Bureau of Navigation. It was initially charged with making sure ships carried wireless equipment, as required by a June, 1910 act. With the passage of the 1912 Act, the job of licensing stations and operators was added to the Radio Service's duties. The country was divided into nine Radio Inspection districts, with a district headquarters for a Chief Radio Inspector set up at a major port within each district. Initially radio was dominated by ship-to-ship and ship-to-shore stations, plus amateurs who comprised the bulk of the land stations.

As far as government control goes the 1912 Act was fairly liberal, since some, particularly the Navy, had wanted to nationalize radio altogether. Unfortunately, the Act's language wasn't always very clear, and was geared toward two-way communication between stations that were permitted, and even expected, to use various wavelengths of their own choosing. Fourteen years later these flaws would help cause a breakdown in the regulation of broadcast stations.

The 1912 Act essentially divided the radio spectrum into four parts. Following the standard set by the Service Regulations of the 1912 London International Radiotelegraph Convention, a choice band of wavelengths, from 600 to 1600 meters (500 to 187.5 khz) was appropriated primarily for government use. This band was selected due to the superior groundwave coverage these wavelengths provided.

Two additional bands, available for commercial use, were designated on either side of the government band. The first group, consisting of wavelengths greater than 1600 meters (frequencies less than 187.5 khz), actually had groundwave coverage superior to that of the government band. Here were found the huge transoceanic stations.

The other commercial band ranged from 600 meters to 200 meters (500 khz to 1500 khz). Groundwave coverage provided by these wavelengths rapidly diminished as the wavelength decreased. This band was used

by commercial stations with more limited service areas, and for other special purposes, such as 300 and 220 meters (1000 and 1365 khz), set aside because ship antennas were too short for effective use on longer wavelengths.

The final "band" was really a single wavelength – 200 meters (1500 khz). Although they were not mentioned by name, this wavelength was assigned to amateur stations. Because of its poor groundwave coverage, it was considered to be all but useless, and was far removed from the wavelengths amateurs had used prior to 1912. Still, this limited allocation was better than being completely eliminated, which some, again particularly in the Navy, had favored. The Act also allowed individual amateurs to receive "special" licenses to use longer wavelengths, and a number were issued within the 200 to 600 meter band, in order to support communication between amateurs doing "relay" work. (According to the Bureau of Navigation's September 28, 1912 edition of "Regulations Governing Radio Communication", "...a special license will be granted only if some substantial benefit to the art or to commerce apart from individual amusement seems probable".) Still, the Act was a major setback for amateurs, and severely restricted their activities.

The Rise of Voice Broadcasting

All early radio work used telegraphic signalling, in most cases using spark transmitters. However, following the example of the wire telegraph, which would lead to the telephone, many worked to transmit sound by radio. As this work progressed hundreds, perhaps thousands, of experimental and publicity broadcasts were made. Some were even conducted on regular schedules. However, the first technologies used – alternator and arc transmitters – turned out to be dead-ends in the attempt to provide reliable, high quality, and cost effective voice service. Only with the development of vacuum tube continuous wave transmitters, just before the start of World War I, did broadcasting become practical.

During the war all radio equipment – both sending and receiving – was either shut down or taken over by the United States government, so broadcasting experimentation ceased. However, the new vacuum tube transmitters were perfected under government supervision. In 1919, with the end of the wartime restrictions on sending and receiving, numerous commercial, experimental, government and amateur stations renewed dabbling with broadcasting, using the new vacuum tube transmitter designs.

The Westinghouse Stations

Of all the players involved with broadcasting experimentation and development, it was the Westinghouse Electric and Manufacturing Company, headquartered in East Pittsburgh, Pennsylvania, which would finally spark the transformation of radio broadcasting from an experiment into a national institution. Westinghouse was a relative newcomer to radio work. Its post-war efforts arose out of wartime contracts, combined with the broadcasts of Westinghouse engineer Frank Conrad's experimental station, 8XK. Westinghouse was to become the first concern to have the vision, commitment, financial stability, and clout to propel broadcasting into the national consciousness.

Previously the person most associated with broadcasting had been Lee DeForest, who was behind a number of efforts by various companies on both coasts, beginning before the war. However, these activities always seemed to eventually evaporate. In particular, DeForest had a knack for getting stations shut down for violating regulations. With a well established firm like Westinghouse there was no doubt their broadcast activities were a stable and on-going service, that would be funded in part by profits from the sale of Westinghouse radios to the general public. In contrast, with the DeForest efforts there was always the nagging suspicion that a station's main purpose was to promote the sale of watered stock, or that the company responsible, along with the broadcasts, might soon disappear, as had so many of the previous efforts. By 1920, when Westinghouse's work began to bear fruit, DeForest had left radio research, and was concentrating on work on a sound-on-film system for talking movies.

Westinghouse inaugurated its new broadcast service from East Pittsburgh with presidential election returns on November 2, 1920. Most accounts simplify things by crediting this historic broadcast to KDKA, operating on 360 meters. Actually, due to a delay in the delivery of the KDKA license, the election night broadcast went out under the temporarily assigned Special Amateur call of "8ZZ". Moreover, it wasn't until the fall of 1921 that KDKA moved to 360 meters.

Westinghouse's broadcast was hardly unique, as a number of other stations sent out election returns at the same time, and some had also broadcast results during previous elections. Nor were there historic numbers of listeners to the broadcast, since contemporary estimates put the audience at about 100, and it attracted little attention outside of the immediate Pittsburgh area. However,

KNEW 910 AM

Westinghouse differentiated itself from the others which had made broadcasts by launching a regular daily schedule, with plans to establish additional stations if the Pittsburgh station proved successful.

Westinghouse understandably sought good coverage for KDKA and its later broadcast stations. However, the commercial longwave band beyond 1600 meters was too congested to be usable, while the 600 to 1600 band was reserved for government stations. Thus, KDKA's home would have to be somewhere within the 200 to 600 meter band – the only wavelengths remaining after earlier radio settlers had claimed the longer wavelengths with their superior groundwave coverage.

Information is sketchy, but early publicity places KDKA's initial broadcasts on 330 meters (909 khz). There is evidence of shifting around, as some later reports list one or more of the Westinghouse stations on 375 meters (800 khz). With the success of KDKA, the fall of 1921 saw the establishment of three additional Westinghouse stations – WJZ Newark, NJ (now WABC, New York), WBZ Springfield, MA (now in Boston), and KYW Chicago, IL (now in Philadelphia, PA). At this time Westinghouse officials lobbied for a special wavelength for their stations, and after negotiating with Commerce officials, 360 meters (833 khz) was selected. (Unlike DeForest, Westinghouse seems to have had good relations with government regulators). L. R. Krumm of Westinghouse later claimed credit for proposing 360 meters as the standard. The first station to receive a license that explicitly specified 360 meters was WBZ on September 15, 1921. Licenses for 360 meters for WJZ, KDKA, and KYW soon followed.

Westinghouse apparently thought only its stations would be assigned to 360 meters. However, the Commerce Department had no intention of giving Westinghouse a wavelength monopoly. Officials began assigning 360 meters to broadcast stations that other companies set up beginning in the fall of 1921. Unwittingly, Westinghouse's suggestion for itself instead became the seed wavelength which would flower into the broadcast band.

By late 1921 enthusiasm for broadcasting had started to develop nationwide, and the Bureau of Navigation decided to formally designate standards and wavelengths for a specific broadcast service. Moreover, in addition to entertainment broadcasts, it saw the need to provide for broadcasts of official government reports. On December 1, 1921 two wavelengths were formally set aside for broadcasting, set up as a service category

within the already existing "Limited Commercial" class of stations. A clause was added to the Limited Commercial regulations, reading: "licenses of this class are required for all transmitting stations used for broadcasting news, concerts, lectures, and like matter. A wave length of 360 meters is authorized for such service, and a wave length of 485 meters is authorized for broadcasting crop reports and weather services, provided the use of such wave lengths does not interfere with ship to shore or ship to ship service".

Thus, broadcasting was formally introduced using just two wavelengths – 360 and 485 – in the 200 to 600 meter band. However, it would rapidly expand, until it ended up occupying almost all of this band, plus some of the "useless" territory beyond 200 meters. In addition, it would also drive out the ship-to-shore and ship-to-ship services it initially was required to protect. At this time there were few limitations on who could get a broadcast station license. Generally all you needed was the desire, the equipment, and American citizenship.

"Crop Reports and Weather Services"

Having a separate wavelength – 485 meters – for government market and weather reports made theoretical sense, but ultimately proved impractical. After the Navy Department, the Weather Bureau had been the government agency most involved in pioneering radio work. In particular, it wanted to speed weather and market information to isolated farmers, at that time dependent on mailed daily newspapers. (The August, 1913 *Monthly Catalogue of United States Documents* noted that the Weather Bureau had begun a daily radiotelegraphic "broadcast" of weather reports, which it explained as follows: "Broadcast", as the term is used in the Radio Service, means that the message is fired out into the illimitable ether to be picked up and made use of by anybody who has the will and the apparatus to possess himself thereof".)

Beginning with international conventions preceding the 1912 Act, it was the practice to set aside certain wavelengths for special purposes. So, it was natural to set aside a special wavelength for broadcasting market

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reports and weather forecasts. Then a radio could be tuned to a single wavelength and receive service from a number of stations. If the reports had instead gone out on 360 meters, farmers would have risked having distant reports drowned out by nearby stations broadcasting at the same time. The 485 wavelength was probably seen as the more important development, and a greater public service, than the mere entertainment being sent out on 360.

On many occasions the Bureau of Navigation's Radio Service Bulletin listed stations and schedules of weather and market broadcasts, but it never featured the latest listing of stations carrying the Chase and Sanborn Hour. Any broadcast station could get 360 just for the asking, and most did. However, before the Bureau of Navigation would issue an authorization for 485 meters the station had to first submit a written authorization from the Chief of the Bureau of Markets and Crop Estimates or the Chief of the Weather Bureau.

Although the number of broadcast stations authorized to use 485 meters rose from 15 to 137 in the year ending March, 1923, there were few problems with interference. The two Bureaus strictly regulated dissemination of government reports. They also controlled the schedules for the broadcasts, so that stations sending out reports on 485 meters would not interfere with each other.

From the government's point of view the dual-wavelength system worked pretty well. For example, in late 1922 the Weather Bureau Office in Springfield, Illinois announced that, using a good receiver, a daily schedule of thirteen weather and market reports, from seven different broadcast stations, could be heard in central Illinois on 485 meters.

Unfortunately, individual stations were not as impressed, especially since most concentrated on the entertainment side of their offerings. Credo Fitch Harris, in "Microphone Memoirs", a history of the "Horse and Buggy Days" of WHAS in Louisville, Kentucky, wrote:

"What logic gave rise to that mandate to tune a transmitter suddenly from its normal operation of 360 meters to 485 for the weather reports, and then quickly back to 360 for the continuance of a program, has never been explained and it still remains one of the most profound departmental enigmas. Practically none but farmers yearned passionately for news of tomorrow's weather, and crystal sets were incapable of serving distant areas. There were a few, though quite exceptional, instances of longer range receivers, – using earphones of course. These were homemade affairs built from published diagrams and strung out from mother's parlour table to the kitchen, but so imperfect and confusing to tune that usually we had sent the forecast on 485, and were back again on 360, before the tyro had emerged from his wilderness of tangled wires, knobs, rheostats and other gadgets. The rulings were so patently absurd that the chief of the Louisville Meteorological Bureau personally appealed to Washington and had it changed. Parenthetically, for fifteen years I have tried to discover the father of it. None will confess."

In defense of the Weather and Market Bureaus, it's doubtful they expected a station to jump back and forth between 360 and 485 meters like WHAS did. Most likely they expected the station to set aside, and publicize, a fixed period each day for the broadcasts on 485, after which it would sign off. Then, after a decent interval, it would start up operations on 360. In any event, as reviewed later the split wavelength operations ended in May of 1923, not because of the intervention of the Louisville Meteorological Bureau, but as a result of the expansion of the frequencies allocated to broadcasting.

(Note: This historical account by NRC member, and radio historian, Thomas White will continue in installments in future issues of DXN.)



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Musings

of the Members

Thoughts from NRC members ... the opinions expressed in this column are those of the individual writer and do not necessarily reflect those of the editors, publishers, or the National Radio Club, Inc.

With this issue of MUSINGS, we had a new report from CURTIS E. PROGRAM that was dated 4/1 but it was misplaced.....on purpose! Now, we continue:

JOHN R. MALICKY - 995 SHADYCREST ROAD - PITTSBURGH, PA 15216
On with the show: starting via I70, Chris & I visited 3 in IN (WMDH-1550, WEEM-91.7, WCVL-1550), 3 in Danville, IL (WDAN-1490, WIAL-99.1, WITY-980), nearing I80 Musatine, IA (KWPC-860 surviving a heavy thunderstorm to get there), all stations in Omaha except KGBI-100.7, 2 in NE NE with RICK DAU (KHVB-1340, KWPN-840) (Thanks, Rick, for coming), 2 returning home in Galesburg, IL (WAIK-1590, WGIL-1400), though 6 did not have time to give us a tour. This always makes a convention trip even more worthwhile, though the 2300 total mile, including a 1020 mile straight shot home on Labor Day with 4 stops journey seemed, at times, endless! It was worth it! Next year it will be shorter, to Enfield, CT for the NRC's 60th, be there! A couple of items from Omaha '92 before moving on, I have a tape of JOHN BOWKER mentioning to FRED VOBBE he was picking up KNRC-99.3 about 1 1/2 miles away after WWIN s/off. I could not find anything even close on adjacent frequencies or calls. Also, due to lack of concentration while snapping pictures, I missed the story of JOHN BOWKER & THE DOG at the NRC Banquet on Saturday night. 98% of my pictures turned out OK (11 rolls). As for a story on the 25 station tour--don't hold your breath but I'll try to write something!!!! Locally, WWCS-540 is now 24 hours "The Station of the Nations" ethnic block programming though surprisingly & due to a large phone response, is playing classical music 10PM-2AM "Classics After Dark", anything that fits an international flavor. WKEG-1110 has been off again for about 5 months, also WEEP-1080 now runs sat. country and ID's "Your Home for Classic Country" with WDSY. In Erie, new station WFLP-1530 is on as of 7/1 mentioning "Flagship 1530" ID's, CNN news at varied times & local talk, having split from their FM WRKT "Rocket 101". '73's

BILL HARDY - 2301 PACIFIC AVENUE - ABERDEEN, WA 98520-4527
My last MUSING was about 1 year ago! It's been a busy year. We've indirectly added 2 new DX receivers, hi - the radios in a 91 Mercury Sable and 92 Chevy Astro van. Both are digital tuning which is great for vacation bandscans, the 92's dial goes up to 1710. Nancy started her own business, an in-home daycare, which made the van affordable but has cut out most of her DX time, which gives me the chance to catch up to her totals! Mine are now about 1040 heard, the last year is somewhat in disarray! I hope to correct that in the next year by adding a computer to this den. Anyone with practical advice on avoiding interference from the computer to DX, please write! I'll be looking for IBM compatible software that can help with DX records, word processing & databases & sorting. The last two will help me in my work as the coordinator of IRCA's AM-FM Almanac project. My workload on that pales by comparison to WAYNE HEINEN's databases for the NRC AM LOG, which looks great! Thanks, Wayne, for the fine mention of the Almanac in the log. During bandscans for info on satellite talk and music for Almanac updaters, I've logged 4 call changes. 10/4 conditions were good in all directions, WPAD-1560 for the 1st time since the 70's (when they were WDXR) and this with KNZR on! In/out with 30 minutes of Unistar nostalgia music, finally a good ID 3:35 AM PDT. 7:50 AM, got rock oldies on 950 and realized it wasn't KJR which is now sportstalk, but KTBR, promo with address & phone number twice, matching the new log, several "Classic Top 40 KTBR" ID's. Not heard in KRBS days but last logged as KYES. 10/5 daughter napped in the new van and I logged 2 call changes, 7:10 PM KSOS ex-KNKK doo-wop oldies and "your 50's rock & roll station", SMN Kool Gold feed but "Kool Gold" not mentioned. (I think they dropped that a few months back, Bill-DWS). 7:31 PM after waiting through spotset on non-IDer "Coast 1040" Vancouver, they actually admitted "our calls are CKST". If all these new loggings keep up, you'll be seeing more of me in these pages! '73, Good DX

DAVE SCHMIDT - P O BOX 11502 - WILMINGTON, DE 19850
I guess we're still not in full swing, we're weekly now guys! Your reports are welcomed, DX & Radio related! On an upstate trip 10/11-12, noted that WODE-1230 (ex-WEEX) was not on (FM on 99.9 ID'd the FM only, AM was a simulcast in the last year or so). Stayed in Wilkes Barre 10/11 (about 5 blocks from HARRY HAYES), no sign of 1340. On 10/12, after a quick visit to the Pocono NE Railroad, another quick visit to WBAX-1240/WYOS-92.1 but the person we went to see was at a remote. 1320 is indeed running ERC's non-IDing sports he hears in the wee hours, they were not running any ID's while I was sitting out in the parking lot of the empty studio on Keyser Avenue nor programming, just OC for most of the day! When programming was noted, no ID's. Someone told me this is tied in with WWAX-750 so it might be a good idea to send reports there. DX, a little has trickled in the wire, noting that CKLY-910 is indeed back (if off at all), and strong here most nights. The local TIS on 1610 (WNXP-450) has been running an OC for about the last 2 weeks, no audio. And that is it! CUN7

Dave Schmidt

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Times are local per Muse.

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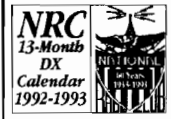
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