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From the publisher...

Hope you’ve been able to do some quality DX’ing during the waning summer months. Most of my time has been spent in front of the keyboard or pasting little pieces of paper onto bigger. Check out the promo at the bottom of page nine for the results of one of these sessions.

Mangled copies of the bulletin have decreased dramatically since the post office required us to tape the corners of DXN, but should you receive a copy in less than satisfactory condition, replacement copies, as always, are free.

We’re holding a copy of DXN which has been sent, twice, to two different addresses and been returned. Please check with the USPS if you aren’t sure what your exact mailing address is, and then let us know so we can get DXN to you on time.

They joined...

R. G. Wood, Philadelphia, PA; Theodore R. Hall, Louisa, VA; Don Hutchings, Loves Park, IL; Jefrey A. Klepping, Seattle, WA; Jerry El Ya, Bloomington, IN; James A. Dale, Rockton, MN; and Lexington E. Smith, KB2VR, Woodbury, CT.

Publications...

Grove Publications - P. O. Box 98 - Brastown, NC 28902-0098 is offering "propagation Programs - A Review of Forecasting Software" by Jacques d'Avignon. The 47-page book is $9.95. And fellow Kansan Kannon Shanmugam’s "1993 Guide to Shortwave Programs", which includes 20,000 English-language programs from 100 stations worldwide sells for $13.95. Mention the NRC when you order!

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**DX Time Machine**

Receptions from the DX log of Max Watkins, Tćcumseh, NE: Oct. 17: KF1X, Independence, MO; Oct. 12: WRC, Washington, DC; Oct. 13: WTM; Cleveland, OH; Oct. 15: WBAA, Minneapolis, MN; KFFZ, Dallas, TX; Oct. 20: WRAO, St. Louis, MO; KJW, Towanda, KS; Oct. 30: WCAS, Minneapolis, MN.

From the pages of DX News:

50 years ago... from the August 22, 1942 DXN:

Frank Coryell, Cleveland Hts., OH, noted, "I never really understood how poor summer reception was until now. It's positively disgusting; I can't even hear KFI until past 3 am, and then only about R-4."

25 years ago... from the September, 1967 DXN:

DX'ing from Antofagasta, Chile, John W. Hoogerheide reported reception of WCKY-1530, WKBK-1530, WPTR-1540, KMOX-1120, and WGBS-710.

10 years ago... from the August 23, 1982 DXN:

The all-time IDX listed Ray Crawford, New Zealand with 167 countries; Al Slater, England, 130; Ken Mackey, New Zealand, 123; Ben Dangerfield, PA, 118; Hilding Gustafson, IL/Fl, 109; Art Cushing, New Zealand, 108; Roger Anderson, VA, 105; and Hank Holbrook, MA, 101.
CALL LETTER CHANGES

Old call: New call:
730 WARB LA Covington WASOR
740 WMEA MA Cambridge WJIB
870 WFJS TN Colonial Heights WJNC
900 KKAQ TX Floydada KAWA
1230 WBBQ VA Abingdon WABN
1280 KLVG TX Longview KARW
1400 KCOB CA San Luis Obispo KIXT
1450 KGJF MT Great Falls KMSL
1480 NMAX MI Kentwood WGVU
1520 WPLM GA Cordele WSCW
1550 WNEZ MI Muskegon Heights WJQW
1550 KZQO UT West Valley City KRGQ

#WARB-730 first asked for a change to WAFU but had that change set aside in favor of WASO.

APPLICATIONS FOR NEW STATIONS
None

GRANTS FOR NEW STATIONS
1060 AZ: Tempe: 5000/500 U2 (replaces the existing license of KUKA as part of a settlement agreement)
1250 PR: Sabana: 1000/250 U4
1470 NC: Greensboro: 3500/5000 U2

APPLICATIONS FROM EXISTING FACILITIES
900 WSTA AL: Montgomery: dismantle nighttime directional antenna system and operate with 44 watts at night from the daytime transmitter
1040 KEZG OR: Tigard: powers to 2200/200
1070 WANN WV: Green Valley: night power to 200 watts
1100 KZPM CA: Bakersfield: night power to 5000 watts
1250 KPHP OR: Lake Oswego: day power to 3500 watts
1350 KANO AR: Rogers: powers to 1000/125, antenna to U1
1430 KUO TX: Breckenridge: day power to 700 watts

GRANTS TO EXISTING FACILITIES
920 KWNJ IL: Granite City: relocate daytime transmitter site, reduce day power to 450 watts
1480 WCOJ OH: Cincinnati: powers to 1000/114
1490 WLGW NH: Lancaster: relocate transmitter site

OTHERNESS
640 WJZJ NJ: Mount Holly: new station has been conducting on-the-air testing for over a month and may be on regular schedule when this reaches you
650 KBBA AR: Benton: silent station has new owners, may be returning to the air
770 WTOR NY: Youngstown: construction of this new station has hit a snag as a citizen group is protesting the erection of their three 350-foot towers in Lewiston, NY

610 WIOD NEWS • TALK RADIO

810 WSJC MS: Magee: station is SILENT
850 WPID TN: Fairview: silent station is ON THE AIR
900 WBGQ NY: Saratoga Springs: silent station is ON THE AIR
900 WBOY TN: Lebanon: silent station is ON THE AIR
920 CKGY ON: Sault Ste. Marie: station will go off the air for good on 8-30-92. Owners of both AMs in this market are taking their AM facilities off the air permanently and will combine their FM stations into a joint operation. See 1050 below.
990 WEEB NC: Southern Pines: according to the station they run 5000 watts during Critical Hours and 500 watts at night
1030 WAZK TN: White Bluff: station is SILENT
1050 OFYV ON: Sault Ste. Marie: station will go off the air 8-30-92, see CKGY-920 above
1080 WKKE NC: Saint Pauls: silent station is ON THE AIR
1120 KTCO TX: Manor: application to change city license to Cottonwood and increase night power has been recinded by the station
1130 WEEO PA: Wayneboro: station is SILENT and will remain so permanently, the studios have been dismantled and their 3-tower antenna system has been taken down. Looks like this one is gone for good.
1210 WODR GA: Dahlonega: silent station has new owners who expect it return it to the air soon
1250 WIOX MI: Bay City: station is SILENT again
1260 WRIP SC: Lake City: silent station is ON THE AIR
1340 WKGJ TN: Knoxville: silent station is ON THE AIR
1350 WCHI OH: Chillicothe: silent station is ON THE AIR
1380 WKTJ ME: Farmington: station is SILENT
1400 KOKX TX: Huntsville: station is SILENT
1440 WGGH KY: Paris: new station is ON THE AIR with Southern Gospel format and USA net news. Programing is LOCALLY produced, not satellite fed!!
1470 WBBL KY: Shepherdsville: silent station is ON THE AIR
1480 OKAN ON: Newmarket: silent since last March, station is now ON THE AIR again
1500 KOKY AR: Jacksonville: license for this silent station has been CANCELLED and the calls DELETED
1520 WQHA NC: Winston-Salem: station was reported to be off by a local monitor but silence must have been very brief as this station is still ON THE AIR
1540 WAMD IN: Decatur: station is SILENT temporarily due to equipment problems
1550 WNDI IN: Sullivan: silent station is ON THE AIR
1550 WTVB VA: Virginia Beach: silent station is ON THE AIR
1600 WRNC NC: Reidsville: license renewal for this long silent station has been DISMISSED, we assume this indicates this station will not return

THANKS: Dick Trux, Chuck Rader, William Cooley, Doug Smith, Stan Morss, Jack Parks, John Bowker and M Street Journal

73 and Good DX Desk & BKF Jerry Starr & Buffalo K. Fooman
Domestic DX Digest

North: Bill Hale
495 Creekview Drive - Meridian, ID 83642-3241

South: Duncan Shaw
3131 S. McClintock 8111 - Los Angeles, CA 90067

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

\[\text{Here we are in Idaho! See the header for my new address. Meridian is about 10 miles west of Boise's city center and I am about six miles due north of KBOI's transmitter site. But have been able to null them out for KBOI-880 reception! Due to the re-alignment of DDXD (see map in issue 28, although the dot for Boise is about 125 miles too far East, he), I must sadly say goodbye to all of you faithful reporters in the South and the West. But keep your fine reports going to your new editors and DDXD will continue to be THE way to get your DX and tips in the fastest possible manner available to mortal man, he. Thanks for all your support over the past six months (West-Coasters) and six years [has it been that long? Yikes for the East. So, let's go, Northerners. Report now. . . and often! Show those DXers in the other areas where the real DXers live! The phone number here is 208-388-7398. Call from 6-10 PM Mountain Time.}

Welcome to first-time reporter Deane McIntyre of Calgary, Alberta. Good to hear from another "Northerner"! Good stuff, Deane. Report often.

Thanks to Mike Brooker for the handy little CBC Radio Schedule and station guide. From this new location, I'll be doing a lot of listening to that service.

Included here are the results of Jerry Coatsworth's DX Test efforts over the past season. Mighty fine, mighty fine!

Upcoming deadlines for DDXD-N are as follows: Issue 30 Sept 12 . . . Issue 1 Sept 26 . . . and weekly for several issues after that. Have fun at the Convention!

SPECIAL

W2GAC Great 58 am

590 WKZQ MI - Kalamazoo - As of mid-July, format is now News-Talk (ex-AdCon). Slogan: News 59. (PLB-MI)

800 CHAB SK - Moose Jaw - 7/11 0500. Fair with . . . You know it, we know it, they know it, and so everybody will know it. Nobody plays more continuous country than Country 800. Slogans Continuous Country and Country 800 and Saskatchewan's Continuous Country. No longer Oldies. Also now Broadcast News. (SA-MB)

820 WOSU OH - Columbus - Beginning 8/1, hours of operation are 0500-2300 Monday - Friday and 0600-2000 Saturday and Sunday due to budgetary cutbacks. NFR's Talk of the Nation will replace big-band programming. Also affected are the schedules of WOSU-TV and WOSU-FM. (GH-OH)

860 CJBC ON - Toronto - 7/15 0315 Noted OFF for the first time in a long time. The next night I heard them sign off at 0110. Perhaps an austerity move? (JR-NY)

980 KUPI ID - Ammon - Idaho Falls - 7/27/82. Heard with dual city ID, slogans 98 Gold and Q-pee. Playing some satellite feed with local ads. All music Classic Adult. My 10 and 13-year-olds were totally amazed! Data differs from current Log. (BW-WY)

1150 WAWO SD - Rock Hill - QSL from WHVN-1240 states they simulcast on WAWO and it's 24 hrs, 1 kw days, 60 watts nite. (DT-ON)

1340 KSIT WY - Jackson - 7/27/82. Heard all week with all-country music. Good signal all the way north until into Yellowstone. Real weak copy even up at Old Faithful. No CHIR heard at all as listed in '92 Log. (BW-WY) (Note: no TIS' noted at either Grand Tetons or Yellowstone)

1480 WGVU MI - Kentwood - Has added NPR's Fresh Air and John Hockenberry's talk show to their afternoon line-up. Also, been operating on 1060 watt night pattern 24 hours-a-day since June. (PLB-MI)

1520 WQWQ MI - Muskegon Heights - 8/1. Took back these calls (ex-WWEZ) and adopted a Nostalgia/Big Band format. No longer simulcasting their FM. (PLB-MI)


UNIDS AND UNID HELP

580 UNID ?? - 8/1 2338 Very poor with very vocal preacher, briefly under CRY. Lots of Iowa, Missouri, Indiana & Wisconsin this night. Ideas, please! (SA-SR)

1290 UNID ?? - 8/2 2255 Very poor in brief fade-up with Latin BBD music under CIFX. (SA-SW)

1550 UNID ?? - 7/23 0621 Fair with C&W music, several One, two 6 Ob Country IDs. (SA-MB)

MIDNIGHT TO 0800 HOURS ELT

580 CKXR BC - Salmon Arm - 7/16 0125. Good with AC music. No sign of usual CKUA or CRY, which normally dominate. (Dmc-AB)

590 WOW NB - Omaha - 7/16 0100. Good with local weather, several IDs. Also uses the Radio Ranch non-ID. (Dmc-AB)

700 KOMY WA - Newport - 7/18 0055. Fair good and good in CRKD null with C&W music, ID and sign-off at 0100. (Dmc-AB)

700 KURL MT - Billings - 7/16 0100. Good with local weather and ID. No sign of usual CKLG or CKDM. (Dmc-AB)


860 WUGL FL - Dundola - 7/15 0330. With MoYL format, ID and weather. Nice to have CCB off. (JR-NY)

990 CKIS PQ - Montreal - 7/16 0553. Blasting in with Oldies 990 ID, ad for Cape Cod Restaurant en Ste-Anne-de-Bellevue. (MB-MA)

1030 KMAS WA - Shelton - 7/13 0200. Fair with ABC News, local weather. IDs as 0800 KMAS. KTWO off. (Dmc-AB)

1060 CJRP PQ - Quebec City - 7/15 0548. Fair to good with FF MoR tunes, noted 1 CJTR-1414. Trois Rivieres (good), CPVM-1220. Amqui (fair) and CJMS-1280 Montreal (fair to poor). (MB-MA)

1100 WYKR VT - Wells River - 7/16 0057. Fair with state and local news. (MB-MA)

1340 WSTJ VT - St. Johnsbury - 7/13 0012 In mess with what sounded like a local rock program and . . . you're going to hear about it on WSTJ . . . On later than shown in '91 NRC Log schedule. After 16 years, only my 3rd from Vermont. (JR-NY)

CKCR BC - Revelstoke - 7/20 0200 Fair with Broadcast News, sports, ID. (Dmc-AB)

1360 KSCJ IA - Sioux City - 7/16 0658. Good with KSCJ Information Radio at new time slot. (SA-MB)

KRRK WY - Rock Springs - 7/23 0505. Excellent with oldies, ID as KRRK Rock Springs - Green River. (Dmc-AB)

1390 WRSC PA - State College - 7/13 0620. Fair with report on a renovation project at Penn State University. ID at 0629. (JB-MA)

1420 WGED PA - Dubois - 7/9 0610 Several IDs, weather report mentioning Dubois. ID also as Classic 1420. (JB-MA)

1440 WNPV PA - Landalde - 7/13 0611 Fair with IDs as WNPV and Info Radio Report called Suburban Weather Report. (JB-MA)

1450 KIRX MO - Kirksville - 7/23 0604 Fair with weather/sports. ID as KIRX - C&W music. (SA-MB)
DDXD-South

SPECIAL

690 KSTL MO St. Louis - Now carries children's programming in the early afternoons.

1260 WIBV IL Belleville - Per announcement on KTIV Channel 2, this station simulcasts KTIV's newscast at 1800 ELT. (EB-MO)

1400 KJCF MO Festus-Chrystal City - Now AC, ex-OLD (EB-MO)

1570 KBGZ IL Alton - Now carries SUN NETWORK Talk, still The Big Z (EB-MO)

530 TIS MO St. Charles - 8/7 0021 good over CIAO and other TIS with info on resurfacing of the Poplar Bridge. Mentioning alternate routes. There is also a synchronous transmitter in downtown St. Louis with a one-second delay.

640 WWLS OK Moore - 8/7 0143 good over KFI/WOL/WCRV with KXOK-630 splash with baseball talk. (EB-MO)

WCRV TN Collierville - 8/7 0144 fair under WWLS with KXOK-630 splash with mention of WCRV and christian information. (EB-MO)

1140 WRVT VA Richmond - 8/1 0301 good over XMR with slight KMOX-1120 splash with CBS News, network ads, wx for Richmond, into Big A's Bluegrass Special. Better here than in GA! (EB-MO)

1210 Wogl PA Philadelphia - 8/1 0310 good with fair $57000 with OLD, Oldies 98 ID, mention of a Twin Spin Weekend, Oldies 98 jingle, better here than in GA. (EB-MO)

1430 WAXM KY Buffalo - 8/7 1058 good to poor in super-bright WRTF null with CWM, faded out by legal ID time. (EB-MO)

0800 - 1600 ELT

(What - everyone was too busy to DX while at work? - DJF)

1600 - 2400 ELT

860 KROW KS Pittsburgh - 7/28 2109 near local-like with some KFUO-850 splash w/CWM. (EB-MO)

1130 KFAN MN St. Paul - 7/31 2158-2206 Legal ID, mention of sports format, into Mutual Nx, then to Saturday sports program. Very strong even barefoot and rare enough here; best ever. (IL-MO)

1310 WBAI WI Madison - 7/31 2058-2100 ad for hardward store, Legal ID, into Nxn. Strong. Caught while listening for Joplin o/u other un-ID station. (JL-MO)

1440 WROK IL Rockford - 7/28 2105 good over WHYY and others with slight WRTF-1430 splash. Wx, Sounds of Sinatra promo, Jobs Corps PSA, jingle, into Bruce Williams Show. (EB-MO)

REPORTERS


BITS AND PIECES

Eric Bueneman reports: "Back in the St. Louis area after four years near Atlanta, and my closest local, KIRL-1460, can be null to get traces of KGGO, but I can still get a nice signal on WMBD-1470 and the mess on 1450." A short first column for all you Southern people - in fact, this was the completely Missouri edition!! Remember, please send reports to the new L.A. address. Hope to see you in a few days in THE BIG O!!!
INTERNATIONAL DX DIGEST

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

The big news here is that I finally got Vermonter verified (yes, the next state over!), WST 1340. This is only the third one I’ve heard in 16 years from Rochester. I’ve heard more from Spain than Vermont! Congratulations to DX Australia, which celebrated its 10th anniversary in July.

If you wonder that the IDDX deadline is one week before the Topeka deadline, try to get it to me on Friday.

TRANS-ATLANTIC

549 ALGERIA Oran/Les Trembles 6/11 0345 - Bits of Arabic chat, mostly just a loud hot on 550 destinations. [MC-MA]

639 SPAIN La Coruna 7/27 0350 - Hit, bits of Spanish talk. [MC-MA]

655 SPAIN Murcia et al. 7/27 0347 - Spanish talk, music in WHDH slp. [MC-MA]

882 ENGLAND Washford 7/27 0344 - Surprisingly loud with English talk, rock music. This shows that, at least when dry, “summer polar air” is in (and thus a little mist), DX DX season can start in late July in the northeastern US. [MC-MA]

891 ALGERIA Algiers 6/5 0358 - Arabic string music and vocals to good peaks. 6/1 0338 - Arabic music, good. 7/1 0338 - Fair with Arabic male vocal chat. [MC-MA]

1035 PORTUGAL Lisboa 7/27 0338 - Pop music, Portuguese talk, fair with WBZ nulled. [MC-MA]

1305 UNID (probably Spain) 7/27 0321 - Crowl of many co-channel carriers, not much audio discernable. [MC-MA]

1521 SAUDI ARABIA Dube 7/27 0350 - Arabic acapella vocal (Koran), pushing past WWKB. This has been good in other years during the late summer. Dawn enhancement near the transmitter site may be involved. [MC-MA]

1530 VATICAN 7/27 0318 - Chimes, then Vaticana mention and Slavic-sounding talk including a mention of Sarajevo. Often atop WCKY. This, like 1521, is often good in late July and in August. [MC-MA]

1599 GERMANY Mainfingen 7/27 0314 - Bits of German in bad WPR slp. [MC-MA]

1548 UNID 7/27 0313 - Arabic or Hindisounding music, in slp. Maybe an ethnic program on a UK local. [MC-MA]

1575 SPAIN/PORTUGAL/??? 7/14 0400 - A real jumble here, pips, Spanish talk (poor), QRMed by apparent Portuguese and another audio that might have been German. [MC-MA]

1584 SPAIN 5/27 0412 - Good with man in Spanish. 7/14 0415 - Excited Spanish talk, fairly. 7/14 0492 - Good with news by man in Spanish. [MC-MA]

1593 GERMANY Langenberg 7/14 0403 - Poor with German talk. 7/27 0303 - Good with woman in German, then light music. [MC-MA]

1602 SPAIN 7/14 0408 - Spanish talk, poor in WUNR/WWRL slp. [MC-MA]

1611 VATICAN 7/27 0307 - Poor with religious church music, hetted by Anguilla. [MC-MA]

RADIO FLORIANO LTD.

Epa Clementino Vilasbo, 16 A, Andor C. P. 35
Telefonos 627-3611/3615/3617 - Teléfono DIFUSORA CEP 646

PAN-AMERICAN

750 NICARAGUA R. Sandino, Managua - Back on (assuming they were off recently) with calls YNRS (at last that’s what it sounded like) mentioned at their midnight (002) sign off, and now called “La S Grande”. [CD-FL] (WRTH says calls are YNRS - jim)

780 VENEZUELA R. Coro 7/16 0455 - Strong in WBBM null with slogan and time checks between musical selections. [JRN- NY]

1020 VENEZUELA Mundial Marganta 7/15 0745 - Heard with “Mundial” ID after music; weak in KDKA null. [JRN- NY]

1375 ST. PIERRE ET Miquelon 7/1 0350 - Good with female opera vocal, then French talk by man. [MC-MA]

STATION NEWS

ALABAMA: Durres 1098 has been off its regular frequency 1088 for several weeks. [Horus Reach via BB in ARC #2]

AMERICAN SAMOA: WVUV Pago Pago back on 648 after the cyclone last December. [R. Nederland Media Network in WDXC 7/92]

ANTIGUA: VO4 is off the air. A Finnish DXer, Larsu Levanto, has visited the island and heard this info from a former technician of the station. [SDXL in ARC #2]
AUSTRALIA: 3EE signed on the air 7/3. 200 kilowatts to leave AM for FM on July 22. 2NX 1310 to leave for FM on August 1. 2NX 1341 left the air on June 27th. 4AVA Gold Coast has closed down, apparently during 1991. The station had been broadcasting on 1656 kHz. [DX Australia 7/92]

COLOMBIA: Stations observed off frequency: 1333 Caracol Popayán, 1372.9 RCN Cauca, 1433 La Voz de Belalcazar. [YHC in DAR #2]

DOMINICAN REPUBLIC: Hits Radio Enriquillo was ordered on 2/14/92 by the government to stop airing Creole news reports. The news program "Nouvelles d’Haïti" began broadcasting a few days after the coup d’état in Haiti in 1991. To get around restrictions, R. Enriquillo staff have begun to sing news reports and communique. [ICA in DAR #2]

GERMANY: R. Volga, serving the remaining units of what was the Soviet Army, is now hiring out air time to other stations. Since 1st May, the German satellite news station RadiophQA-Info has been using the 200 kW transmitter located at Burg; it is broadcasting in German on 261 kHz, Mon-Sat 0500-0700, 1000-1200 and 1400-1600, Sun 1300-1600 and 1800-2100. A 90 minute program from Radio Volga itself is broadcast 1300-1330 Sundays. [R. Nederland Media Network via Communication #211] RIAS 999 has now added a transmitter in Schwerin, power 50-100 kW. [BE in DAR #2]

ITU: The following states are now official members of the International Telecommunication Union (ITU): Armenia (ARM), Azerbaijan (AZE), Belarus (BLR), Estonia (EST), Georgia (GEO), Kazakstan (KAZ), Kirghizia (KZG), Latvia (LVA), Lithuania (LTU), Moldavia (MDA), Russia (RUS), Tadzhikistan (TJK), Turkmjenistan (TKM), Ukraine (UK), and Uzbekistan (UZB). The Republic of Croatia (HRB) and Slovenia (SVN) are also now members. Abbreviations are the official ITU country codes. [ITU and Benelux DX Club in WDXC #2]

KALININGRAD: A WRTH collaborator in St. Petersburg has been able to obtain power figures for the transmitter at the Bolsakovo site: 171 1200 kW, 1143 150 kW, 1215 1200 kW, 1386 2500 kW. The figure for 1386 could be ERP, though all other figures appear to be transmitter outputs.

MEXICO: XENO 640 La Voz de la Provincia 10/5 kW, ex 1580. Also, the Commission on Radio and TV is now selling the government owned TV stations and will soon sell government owned AM and FM stations as well. According to a constitutional amendment last December, "the church has the right of access to the media of communication." This means religious radio is not far off. [ICA in DAR #2] The Mexican Revolution restricted and/or removed many church privileges.

RUSSIA: A WRTH collaborator in St. Petersburg has been able to obtain power figures for the transmitters: Popovka (near Krasny, southeast of St. P.): 234 1000 kW, 549 1000 kW and 1494 1200 kW; Olgino (northwest of St. P.): 198, 873 and 1125 150 kW each.

SPAIN: RNE RS Murcia 567 now 50 kW. [Horst Rauch via Play DX-699 in DAR #2]

UNITED KINGDOM: Independent Music Radio, London has been testing with pop music and announcements every 30 minutes on 1215 kHz, regular programs to begin in 1993. 1197 will also be used. [BE in DAR #2]

HELP FROM SWEDEN
Concerning Jean Burnell’s recent loggings on 1431 and 1386, from Olle Alm: The only possible CS station for 1431 is Mikolajyuv, Ukraine, which is parallel 4940. Has Kiev 3rd Program to 0000 summer UTC, then Majak program // 1449. (Horst Rauch via BE via DAR #2 notes that VOA programs in Georgian are heard here 2000-2100 - Jim). Radio Aia 1386 recently noted from 0200 via Bolshakov site in Kaliningrad (2500 kW). Greece opens before 0300 only on Monday mornings. Times are summer UTC. Olle, who is a member of NRC and ARCTIC Radio Club, also notes that the Scandinavian totals recently printed here in DXWD are for stations verified - even more impressive! Thanks, Olle.

CONTRIBUTORS
[CD-FL] Chris Dunn, Pembroke Pines FL
[MC-MQ] Mark Connolly WA1JQN, Billecker MA; Drake R8, Realistic DX-440, two 20 meter wires in noise-reducing configuration, phased with MWDX-5, RTL-1A Loop, MWT-2 Tuner also used.

Dangerfield Abroad
Here follows a report from Ben Dangerfield’s most recent trip to Morocco and Southern Spain. In addition to observations about specific stations, Ben notes that "a great many stations over there are somewhat directional judging from the 2-tower set-ups I saw." He also reports that "it is quite interesting listening between synchros. You get an echoing, fluttery effect," and that there are few stations north of France audible at night. He noted T.DX hela during this visit.

540 MOROCCO, Sidi Bennour - located just north west of Marrakech, and is strong up into Spain day and night.
549 ALGERIA, Les Trembles - semi-local to Torremolinos (where we spent a week, just west of Malaga).
594 MOROCCO, Oujda - strong at Fes, Morocco and Torremolinos, Spain.
603 SPAIN, Sevilla, RNE-5 - Strong days at Rabat, Morocco and at Malaga.
612 MOROCCO, Sebou-Aitoun, R. Mediterraneo Int. - FA and AA, seems to be directional between Fes and Tangier. The only MW station on now for R. Med, also heard near Malaga.
684 SPAIN, Sevilla, RNE - this powerhouse heard everywhere in this area from Rabat to Malaga. The transmitter is on a hill just west of the city. Surprisingly at night they are sometimes covered by Belgrade, Yugoslavia at Torremolinos.
702 MOROCCO, Sebou-Aitoun - the towers are west of Fes, near Meknes. I saw the complex which is used by 612, 702 and 1044. Directional. This is a Berber language and music station and apparently changes patterns at night. At Fes it sounds local in the afternoon, but far away in the evening.
792 SPAIN, Sevilla SER - strong days at Rabat and Malaga.
828 MOROCCO, Oujda - SS and FF, strong at Fes and Torremolinos.
936 MOROCCO, Agadir - this one's a puzzle. I didn't hear it anywhere in Morocco, nor did I hear it last year from Madeira.
891 & 981 ALGERIA - heard days with weak signals at Torremolinos.
1006 SPAIN, Granada, RNE-5 - that's who's hear now. Fair at Torremolinos. Malaga now on 1152. (Jean Burnell, take note!) 1044 MOROCCO, Sebou-Aitoun - strong at Fes, being local, and fair at Torremolinos. Seems directional east-west.
1052 MOROCCO, Tangier - Strong along the Moroccan coast and pretty good at Torremolinos. I saw 2 towers on the coast which looked to be north-south. Nearby is the VCO complex.
1152 SPAIN, Malaga, RNE-5 - now here from 1008. A synchro now. Has changed places with rock music (no pun intended).
1233 MOROCCO, Tangier - not on the air anymore. I saw two towers in the city.
1349 MAURETANIA, Nouakchott - tremendous signal at night in Rabat.
1458 GIBRALTAR - I logged this one from the ferry coming into Algeciras which is across the harbor from Gibraltar. I visited Gibraltar a few days later and I think I spotted the towers atop the rock. There is no signal from this station in Torremolinos, perhaps because the town of Gibraltars is on the west side of the Rock and Torremolinos is 100 miles east. However I did log this one at both Sevilla and Rabat, so it must be quite directional. Lots of rock music (no pun intended).
1485 SPAIN, Cadiz - was atop the frequency in the daytime at Rabat even with a Casablanca station only 60 miles south on the same frequency. Speaking of Casablanca, we visited Rick's American Cafe! It's located in the Hyatt Regency.
1566 MALTA - very strong signals in AA at Torremolinos.

Are you expiring?
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(NY residents, add sales tax).
Hello again, everyone. It looks like the E-skip has died for the time being, as I haven’t heard about any since late June/early July. Even 6m (50 MHz) has been dead.

I got in on some of the tropo that Mike Hawk had such a bonanza with, but I had some poor engagements that kept me out of the radios more than I would have liked.

Paul’s next deadline is 18 September, and I would like to ask that your loggings arrive in Silver Lake by Wednesday of the 16th. This will be the last edition for 1992, so any loggings received after then will be old and decrepit by next April when the column will resume.

Eric Eueneman, 631 Coachway Lane, Hazlewood, MO 63042

Equipment: Realistic STA-90 AM/FM/FMS receiver with amplified rabbit ears.

8.392 groundwave

1200 89.5 KCFV MO Ferguson—very good with legal ID into New Jersey. The Wave of the Future’s slogans. First day back after two-month hiatus, hours are 0600-2400 CDT Mon-Fri, 0800-2400 Sat and Sun.

8.692 Tropo

1730 95.9 WCNL IL Carlinville—good with SMN CWM, Macoupin County’s Very slogan, mention of CL’s in local ad. Follow up to reception of WRVI-96.7 on 95.9 9.92: WRVI is the flagship station for the Springfield Cardinals of the Class A Midwest League, and WCNL is the Carlinville affiliate (affiliated with the St. Louis Cardinals).

FORMAT CHANGE: 89.7 KYMC Ballwin, MO: Is slowly phasing out New Wave in favor of “family-oriented programming”. Don’t know whether it would be religious programming or something more commercialized. Several program directors and DJs were fired from the station because the programming that was aired wasn’t up to the standards of KYMC’s owners, the YMCA of West St. Louis County, MO. (Thanks for the enclosed article, Eric. Photocopies as a rule don’t print well...-trb)

I might as well give you the combined tri...

KEZS FM 103
For Beginners

The decibel

Few issues of DX News appear without some use of the term “db”. The purpose of this “For Beginners” article is to present some basic ideas about dB, and the term for which it is the abbreviation, the “decibel”.

The word “decibel” originated in the telegraph industry and was used by telephone engineers needed a unit of measurement of sound levels, which would approximate the response of the human ear. The unit which met that need was the “bel” (named for the inventor of the telephone, Alexander Graham Bell).

One of the characteristics of the normal (human) ear is its response to a difference of sound intensities. If two sounds of the same pitch are heard one after the other, such that one sound twice as loud as the other, the actual audio power of one is not twice but about ten times that of the other. That ratio is true for two sounds of low intensity, and also for two which are loud. This means that the response of the human ear is not linear.

Logarithms

The following is a brief introduction to the subject of logarithms.

Logarithms are systems in mathematics in which multiplication is reduced to addition, division is reduced to subtraction, and large, cumbersome numbers are reduced to shorter, more manageable numbers.

Logarithms were introduced in the early eighteenth century. English mathematician John Napier was credited with their invention. Logarithms have been widely used in engineering work and in financial work for many years.

The logarithms most widely used in the study of radio and other communications are known as common logarithms and are based on the number ten. By definition, the common logarithm of any number is the power (exponent) to which the quantity ten must be raised to equal that number. For example, since 10 to the third power equals 1000, the log of 1000 equals 3.

Similarly, since 10 to the second power (ten squared, or 10 x 10) equals 100, the log of 100 equals 2. Now, since the log of 10 equals 1, the log of 100 equals 2, and the log of 1000 equals 3, we would expect that the log of a number between 100 and 1000 would be a number with a value between 2 and 3. It will be found with the aid of the tables of common logarithms found in mathematics textbooks and engineering handbooks, or by the use of an electronic calculator. For example, the log of 279 is 2.45 and the log of 623 is 2.79. The numbers 279 and 623 can be multiplied by adding the two logarithms together and finding the

of coaxial cable dissipates half the power input to it, and delivers the other half to the load, there is a 3 dB loss.

Note that in the preceding paragraph we dealt only with quantities of power, measured in watts. When dealing with voltage, the equation for dB is different. For voltage, dB equals 20 times the logarithm of the ratio of the voltages. Doubling of voltage represents a 6 dB gain. A voltage ratio of 10 to 1 equals 20 dB, and so on. When working with decibels it is important to know if the stated gains or losses are power or voltage gains or losses. When comparing voltages, the decibel equation is valid only for voltages measured across the same value of impedance.

Logarithms - By Frequency

110 sheets, 25 entries possible per sheet with space available to add your own columns. Punched for three-ring binders, full-size 5.5 x 11 inches, on heavy paper.

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Information and advice of interest to inexperience DXers

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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

<table>
<thead>
<tr>
<th>Frequency (kc)</th>
<th>Call Letters</th>
<th>Main studio and transmitter location</th>
<th>Power</th>
<th>Time designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1480, regional</td>
<td>WFEA</td>
<td>Manchester, N. H.</td>
<td>300 w</td>
<td>U-Exp. (C. P. only)</td>
</tr>
<tr>
<td></td>
<td>WKO</td>
<td>Albany, N.Y.</td>
<td>500 w</td>
<td>Simultaneously Exp. with WCAH, WBF, WFEA, and WHEC.</td>
</tr>
<tr>
<td></td>
<td>WHEC</td>
<td>Rochester, N. Y.</td>
<td>500 w</td>
<td>Simultaneously Exp. with WCAH, WBF, WFEA, and WHEC.</td>
</tr>
<tr>
<td></td>
<td>WCAH</td>
<td>Columbus, Ohio</td>
<td>500 w</td>
<td>Simultaneously Exp. with WCAH, WBF, WFEA, and WHEC.</td>
</tr>
<tr>
<td></td>
<td>WBAK</td>
<td>Harrisburg, Pa.</td>
<td>1 kw</td>
<td>S.H. D. G.</td>
</tr>
<tr>
<td></td>
<td>WHP</td>
<td>T-Lenoxie</td>
<td>5 kw</td>
<td>S.H. D. G.</td>
</tr>
<tr>
<td></td>
<td>WNBR</td>
<td>Memphis, Tenn.</td>
<td>600 w</td>
<td>U.</td>
</tr>
<tr>
<td></td>
<td>KGNF</td>
<td>North Platte, Neb.</td>
<td>600 w</td>
<td>D.</td>
</tr>
<tr>
<td></td>
<td>KEOA</td>
<td>Los Angeles, Calif.</td>
<td>1 kw</td>
<td>U.</td>
</tr>
</tbody>
</table>

About 9 months ago, I suggested an NRD-525 AM mode AGC mod in my article "NRD-525 AGC Mod, Preliminary Version 2, August 16, 1991." The basic idea is to disable the AM branch of the AGC circuit and to use the SSB/CW AGC circuit in all modes. The mod was untreated because I had no NRD-525. Recently Russel Scotta sent me his NRD-525 to try out my ideas.

In the previous note, I suggested reducing R104, jumping pins 3 and 4 of IC7, and removing C78 and C79. This is what I tried first. But had low frequency audio distortion in the FAST AGC setting was observed. The release times were measured and found to be about 25 ms for FAST and 500 ms for SLM, much faster than my mathematical analysis and software simulation had suggested. Apparently there is a discharge path internal to IC9A equivalent to a 500k ohm resistor. In any case, this demonstrates the importance of measuring the results of any modification.

When C78 and C79 were restored and pins 3 and 4 of IC7 were jumped, the measured release times increased to 100 ms for FAST and 2 seconds for SLM, which is about optimal. And no low frequency audio distortion was heard on received signals in either FAST or SLM.

Consequently, the good news is that reception quality using the NRD-525 AM mode can be made much better (and much better than ECS5) by removing one surface mount resistor (R104) and adding two jumpers to pins of IC7 (pins 3A and pins 4A). With these changes, AM FAST AGC is now excellent for fast bandswitching and for DXing steady or moderately fading signals, and AM SLM AGC is now excellent for strongly fading SW signals and for nighttime AM graveyards provided not much thunderstorm static is present. Of course, any AGC with a 2 second release will hang briefly on strong noise spikes, and this SLM AGC is no exception.

The bad news is that the SSB/CW AGC (in which also the AM AGC) tends to have a rather bad overshoot. This is not a problem for AM signals. And, fortunately, there is no audible pop or click on initial SSB transmissions as is often the case with overshoot. The NRD-525 also has undershoot on FAST release in SSB/CW mode. No audible evidence of the overshot was observed on AM or SSB/CW signals. Because there was, however, evidence of the undershoot in any mode, I did not try any further modification to eliminate that. Perhaps the overshoot could be reduced or eliminated by replacing R104 with a higher value resistor. But tinkering with different values for R101 is not a good idea because a PC board trace goes underneath R101.

Russel Scotta has told me that he is very pleased with the improved AM performance of his new NRD-525. Before I modified the AM mode AGC of his NRD-525 he used ECS5 for AM mode AGC because of the original AM mode AGC problems and related poor AM mode audio quality of received signals. Now that the AM mode AGC problems have been eliminated with my mod, Russell has found that the AM mode provides much better audio quality than the tinny sounding ECS5 he used previously. Curiously, Russell said that his NRD-525 phaseband tuning now works much better in AM mode than before. I have no explanation for why my AM mode AGC mod should improve the performance of the NRD-525 phaseband tuning in AM mode, but apparently it does.
NRC DXCon - '92 in Omaha

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special needs: Arrangements for the visually impaired, airport/train/bus pickup transportation, roommate matching ... all available if you call Ernie at (402) 330-7758. The Big O team will work with you to make a fun time easy for you to attend.

But plan NOW to attend; the convention is just a few days away, September 4, 5, 6. Your hosts: Ernie Wesolowski, Carl Mann, Curn Chadwick, Mike Hawk, Neil Zank, Bob McCoy, Lonnie Merritt, Dan Bartek, Bob McCoy, and Skip Dabelstein.

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