



DX Monitor

Devoted Exclusively to
Broadcast Band DXing

November 23, 1985

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Issue Number 732

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No Western DX Forum this time because Ric Heald is moving. It was probably just as well because it enabled us to shoehorn in the last 13 pages of Mark Connelly's excellent construction article on his latest generation of phasing units.

What's Happening?

THE ALMANAC IS HERE!

The Fourth Edition of the IRCA Almanac is back from the printers and has been mailed out to those who have ordered it. If you haven't gotten your copy yet it's probably somewhere in the mail. Either that or you haven't ordered it yet. The latter is easy to remedy. Just send a check for \$8.00 (if you're a member, \$9 otherwise) to 9705 Mary Avenue NW, Seattle, WA 98117. You'll be glad you ordered it because it's packed with all sorts of valuable information in the form of articles, lists, tables, and charts on AM radio stations. It includes US and worldwide sunrise/sunset maps, station changes, construction permits, national networks, state networks, regional networks, audio news services, special networks, talk programs, satellite networks, syndicated programs, religious programs, slogans, AM stereo stations, rare DX, Canadian broadcasting, sports, utility stations, verifications, and other assorted odds and ends. Next to a list of AM stations, such as an NRC or White's Log, it's the most valuable reference book for all-around BCB DXing. Join the multitudes of happy Almanac owners while the supply lasts. (Make checks payable to IRCA, above prices are for book rate to US, surface mail elsewhere, add US\$2 for airmail overseas).

IRCA ACHIEVEMENT AWARDS

The IRCA achievement awards manager, Bruce McFadden, has moved. His new address is 412 Harding Road, Williamsville, NY 14221. IRCA achievement awards (in case you haven't heard) are attractive, colorful certificates, suitable for framing, attesting to your DXing prowess. They are awarded for verified reception of particular numbers of stations, states/provinces, countries, state capitals, continents, and other categories of stations. For details on how to apply for achievement awards, send an SASE to Bruce at the above address.

ABC TALKRADIO PROGRAM

Don't forget to tune in the second annual all-night nationwide DX gabfest on the Ray Briem show on the ABCTalkradionetwork, on Friday night / Saturday morning December 7, 1985, beginning at 0806 UTC. In studio guests will include Grant Manning of Radio West, IRCA/NRC member Paul Swearingen, ASWLC president Stewart MacKenzie, plus phone hookups with Dr. Bruce Elving of FM DXing fame, Arthur Cushen of Invercargill, NZ, and Dr. Richard Wood, IRCA president. So warm up the coffeepot that night, and be prepared to stay up until the wee earliest listening to America talk about DXing. You may even want to participate by calling 213-879-8255. The show will originate at KABC-790 Los Angeles and be carried over about 48 network affiliates. For a list of affiliates, see the November 2 DXM or page 89 of your Almanac.

Nancy Hardy
2301 Pacific Avenue
Aberdeen, WA 98520

WESTERN DX ROUNDUP

All times are
Eastern Local

Phone for hot WDXR tips: (206)532-6827 till 10pm(PLT)

DEADLINES: Tues. Dec. 3, Tues. Dec. 10, Mon. Dec. 16, Mon. Dec. 23,

REPORTERS FOR THIS ISSUE:

- (LHC) Les Carpenter-23171 La Vaca-El Toro, CA 92630
Kenwood R-2000, FRT-7700 antenna tuner, 100' longwire
- (MD) Mike Deckman-908 N. Arrowhead Ave.-Rialto, CA 92376
ICOM R-70, 24" amplified box loop
- (NH) Nancy Hardy-2301 Pacific Ave.-Aberdeen, WA 98520
PRG-7, Radio West loop
- (DKK) Don Kaskey-465 Burnett St. #1-San Francisco, CA 94131
Hammarlund Hq-140X, SM-2
- (PW) Patrick Martin-P.O. Box 843-Seaside, OR 97138
- (RW) Robert Wien-1309 Dentwood Dr.-San Jose, CA 95118
TE Superadio, GE long-range portable, SM-2

CF SPECIAL INTEREST:

- 530 TIS WA, Mt. St. Helens Nat'l Volcanic Monument new TIS w/recorded message about camping, hunting, park closure, etc. Not as consistent a signal as other Wash. TIS stns (Olympia, Discovery Bay). (PW-OR)
- 770 KATI MT, Miles City 10/25 0922 w/ID & Miles City ment. during ad. Was deep u/KOE. Ex-1340. (DKK-CA)
- 970 KBIT MT, Billings 11/4 0400-0415 poor u/KYTE/KHYW w/RUZZ nulled w/partial ID on hour "Montana's ??? country, KEIT," into CES mx // KYTE, wx at 0405, clear ID at 0415 "AM Country 970, KBIT." C&W mx. Call change, ex-KOOK. (RW-CA)
+11/7 1928 1/2 "K-E-I-T 97 Country" after Glen Campbell song. Poor w/KYTE nulled. (NH-WA)

- 540 KNAK UT, Delta 10/25 1024 briefly heard on the car radio on the way to work w/"Items For Sale." (LHC-CA)
- 570 (KLAC) CA, Los Angeles 9/16 0342 & 9/23 0322. (LHC-CA)
WJUB UT, Salt Lake City 9/16 0342 very faint u/KLAC TT's w/Monday Night Football promo. (LHC-CA)
- KVI WA, Seattle 9/16 0342 fair w/Solid Gold hits. 9/23 0322 fair u/KLAC CC w/oldies. (LHC-CA)
- 580 KFXD ID, Nampa 9/23 0410 weak u/KMJ w/cable TV ad. (LHC-CA)
- 600 KLZZ CA, San Diego 11/2 1707 fair w/KFM-590 slop. "San Diego spells Class K-L-Z-Z." (MD-CA)
- 620 KNCE CA, Hanford 10/4 0233 very weak u/KTAR w/child safety seat PCA and wx. (LHC-CA)
- 630 KIDO ID, Boise 10/3 0820 weak u/KFI-640 splatter w/wx. (LHC-CA)
- 670 KPUA HI, Hilo 10/21 0303 w/ID. Fair signal w/KBOI off. Soft type mx & mx noted at 0330. Normal KNER-680 slop. (DKK-CA)
- 730 KTCY ID, Boise 11/8 1856 1/2 just caught call letters, then faded u/KULF. Back at 1901 w/another ID into some sort of talk. Very poor w/KULF & CHLG nulled. (NH-WA)
- KEOY OR, Medford 10/28 2045-2050 very weak, barely heard. Ment. of southern Oregon made several times. (LHC-CA)
- 740 KBRT CA, Avalon 9/30 0331 "KERT 740 KRZ Avalon, on the air for testing" w/oldies & comedy routines. (LHC-CA)
- 760 CKQR SC, Castlerock 11/1 0915 nice signal atop KPRE. Pop rock mx. Has been nightly QRN for KPRE/WJR since 9/17 when first noted. (DKK-CA)
- 800 CKOK BC, Penticton 11/3 0550 good in XEROX null w/full listing of Okanagan Radio Network. Was looking for CJUP. (RW-CA)
- CHAB SK, Moose Jaw 11/3 0533 good u/CKOK w/"Super 8, CHAB" ID, only 2nd time heard here. (RW-CA)
- 810 (KGO) CA, San Francisco 11/3 0504 totally off on very rare SP. No sign of KQIN-820 or KCEB-820, in NEAP's null! (RW-CA)
- ?KCMO? MO, Kansas City 11/3 0506 tent. in CHQR null w/unID network mx on hour, into "Best of King," only affiliate listed on 810. Heard before. (RW-CA)
- 820 KQIN WA, Burien per call to KQIN, nighttime operation currently "caught in red tape." Now won't go on till "Nov. 25 or 26th." (RW-CA)

- 830 KUYO WY, Evansville 10/23 0915 fair w/wx report and Christian mx. 10/16 0920 weak w/Christian mx followed by program in Indian (Native American type) language at 0929. New. (LHC-CA)
+11/4 s/on 0815 o/WCCO. "This is Gospel Radio, KUYO Evansville-Casper." Fazy since came on in Sept. (DKK-CA)
- 840 KSWB OR, Seaside 10/24 0926 weak w/wx & Pacific Power ad. Ditto on 9/27 at 0916. (LHC-CA)
- 850 KTAC WA, Tacoma 10/30 0353 weak u/KOA w/station ID. (LHC-CA)
CKRD AE, Red Deer 11/1 0912 finishing nx o/KOA. Unusual. (DKK-CA)
- 870 KUYU WY, Orchard Valley 11/4 way atop KIEV 0912 w/ID, wx, C&W mx. (DKK-CA)
- 900 ?KIKR? TX, Conroe 10/22 0858 tent. ID, weak w/Texas State Network News and sports promo. Missed the ID as it faded. (LHC-CA)
- 920 KVEC CA, San Luis Obispo 10/21 0355 fair w/Larry King Show and nx at 0400. (LHC-CA)
KORK NV, Las Vegas 11/2 2030 good w/college football nx & mx. (MD-CA)
KOLO NV, Reno 10/27 2052 good until 2056 w/C&W mx and NEC nx. Covered by KHJ-930 splatter at 2056. 10/28 2110 fairly good w/C&W mx. Appeared to change power/pattern at 2115. (LHC-CA)
- 950 KWIL UT, Vernal 10/31 0937-0939 fair w/KWIL News. (LHC-CA)
KAHI CA, Auburn 10/28 0906 fairly good w/sports on AI network, "Business Earometer," ads, and wx. (LHC-CA)
KOZF ID, Lewiston 11/8 1913 ID by man very poor thru nulled KJR. Immediately faded. New. (MH-WA)
KNFT NE, Bavid 10/28 0925 briefly heard. 10/22 0923 fair w/TC, Savings & Loan ad, and New Mexico nx at 0930. (LHC-CA)
- 970 EVJW AZ, Show Low 9/24 & 9/26 0600 fairly good at s/on w/SSE, etc. "The Voice of Show Low and the White Mountains." Owned by S.D. Woodworth. "Wake Up to Music" show followed s/on. (LHC-CA)
KUZZ CA, Eakersfield 10/30 2040 weak w/C&W mx, ads, contest promo. (LHC-CA)
KYTF OR, Portland 10/28 2344 fairly good w/"Music of Your Life." No ads noted. CBS nx at 0000. (LHC-CA)
- 1000 KRHS AZ, Bullhead City 10/1 2041 weak u/o KHLO w/rock mx. S/off at 2100 on "the (Colorado) River's Only Rocker." Owned by Holiday Broadcasting Inc. "Join us tomorrow when we will Rock holiday shores." (LHC-CA)
KKKZ CO, Hayden 10/30 1930-1942 fair (on the car radio) w/nx, wx for Steamboat Springs & Hayden, AP Network Sports, and bank ads. (LHC)
- (KOMO) WA, Seattle 9/16 0324 off the air. (LHC-CA)
- 1030 KHWY CA, Folsom 10/21 0301 fair while KTMQ was off. UPI nx, wx, and "Radio Advertising" promo. Music Country Network--9/27 0914 fair w/C&W mx on the "Country Highway." (LHC-CA)
KEUP KS, Holcomb 9/26 0844 fair o/u KTMQ w/sports & promo for "Hooper Scooting in Sublette." (LHC-CA)
(KTMQ) WY, Casper 10/21 0301 off the air for KK SP. (LHC-CA)
- 1040 WHBO FL, Pinellas Park 11/4 0645 out of nowhere w/booming signal way o/WHO "1040-WHBO" ID & into pop mx. Held for about 15 min. (DKK)
- 1050 KTBA AZ, Tuba City 10/22 1029-1045 fairly good on the car radio o/ KED w/ID in EF then into Navajo language at 1030. Had to stop listening at 1045 as I had arrived at work. 10/23 0952 moderately strong on the car radio o/KED w/the conclusion of "Back to the Bible." 10/25 1003 fairly good on the car radio o/KED w/INS nx, ads, "Focus on the Family" promo, local/regional nx. 10/28 1912-1941 fair u/o KED w/"Family Forum." "Another View of the News," local/regional/AZ nx, wx and ads. S/off at 1941. Gave address as P.O. Box 1053, Tuba City, AZ 86045. This is the first time heard in the afternoon. (LHC-CA)
- 1060 KPAY CA, Chico 10/30 0335 fair w/female annr & Calif. Dept. of Education PSA. (LHC-CA)
- 1080 KECO CA, Santa Cruz 9/30 2155 fairly good, in spite of the platter from KMX-1070 and XEPRS-1090. Nx and ads. Covered by KMX & XEPRS at 2216. (LHC-CA)
- 1100 KIIO CO, Grand Junction 11/4 2210 good w/KPAY nulled. Nx & wx. "K-1100." First logging of this station. (MD-CA)
- 1110 KHAC AZ, Window Rock 10/23 0929 fairly good o/KRLA w/ads and the "Bible Question." Had to curtail listening at 0932. They were gone when I attempted to hear them on the car radio at 1000 or so. Both KHAC & KTBA are on the Navajo Indian Reservation (KHAC is on the eastern side, KTBA on the western side). I was rather surprised to hear them both this morning. (LHC-CA)
- 1180 KOPI MT, Kalispell 10/23 0228 "The News Authority KOPI Kalispell" w/The Larry King Show. 10/1 2337 weak w/wx for SW MT. (LHC-CA)

1190 KEX OR, Portland 10/1 2341 fairly good on the "Voice of the Beavers" u/KPZE. Heard again 10/2 0101 w/"News on the hour, every hour, KEX 1190, Portland-Vancouver (WA)." (LHC-CA)

1200 (WOAI) TX, San Antonio 9/16 0329 s/off presumably for MM SP. (LHC-CA)

1210 KQTL AZ, Sahuarita 10/23 2020 fair u/o KCLG w/World Series and ads in SS. ID's as "Radio Quetal." 10/22 1930 fair u/o KCLG w/ads in SS. First time heard on the radio in the car on the way home from work. Appeared to change power/pattern 2113. (LHC)

KREW WA, Sunnyside 10/2 0106 s/off for the day. (LHC-CA)

1220 KTSJ CA, Pomona 10/18 1909-1955 weakly heard on car radio w/some KGPJ-1230 splatter. The "Christian music station for the Pomona and San Gabriel Valleys." Also known as "The Sound of Joy." Very difficult to hear here in Orange County. 10/16 1930-1944 fairly good w/Inspirational mx. Also heard on car rx. (LHC-CA)

WSLM IN, Salem 11/4 0632 haven't heard this in a year. Good o/CJOC/CKDA w/several local spots "...in downtown Salem." Salem LSR is about 0745 in Nov., so this was on their 438 w PSA. This stn gets out very well & makes IN somewhat easier if you're not close to Mexico or the Canadian border, hi. (RW-CA)

1230 KGFO CA, Bakersfield 9/26 0306 fairly good w/Talknet & Sally Jesse Raphael. (LHC-CA)

1240 KJOP CA, Lemoore 10/23 0135 briefly/barely heard w/ID in SS. 10/22 0225 briefly heard SS language. (LHC-CA)

KSAC CA, Sacramento ex-KENZ daytime regular. 1st noted 10/1 1823. (DKK)

1250 KHIL AZ, Willcox 9/19 2130 very weak u/KTMS & KUUK at s/off. 10/29 1916 very weak u/KTMS w/C&W mx and Halloween safety PSA. 10/30 0903 weak w/agricultural nx on the Southwest Agr-Radio Network. (LHC-CA)

KNEU UT, Roosevelt 10/30 0856 weak u/KTMS w/motel & airline ads. (LHC)

1270 KDJI AZ, Holbrook 10/28 0851 very good w/the Harrie Billie show in the Navajo language. (LHC-CA)

1310 KDIA CA, Oakland ex-KFYI back on reg sked as of 10/15. (DKK-CA)

KLIX ID, Twin Falls 10/24 2155-2201 fairly good w/ad for Twin Falls Bank and Trust/Visa and promo for "Montaloso (?) the Magificent." (LHC-CA)

1320 KAWC AZ, Yuma 10/1 2030 fairly good w/NPR "All Things Considered." (LHC)

1350 KUNN CA, Bakersfield 9/25 2000-2055 very weak w/C&W mx. (LHC-CA)

1400 KSUN AZ, Phoenix 10/21 0432 briefly w/"Sundown Sound" promo. Also heard back on 9/10 & 9/9. Back on the air after being silent for a while. (LHC-CA)

KXYC UT, Provo 10/3 0023 very weak off & on during the evening, w/LDS Church oriented programming. New owner, new call, new format. Was C&W, now relig. Ex-KPTN, KIXX (LHC-CA)

1450 KFLT AZ, Tucson 9/16 0331 faintly heard w/Christian mx & ID. (LHC)

KVEN CA, Ventura 10/25 1510 weak w/Ventura wx & nx. Heard on car rx during lunch hour. (LHC-CA)

KONE NV, Reno 10/30 2203 very weak w/AEC nx & wx. (LHC-CA)

KDXU UT, St. George per call to KDXU hopes to go nights "within a week or two." (RW-CA) (You mean they aren't already nights on 1450?? Seems odd.--NH)

1460 KLCZ CA, Salinas 9/18 2220-2330 moderately strong w/wx for the Monterey Bay area, "Classy" mx, & very few ads. "For special people, this is the Special Radio Station Classy." Ex-KDON. (LHC)

+11/6 2043 dug out thru severe KEST-1450 slop. Nx, ads, pop mx & several IDs. (DKK-CA)

1490 KDB CA, Santa Barbara 10/30 0244 very weak u/KWIZ-1480 splatter w/classical mx. (LHC-CA)

1510 KNWS AZ, Mesa 10/28 0843 xlnt w/ads, news, traffic reports & sports. Ex-KDJQ. (LHC-CA)

KIRV CA, Fresno 10/31 2015 fairly good o/KNSE & KTIM w/discussion on woman and abortion and promo for "Focus on the Family." S/off 2029. Owned by New Lif Enterprises. (LHC-CA)

KTIM CA, San Rafael 10/31 2016 fair u/KIRV w/Paul Harvey "The Rest of the Story." Also the "Big Band Sound." S/off at 2032. (LHC-CA)

1530 (KFBK) CA, Sacramento 9/16 0137 off the air. (LHC-CA)

WCKY OH, Cincinnati 9/16 0137-0406 weak w/Dr. Nelson on Talknet, CBS nx, and station ID. (LHC-CA)

1560 WQXR NY, New York 11/4 0544 good but fadey on peak w/ID. Rare here. (RW)

1570 KCVR CA, Lodi 10/31 0945 fairly good until 1016 w/"Insights For Living." 10/30 0916 very good w/"Heaven and Home Hour" and "Insights For Living." (LHC-CA)

1590 KLIV CA, San Jose 10/25 2042 fairly good w/"KLIV Cruise" promo and traffic report. "The melodies you love with the music you remember. It's Music of Your Life--KLIV 1590." (LHC-CA)

UNIDs:

890 11/7 1935 noted old standards (Room Full of Roses, I Love You Because, etc) very strong looping SE. Listened until 2007 when they abruptly went off at end of a song. Noted throughout that evening at various times w/very strong test tone. KDXU? (NH-WA)
 1210 10/28 0830-0845 in SS o/KCLC et al. Noted several "Kah-Tel" & Arizona mentions. Suspect CP for KQTL Sahuarita, AZ is on but no definite ID. and KCLC buried them at 0845 when increase to 10kw. Get out the bloodhounds. (DRK-CA) (Sounds like KQTL to me--they're on the air!--NH)

Not too many reporters this week. Where is everyone? ♥

CENTRAL DX ROUNDUP

Robert Kramer
6416 N. Richmond
Chicago, IL 60645

UNID, SPECIAL, CHANGES, et. al

890 KQLX ND LISEBON, 10/15 1000 weak, IDs "K-q-89". Quick verie reply. JGJ-MT
 970 KBIT MT BILLINGS, 11/4 KOOK changes calls & format to C&W. JGJ-MT
 1210 UNID SS looping SSW 11/1 1928-34, something about Arizona, AT&T spot, up tempo mx but no ID or slogan noted. Alone during long KGYN fade, but killed by KGYN at 1934. DF-SD
 1350 KYZX AR CABOT, 10/14 1922 fair w/ID, address, asking for birthday & anniversary info, ad, C&W mx. ex-KEOT. KDF-IL
 1360 WWNK OH CINCINNATI, 11/1 1709 good w/"wink" AM & FM ID. RK-IL
 All da Rest
 550 KRAI CO CRAIG, 10/25 2140 Mutual Sports, strong. JGJ-MT
 570 WMMI MS BIDOKI, 10/28 0106 fair w/hurricane warnings, telephone calls from listeners ID. KDF-IL
 CKSW SK SWIFT CURRENT, 10/1 0821 on top in WNAH null w/sports, community ancmts, wx. DF-SD
 590 KISN WA SPOKANE, 10/1 0826 w/NBC Morning Line Sports, ID, "This is Listen 590, KISN Spokane", xlint. DF-SD
 600 KIIIX CO FORT COLLINS, 10/20 0800 weak w/NBC nx & C&W mx, ID "60-Kicks". JGJ-MT
 KGEZ MT KALISPELL, 10/19 2033 ID, something about H.S. ftbl, way w/KIIX in KSJB null. DF-SD
 610 KONA WA KENNEMICK, 10/17 2100 ID & into net. nx, fair in much WDAF/KRKE QRM. DF-SD
 CKYL AB PEACE RIVER, 10/30 0812 weak but readable w/wx, "presently in Peace River It's... DF-SD
 620 KWAL ID WALLACE, 10/16 0846 good & on top w/spot & promo. DF-SD
 630 KXOK MO ST. LOUIS, 10/31 1950 w/Talknet, lcl spots & ID, poor no CHED. DF-SD
 680 CJOB MB WINNIPEG, 10/30 1838 w/nx & ID, good & alone. DF-SD
 690 KBLL ID BLACKFOOT, 10/21 1000 weak w/US Network nx. JGJ-MT
 730 WMTK KY VANCLEVE, 10/25 1900 poor w/organ mx & s/off u/WLIL s/off. KDF-IL
 750 KMMJ NE GRAND ISLAND, 10/14 0745 strong w/Farm nx & farm spots, "Country 75" IDs, Mutual nx. Quick verie. JGJ-MT
 780 WJAG NE NORFOLK, 10/17 0819 good w/no WBEM, Ag rpt & lcl spots, ID. DF-SD
 820 CHAM ON HAMILTON, 10/18 2021 fair & fuzzy w/WBAP nulled, C&W mx, ID & request. DF-SD
 840 KWPN NE WEST POINT, 10/15 0800 weak ID "AM-84". JGJ-MT, 10/17 0826 good w/rr mx & ag. nx, ID. DF-SD
 CHUR ON NORTH BAY, 10/28 1809 w/pop mx, OM w/ID, SID & promo, fair w/WHAS. NJW-MB
 850 KFVO MO CLAYTON, w/hymn, ID, poor in KOA null 9/29 2058. DF-SD
 860 KUTR UT SALT LAKE CITY, 10/21 2045 good w/CFQC nulled (? ed.), rr mx, promo, ID, 1lk by OM. DF-SD
 870 KAAAN MO BETHANY, 10/25 1918 fair-good o/WWL w/lcl sports, ads, nx, market rpts, "kan" & AM 87-FM 96 IDs. KDF-IL JGJ-MT
 880 KMPFR OR PHOENIX, 10/26 0940 strong during KWIP fade w/spot cluster, ID "AM-88"//
 KWIP OR SALEM, 10/26 0930 strong w/rck, wiping out KRWN. JGJ-MT
 CKLQ MB BRANDON, 10/21 0834 barely audible w/KRVN nulled, lcl spot & ment. Brandon, 10/27 xlint w/World Series 2230. DF-SD, 10/28 0115 C&W mx, hockey scores, "Q Country CKIQ", sports line. TL-IN
 900 KTIS MN MINNEAPOLIS, 10/21 1920 fair w/soft soothing mx, wx & s/off. KDF-IL
 910 WSUI IA IOWA CITY, 10/19 2103 fair w/mod. QRM, nx & wx by YL, ID. DF-SD
 930 WEDL OH ELYRIA, 10/25 0228 OM w/ID, AdCon mx, fair w/WKY & CJCA. NJW-MB
 KIXZ TX AMARILLO, 9/26 2143 good & almost alone w/C&W mx, no KIOA. DF-SD
 940 KBRE UT CEDAR CITY, 10/25 2044 w/EES test, strong during KIOA fade. JGJ-MT/JGJ-MT
 CJTB BC VERNON, 10/14 0920 briefly, ID "All Hit 94, CJTB" quickly lost to KVSH.//

960 KSRA ID SAIMON, 9/30 0800 good w/s/on, SSB, into Ai nx. DF-SD

990 WITZ IN JASPER, 10/14 1857 weak w/end of baseball playoff on CBS, ad, mx, ID. KDF-IL

KAYL IA STORM LAKE, 9/29 2007 weak & alone w/wx, lcl spot, local KDSJ goes off at 2000 Sundays. DF-SD

1010 WHIN TN GALLATIN, 10/17 1858 noted poor w/interview pgm, ID, nx. KDF-IL

1040 WJTB OH NORTH RIDGEVILLE, 10/20 1901 fair u/WHO w/s/off late ? KDF-IL DF-SD

1050 KLOH MN PIPESTONE, 10/18 0907 good w/lcl nx, wx, spots, ID. Usual Canadian QRM.//

1080 CKSA AB LLOYDMINISTER, 10/30 2044 much wanted ID u/KRLD tlk. DF-SD

1090 KBOZ MT BOZEMAN, 10/26 2021 in KAAV null w/wx, promo for "Country News" pgm & C&W mx. NJW-MB

1100 KLLL MO WEBB CITY, 10/25 1945 fair u/WWWE w/s/off. KDF-IL

1110 WCBR KY RICHMOND, 11/2 1745 poor w/ID. RK-IL

1120 KLIN CO LIMON, 9/30 0825 xlat w/Ag. rpt. lcl spot & ID. DF-SD, 10/15 0852 strong during KPNW fade w/ wx. JGJ-MT

1160 WJJD IL CHICAGO, 10/29 1900 fair u/KSL w/MOYL type mx, ID, nx. DF-SD

1170 KDKO CA SAN JOSE, 10/25 2130 weak u/KVOC. JGJ-MT

KFSO CO WINDSOR, 10/14 0915 strong o/KVOC w/numerous Radio Paco IDs. JGJ-MT

1180 KDAN AZ WILLIAMS, 10/30 1943 all alone w/C&W mx, lcl spots. DF-SD

1190 KBGO CO BOULDER, 10/13 2032 s/off. JGJ-MT DF-SD

KOKK SD HURON, 10/30 0803 finally, w/wx. Ag rpt, C&W mx & ID, YL ancr, no CFSL.//

1200 WBGE KY WICKLIFFE, 10/18 1913 fair w/mx, s/off, more mx & prayer. KDF-IL

KPFW ND WEST FARGO, 10/27 1815 Rel. mx, ID, regional wx. TL-IN

1210 WBUI IA DENHAM SPRINGS, fair thru growl w/C&W mx & ID. RK-IL

KBEW WA SUNNYSIDE, 10/31 2000 tent. ID here, weak, u/KRSV w/KGYN muled. DF-SD

1220 CJRL OH KENORA, 10/30 1934 alone & very good w/lcl nx & ID. DF-SD

1230 KTRP MN THEFT RIVER FALLS, 11/1 1922 w/MN Net. nx by YL. lcl temp. & ID, good & on top. DF-SD RK-IL

WLOG WV LOGAN, 11/8 0034½ fair w/2 SIDs in what sounded like net. tlk show break.//

KVOC WY CASPER, 10/30 0200 Ai nx, OM w/ID & wx, into C&W mx, fair. NJW-MB

1240 KLYQ MT HAMILTON, 10/23 0844 w/"Klick" ID & C&W type mx. Fair w/much QRM. DF-SD

1250 KNEU UT ROOSEVELT, 10/1 0759 s/on fair w/SSB, slight QRM. DF-SD

1280 KCNI NE BROKEN BOW, 9/29 2028 ID & C&W mx way u/KBRH. DF-SD

KDYL UT SALT LAKE CITY, 11/1 1915 w/ID, DJ tlk by OM, rr mx, weak during WWTC fade.//

1320 KELO SD SIOUX FALLS, 10/16 0530 u/KRUG weak. JGJ-MT

1330 KGAH NH GALLUP, 10/25 2115 on top w/HS football. JGJ-MT

1340 KCAP MT HELENA, 9/27 0444 on top w/C&W mx & ID. DF-SD

KDIO MN ORTONVILLE, 11/1 1750 way o/KRNT w/lcl spot. DF-SD DF-SD

KBRK NE O'NEILL, 11/2 0900 good w/OM tlk, lcl spot & ID into Ai nx, no KRNT/KLDR.//

CKAR ON OSHAWA, 10/28 0130 TG, ID for CKAR & CKQT-RM, mx, fair w/KRNT & WSLR. NJW-MB

1360 KKBV MN BEEMIDJI, 11/1 1743 o/KSCJ w/C&W mx, ID, tlk by OM. DF-SD

1370 KRFM ND GRAND FORKS, 11/1 0900 poor w/KGRD, ID. DF-SD

KVYL OK HOEDENVILLE, 10/31 1900 u/KGNO w/ID, nx. DF-SD

KSHY WY CHEYENNE, 9/26 2100 on top w/rel. pgm & s/off by YL, no SSB. DF-SD

1380 KSRV OR ONTARIO, 10/26 0915 on top 1380. JGJ-MT

1390 KCEY CA TURLOCK, 10/20 2100 strong w/Big Band mx & Mutual nx. JGJ-MT

WGCI IL CHICAGO, noted off 10/28 0040+ & 11/1 0003+, occ. ET w/OA. Both nights the Frequency was dead. Only WHIG was new & una. but rare KOC also hrl. RK-IL

KNCK KS CONCORDIA, 10/31 1855 strong w/KS nx, lcl wx & ID. DF-SD

WRIG MT SCHOFIELD, 10/28 0059½ poor w/ID & gone. RK-IL

1400 KXGN MT GLENDALE, 10/24 0915 in & out w/sports, wx & ID. DF-SD

1410 KCLO KS LEAVENWORTH, 10/26 1925 good no WING "Today's Best Country Music KCLO. TL-IN

WIZM WI LA CROSSE, 10/16 0500 strong o/CFUN w/Larry King & NBC nx. JGJ-MT NJW-MB

1420 WHK OH CLEVELAND, 10/25 0204 w/oldies, IDs as "14-K Cleveland's Solid Gold", poor.//

KUJ WA WALLA WALLA, 10/16 0900 fair w/ID & lcl spot mixing w/KGIM. DF-SD

CJVR SK WELFORD, 10/19 2042 ID in heavy QRM. DF-SD

CKPT ON PETERBOROUGH, 10/26 0226 w/"Album Hour", YL w/ID, lcl spots, w/WHK. NJW-MB

1430 KASI IA AMES, 11/2 0855 ID & regional wx, fair mixing w/KBRK. DF-SD DF-SD

WIL MO ST. LOUIS, 10/30 1855 w/C&W mx, promo & ID w/KRGI/KEZW partially muled.//

KBRK SD BROOKINGS, 10/30 1900 hrd tent. ID, 11/2 0853 lcl & state nx, lcl spots. DF

1440 KKKL ND GRAND FORKS, 11/1 0855 good o/KRHS w/C&W mx & ID. DF-SD

1450 KRBH MT RED LODGE, 9/30 2107 good w/ID ending nx, o/KRBS & KBFS. DF-SD

KVCR MT WOLF POINT, 10/23 0155 C&W mx, 0200 s/off w/jingle, fair o/mess. NJW-MB

1480 CKAN ON NEW MARKET, 10/28 0035 C&W mx w/"1480 C-Kan" IDs, good. TL-IN

1490 KOJO WY LARAMIE, 10/14 0200 s/off after C&W mx, fair. NJW-MB

1510 KCCV MO INDEPENDENCE, 10/31 1844 w/end of rel. tlk pgm. program changes, good w/KDMO muled. DF-SD

KTTT NE COLUMBUS, 11/2 0851 w/lcl spot, ID ment. NE & Columbus, calls sounded like KMG. DF-SD (David, I have no record of a call change for them, ed.)

1520 KWKW MN ROCHESTER, (is this the right call ?) 11/1 0916 w/C&W mx & KWKW AM, KOIM FM 97 ID, good w/KCMA/KNAV muled. DF-SD (David, I have no listing of a call change for this one, but with the way stations change calls now that doesn't mean anything, ed.)

1530 WCKY OH CINCINNATI, 10/16 0520 u/KFBK. JGJ-MT

1550 KKJO MO ST. JOSEPH, 10/17 0540 on top w/oldies rok, ID "KKJO AM 15-5". JGJ-MT

KQWB ND WEST FARGO, 10/27 1837 T40 mx, ID "1550 KQWB". TL-IN

1570 KLOV CO LOVELAND, 10/26 1932 relaying KLOV-FM 102 w/mx, YL DJ, fair w/CFOR after KXKL s/off. NJW-MB

KUXL MN GOLDEN VALLEY, 11/2 0845 rel. pgm., ID. DF-SD
 WRJQ WI APPLETON, 10/29 1817 fair w/promo for contest. KDF-IL
 CKLM RQ MONTREAL, 10/28 0155 FF tlc, SID. TL-IN
 1580 KDOM MN WINDOM, 11/22 0758 good w/lcl spot & ID. DF-SD
 KOKB OK BLACKWELL, on late 9/27 2130+ w/HS game, lcl spots. DF-SD (David, note new calls, ed.)
 1590 WAKR OH AKRON, 10/26 0200 Mutual nx, lcl nx, Larry King, fair w/KRRK. NJW-MB
 1600 KBBX UT CENTERVILLE, 10/31 1925 w/Rel. ID in & out w/KLAK. DF-SD

MOUNTAIN DX ROUNDUP ?

DF... David Faulkner 124 May St. Lead, SD 57754
 (TRF 12-650, TRF 12-655, Radio West Loop)
 JGJ... John C. Johnson 501 5th St. West Billings, MT 59101-2831
 (IC-R71A, 50' N-S LW)
 KDF... Karl Forth 2714 N. LeClare Chicago, IL 60639
 (H4-160, IC-R70, spiral loop, LW)
 RK... The Refridgerater
 (R-1000, H4-129X, Radio West Loop, Kowalski Loop)
 TL... Tom Laskowski 1334 E. Miner St. South Bend, IN 46617
 NJW... Niel Wolfish 31 Southlawn Stroll Winnipeg, MB R3T 5B9
 (Superadio, DX-400, Panasonic Car Stereo)

SOME INFO FROM NIEL WOLFISH

The following stations relay CKIS-FM (ex-CHFM) Winnipeg after midnight:
 CFOB-800 Ft. Frances, ON CKDR-900 Dryden, ON
 CJRL-1220 Kenora, ON CFAK-1240 Atikokan, ON
 CKIG-1340 Ignace, ON CKRE-1340 Red Lake, ON
 CKSI-1400 Sioux Lookout, ON CKHD-1450 Hudson, ON
 CKEF-1450 Ear Falls, ON

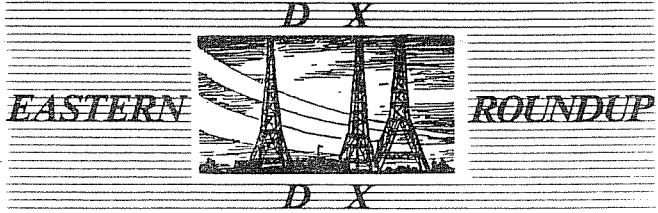
Sorry about missing last week's issue. I had a bit of a cold & didn't feel up to typing it. I only had 1 report on hand at the time. Most of this stuff came in after the deadline.

CADX XVI

Will Mike Hogan jump out of an airplane without a parachute ? Will Karl Forth recite poetry in Esperanto ? Will Harmonica Red play Mozart's Harmonica Concerto in a lot of flats ? Find out by attending this year's edition of the annual CADX holiday get together, now in its 16th year. There will be plenty of DX, including the traditional Monday Morning session, which has been very productive the last few years. The dates are Saturday Dec. 28 to Thursday Jan. 2. Most of the activity will be in the Dec. 28- Dec. 31 period. The location is 6416 N. Richmond in Chicago. For more info call host Harmonica Red at (312)-262-6299.

REPORTERS IN THIS ISSUE:

(RB-NY) Raymond Bauernhuber, 141-12
 243rd Street,
 Rosedale, NY
 11422..Panasonic
 RF-2800, shotgun
 loop.
 (RCR-PA) Robert C. Ritchey
 R.D.#1, Box 738
 East Freedom, PA
 16637
 Realistic DX-160,
 150 foot longwire
 (KZ-NY) Karl J. Zuk, 154 Old Post Road North, Croton-on-Hudson, New York 10520
 GE Superadio

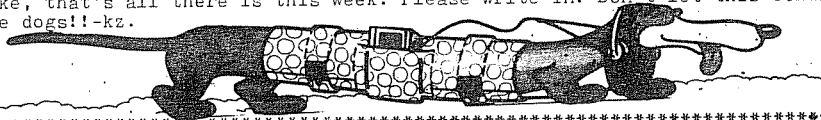


EDITOR: Karl J. Zuk • 154 Old Post Road North • Croton-on-Hudson, NY 10520
 Times are ELT

 540 CJSB ON, Ottawa. 10-20 0345 with Music Of Your Life, News, Sports, Weather. Strong signal. (RB-NY)
 590 WEEI MA, Boston. 10-19 2350 with news, sports, weather by female announcer, Poor. (RB-NY)
 680 WPTF NC, Raleigh. 10-20 2200 News by female announcer, J.C. Knowles with "The North Carolina Collection" area history show. Heavy interference. (RB-NY)
 730 WMTC KY, Van Cleve. 10-24 1900 Weather and sign off by man, fair. (RCR-PA)
 840 WHAS KY, Louisville. 10-28 0030 "Sports Talk" phone-in program. Excellent. (RB)
 940 WFNC NC, Fayetteville. 10-23 0735 Editorial, ID, local ads, good. Not on 640 kHz yet. (RCR-PA)
 940 WVLV PA, Lebanon. 11-6 0818 O/u mess with ID "The all new, town and country, WVLV," with weird nostalgic music, like Spike Jones. (KZ-NY)
 950 WROL MA, Boston. 11-6 0830 with ID "This is WROL, Boston." then time tone, followed by a block program buy. (KZ-NY)
 960 WHYL PA, Carlisle. 11-6 0835 with end of news, sponsored by a pharmacist in Carlisle. ID "That's WHYL news..." C&W music, many local ads. (KZ-NY)

- 980 WPHG VA, Bristol. 10-20 2230 with lots of nice C&W music. (RB-NY)
 990 WZZD PA, Philadelphia. 10-19 1940 Light pop music on "Philadelphia's light, WZZD." (RB-NY)
 1020 KDKA PA, Pittsburgh. 10-25 0015 Noted off air, SS stations heard instead. (RCR)
 1070 WNCT NC, Greenville. 10-30 0545 with C&W music, Univ. of NC Coop Extension feature. 0552 NC weather by accented man. Sonny's Chicken ad. (KZ-NY)
 1130 WISN WI, Milwaukee. 10-22 1910 ID "WISN Milwaukee," into rock oldies, fair in place of usual WNEW New York, NY or WCXI, Detroit, MI. (RCR-PA)
 1190 WOWO IN, Fort Wayne. 10-28 0040 Rock-pop music with call-ins. (RB-NY)
 1220 WGAR OH, Cleveland. 10-28 0100 News, weather, sports, country music. Good. (RB)
 1330 WTRX MI, Flint. 10-24 0005 Station promo, ID "1330 WTRX", into Sally Jesse Raphael show on NBC Talknet, good. (RCR-PA)
 1520 WKBW NY, Buffalo. 10-28 0120 with call-in show with Bruce Williams. (RB-NY)
 1530 WCKY OH, Cleveland. 10-28 0130 ID "Cincinnati's Info Radio", with sports talk show, with call ins. (RB-NY)
 1590 WTVB MI, Coldwater. 10-23 0810 Local ad, weather, ID "16 TVB," briefly good. (RCR-PA)

No joke, that's all there is this week. Please write in! Don't let this column go to the dogs!!-kz.



EASTERN DX FORUM

RICHARD EVANS
 English Village Apts, Bldg 23 Apt. B-6
 NORTH WALES, PA 19454

Deadlines: Saturdays
 This column typed 11/10/85

Pete Clarius, 1583 Castleton Avenue, Staten Island, New York 10302
 Greetings from Staten Island: This is my first contribution as a member of the IRCA. I started DXing in 1931 with my first verie from the old WPOF which was on 1370 with 50w. and was owned and operated by the Patchogue Order of Elks. My ECB log is at 2027 with 1449 verified. FM Tog 116 - 13 verified. SW log 258 with 82 verified. My best ECB catches were the old F.Q.N. on 609K. at St. Pierre, Migulon and VAS at Glase Bay, Nova Scotia (I forget what frequency they were on) but they were a weather and fishing information station. My biggest thrill was a telephone interview with Lori Joudrey from C.B.A. two years ago at 0525 on the program "Information Morning". This came about because about a month earlier I had sent in a two hour report from 0430 s/on to 0630. For some reason I get very good Maritime reception here on Staten Island. For those who might be interested, WNYM is now operating studios, offices, towers and transmitter from 1111 Woodrow Road, Staten Island, N.Y. 10312 which were formerly used by WPOW from 1957 and before that by the old WBBR when they came on back in 1924. Congratulations to Dr. Wood as president of the IRCA. (Pete, welcome to EDXF. No problem here with your typing. My Dad says trifocals are even worse than bifocals!!-rce)

John H. Demmitt, Box A K0848, Bellefonte, Pennsylvania 16823
 Halloween night had tricks and treats across the MW dial. While many of the stations were giving listeners treats in the form of Halloween programming such as interviews with witches, tours of haunted houses and telling ghost stories, WCAU-1210 played a trick on its listeners! They promised in program schedules and on the air announcements that they would present the famous H.G. Wells classic, War of the Worlds at 2000 on Halloween night. Instead, listeners heard an old show that was not even related to Halloween, let alone scary. Only after the WCAU switchboard lit up like a Christmas tree did the announcer make several announcements saying that they were unable to air the show. The probably received more calls on Halloween night than the Mercury Theater did when they first aired the program. Nov. 2nd marked the 65th birthday for KDKA and they devoted a special 12 hour broadcast including history, selected recordings, interviews, oldies and telephone calls, all related to the birthday celebration. One interesting item told that KDKA had a SW service to Canada where they read letters to those in the remote areas. This was stopped during the war when the FBI claimed that some of the messages were being sent to spies. 73.



WORLDWIDE EAST

BE SURE TO USE MY NEW ADDRESS: Jim Hall
2687 Myrtle St.
Apt. 2 Rear
Erie, PA 16518

Here's another edition of DXWW-E from an editor who has just reached the point of temporary sanity. Once again, I apologize for the delays in getting the column off to HQ!

* * * * *

I R A N S - A T L A N T I C D X (all Mark Connelly-MA)

- 209 MOROCCO, Azilal 10/14 0025 : AA talk, fair.
- 549 ALGERIA, Oran / Les Trembles 10/14 0035 : AA male vocal, good copy despite low modulation level.
- 684 SPAIN, Sevilla 10/14 0050 : Male SS ballad vocal o/slight WRKO/WAPA slop.
- 738 SPAIN, Barcelona 10/14 0059 : SS talk fair.
- 747 t BURKINA-FASO, Ouagadougou 10/13 23 9 : Bits of talk noted here during Africa-dominated TA opening.
- 765 SENEGAL, Dakar 10/13 2315 : Loud w/Koran reading in AA.
- 774 SPAIN, synthros. 10/14 0104 : Loud w/SS nx read by man & woman.
- 792 SPAIN, Sevilla Very good with SS talk. 10/14 106
- 837 CANARY ISLANDS, Las Palmas 10/14 0114 : XInt w/SS talk, then hard rock music.
- 855 SPAIN, Murcia 10/14 0138 : Good w/uptempo pop SS vocal //774.
- 891 ALGERIA, Algiers 10/14 0120 : XInt / local-like (S9 + 4 dB) w/spirited AA vocal mx. Barely a hint of an 89c het at the time.
- 954 SPAIN, Madrid 10/14 0016 : SS telephone talk show.
- 999 MOROCCO, Ad-Dakhla 10/14 0005 : XInt w/AA talk during solid opening to North Africa.
- 1035 PORTUGAL, Lisboa 10/14 0019 : Good w/PP talk ; WBZ phased.
- 1044 MOROCCO, Sebba-Aioun 10/13 2343 : AA vocal //1053, fair to good.
- 1053 MOROCCO, Tanger 10/13 2343 : AA male vocal //1044, good strength -- badly QRMing WHN.
- 1304 unID, 10/13 2333 : Somebody still on this old plan channel w/AA or Afro talk. (Senegal?) -- Signal in bad slop. (Possibly ed.)
- 1349 MAURITANIA, Nouakchott 10/13 2323 : Drumming, kalimba mx, talk by woman. Carrier very strong (killing WNIS) ; audio relatively weak.
- 1395 t ALBANIA, Lushnje 10/13 2329 : Talk by m & w which sd/lk political propaganda in an eastern European language. Low growl under, prob. from Spanish or African stations with poor freq. control/.
- 1521 SPAIN, 10/14 021 : Time pips, nx by man in SS. Signal was "exalted carrier!" : Saudi Arabia's OC was on (prior to their 0258 official s/on) ; that massive carrier was pinning the S-meter and completely annihilating WKBW. Spain "took a ride" on the carrier, modulating it about 10 percent.
- 1566 TUNISIA, Sfax 10/13 2316 : AA talk by man, o/SAH.
- 1575 PORTUGAL, Porto-Canidelo 10/14 157 : Current hit "Never Surrender", then PP talk.

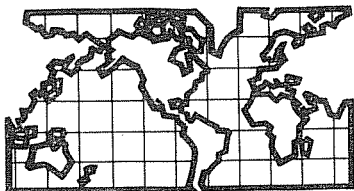
P A N - A M E R I C A N D X

- 535 GRENADA, Morne Rouge 10/14 0033 : Good w/vocal mx which sd/lk a blend of calypso & country ; then man (DJ) in Caribbean EE. (Connelly)
- 580 PUERTO RICO, San Juan WKAQ 10/14 0039 : "Radio Reloj" ID, SS mx, o/low-pitched (approx. 200Hz) het. (Connelly)
- 600 CUBA, Urbano Noris CMKA 8/26 : Strong w/SS mx //670/69', 670 not as strong as others. (Wyllie)
- 640 CUBA, Guanabacoa CMBB 9/6 : Strong w/R. Rebelde pgmng. (Wyllie)
- 650 unID, SSer 9/6 : Maybe Colombia but not sure. (Wyllie)
- 660 unID, SSer 9/6 : Weak, behind WNBC, Cuba likely? (Wyllie) (Best bet. ed.)
- 680 PUERTO RICO, San Juan WAPA 10/14 0051 : Several Puerto Rico SS ads, apparent sporting event, w/WRKO, o/low-pitched het. (Connelly)
- 700 VENEZUELA, Maracaibo YVMH 10/14 0058 : "R. Popular" ID atop chan., loud. Several other stations (HJCX, Jamaica, WLW, et al) hrd "rumbling" in the background. (Connelly)
- COLOMBIA, Cali HJCX 0027 8/24 : SS mx, poor signal but o/WLW. Is Radio Sutatenza. (Wyllie)
- 705 ST. VINCENT, Kingstown 10/14 0057 : Poor to fair w/EE talk ; sloped by R. Popular de Maracaibo on 700. (Connelly)
- 730 MEXICO, XEX 0220 8/30 : Weak, SS mx, ID "Radio Festival". Other SS stations behind. (Wyllie)
- 750 VENEZUELA, Caracas 0300 8/24 : EE/SS rock, "Caracas" ID. (Wyllie)
- 760 COLOMBIA, ?? ??? 0215 9/6 : Rapid SS talk, hrd ment of Colombia o/other statpion here. (Wyllie)
- CUBA, Guanabacoa 0320 8/30 : Weak w/"RRR" code ID's. Also hrd Colombia in background. (Wyllie)

- 885 t MONTERRAT, Plymouth 10/14 0142 : Strong OC. (Connelly)
 895 COLOMBIA, Santa Marta HJPM 10/14 0125 : Festive LA mx ; badly splashed by stronger 891 Algeria. (Connelly)
 1020 VENEZUELA, La Ascuncion YVRS 0218 8/25 : Strong w/SS mx, 1D as "Mundial Margarita". Also noted on 9/7 0044 weak, and 9/15 good at 22. (Wyllie)
 1040 COLOMBIA, Barranquilla HJA1 8/25 0217 : Good w/"CARACOL" 1D, SS mx, much splash from WBZ-1030 & WHN-1050. (Wyllie)
 1100 ANTIGUA, St. Johns ZDK 9/14 0245 : Reggae mx, good w/QRM from HJAT. (Wyllie)
 -COLOMBIA, Barranquilla HJAT 0245 9/14 : Hrd NA & ment of Colombia and Barranquilla, so must be R. Reloj. (Wyllie)
 1120 DOM. REPUBLIC, Santo Domingo HICN 0021 10/14 : Loud & completely dominant w/Santo Domingo ads, SS LA mx. (Connelly)
 1165 ANTIGUA, St. Johns C.R.B. 0023 10/14 : Like a local w/preaching in EE. (Connelly)

CREDITS:

- (Connelly) Mark Connelly, 7 Trowbridge Path, West Yarmouth, Cape Cod, MA 02673
 (Kenwood R-600, 2 37-m lw's phased w/MWX-4 phasing unit)
 (Wyllie) William Wyllie, 95 Peck St., Franklin, MA 02038
 (SHARP GF-450 - stations hrd at Prudence Island)



DX WORLDWIDE - WEST

Pat Martin - Editor

P.O. Box 843, Seaside, Oregon 97138

PHONE; (503) 861-3185

- 529 COSTA RICA, Cartago-Radio Rumbo, WCAL 11/1 0452 almacén spot, agricultural extension PSA, color TX spot "En Rumbo" etc. Good ex 530 (REW-HI)
 600 CUBA, Urbano Noris, Radio Rebelde CMKA 11/3 0625 mx item, into trop-tical mx, booming, slightly overmodulated. (REW-HI)
 650 ALASKA, Anchorage-KYAK 10/30 0823 "KYAK" singing ID level w/KORL. (REW)
 820 ALASKA, Fairbanks-KCBF-10/30 1532 sports mx, temp. minus 3 "at the KCBF studio in Fairbanks" into Easy Listening vocals but also hrd a promo for Country Countdown. Loud and clear. (REW-HI)
 930 PERU, Lima-Radio Moderna OAK4E 10/30 0715 SS Pops show from Los Angeles Little KNJ on SE beverage. (REW-HI)
 970 ALASKA, Fairbanks-KYAK-10/31 1600 ID "First by a Country Mail, KIAX Fairbanks." Into Mutual News, 1603 local mx, temp. minus 5. AS+ TC Easier here now that KPIA has moved to 670. (REW-HI)
 980 BRAZIL, Brasilia-Radio Nacional ZYH707-10/30 0825 Dale Carnegie-type self help talk, address. Many Brazilians dominant tonight. (REW-HI)
 1010 MEXICO, Guadalajara, Jal. La HL XEHL 10/22 0620 ID "En HL" otro existe para ti" rx mx dominant. (REW-HI)
 1071 INDIA, Rajkot-10/31 1550 Urdu talk on azadi (freedom) and late Prime Minister Lal Bahadur Shastri. This one and 1134 are dominant every morning now. (REW-HI)
 1127 COLOMBIA, Unid. 10/26 0420 etc "En Colombia 11.20" Julio Iglesias and other current Latin standards played, this is not the same Unid, probably Colombia on 1125 reported earlier. (REW-HI)
 1179 JAPAN, Osaka-JOOR-10/19 1558 ID as "Mainichi Hose" and ads. Belongs to famous Mainichi newspaper chain. (REW-HI)
 1250 ALASKA, Homer-KBBI 1545 11/3 "Sunday morning" show from CBC Toronto 1600 local ID. First time hrd this season. Has applied for 890 KHZ w/10KW. I don't look forward to that as it will make Adak impossible then. (REW-HI)
 1360 VENEZUELA, Maracaibo, Caratumbo Internacional YV7I 10/22 0555 time check, ID, Maracaibo ad. About the easiest YV here. Dominant. (REW)
 1510 MEXICO, Veracruz, Ver. Radio Veracruz XELPM 11/3 0415 music portion "En XELPM a favor de Ignacio" romantic mx, some almost GS sounding ad for seafood ret. CST etc. (REW-HI)
MEXICO, Cd. Guzman, Jal. Radio Felicidad XELW 11/3 0430 took freq. over from XELPM, spot for agriculture, phones "aquí en Cd. Guzman. (REW)
 1550 COLOMBIA, Unid. 11/1 0500 Colombian NA 0502 s/off. Good (REW)
 1560 MEXICO, Lazaro Cardenas, Mich. La Voz del La Valle XELAC, 11/1 0458 s/off. Into five verses of Mexican NA. Atop KFMC and other XE (REW-HI)
 1585 THAILAND, Several listed 10/30 1545 Thai talk, Thai pops 1600 time signal. Good. No // observed. (REW-HI)

THANKS TO THIS REPORTER:

REW-HI RICHARD E. WOOD-Post Office Box 5074-Hilo, Hawaii 96720
 R-71A, R-1000, 4 Beverages, phasing unit, preamp.

MWDX-4 & Mini-MWDX-4 Series Phasing Units

Mark Connelly --> WALTON DX Labs
30 William Road --> Billerica, MA 01866
11 OCT 1985

Operating the MWDX-4 and Mini-MWDX-4 series Phasing Units

- /* The techniques outlined below should first be practiced on groundwave signals during the daytime. This condition yields the steadiest nulls; therefore, it is the appropriate condition to allow a new phasing unit user the ability to gain familiarity with phasing procedures and the feel of the controls. Practice frequencies should have 2 groundwave stations, one about 25 dB stronger than the other. */
- /* The "pest station" to be nulled need not be an actual broadcast signal. It can be a man-made noise source (such as a light-dimmer or TV sweep circuit) covering wanted signals. */

P/

Two-Wire Phasing with the MWDX-4 Phaser

1.0 Initial Set-up

- 1.1 Set S5 (Amp. switch) to "Off" initially. Connect 9 V battery to J6 battery clip.
- 1.2 Connect wire ant. #1 to J1.
- 1.3 Connect wire ant. #2 to J2. The two wires should be of similar length. For frequencies of 500 kHz or less, 30 m. / 100 ft. is the minimum suggested length of each wire; for frequencies above 500 kHz, 15 m. / 50 ft. is the minimum suggested length of each wire.
- 1.4 Connect output cable from J4 (or J5) to receiver.
- 1.5 Set S6 Line-2 Input (Loop/Wire) select switch to Wire.
- 1.6 Set S4 (Length Switch) to Medium, unless each wire is considered to be short (shorter than 50 m. / 164 ft. at freq. \leq 500 kHz. or shorter than 25 m. / 82 ft. at freq. $>$ 500 kHz.). If antenna wires are considered short, set S4 to Short.
- 1.7 Set R3 (Output Level Pot) to max. level / fully CW setting (knob pointer at 8:00).
- 1.8 Connect earth-ground (or mains / cold-water-pipe ground) wire, if available, to J3.

2.0 Frequency-Range Switch (S1) Setting

- 2.1 If you have an MWDX-4A, set S1 according to the Table 2.

Table 2 MWDX-4A / Mini-MWDX-4A Frequency Range Chart

<u>Operating Freq. (kHz)</u>	<u>S1 position</u>	<u>"Clock" pos. of knob pointer</u>
140 to 180	1	9:30 (fully CW)
180 to 300	2	10:30
450 to 620	3	11:30
620 to 850	4	12:30
850 to 1300	5	1:30
1300 to 2000	6	2:30 (fully CW)

Different tables for other coil groups (e. g. B, C, D) should be prepared by the phasing unit user. This can be done by experimentation or can be computed roughly by the BASIC program:

```
10 PRINT "(to stop program, enter 0)"
20 INPUT "Inductance (uH) of S1A coil selected";L
30 IF L=0 THEN 100
40 C=330\GOSUB 70\PRINT"Minimum frequency = ";F;" kHz"
50 C=150\GOSUB 70\PRINT"Maximum frequency = ";F;" kHz"
60 PRINT\GO TO 10
70 F=159155/((L*C)^.5)
80 RETURN
100 END
```

3.0 Line 1 Tune

- 3.1 Set R1 fully CW (pointer at 8:00 / max. level).
- 3.2 Set S2 (Function Switch) to Line 1 (11:00 / fully CW) position.
- 3.3 Set C3 to half-meshed (9:00 on knob pointer) position.
- 3.4 Adjust C1 for maximum signal at operating frequency.
- 3.5 If a peak cannot be obtained, set the S4 Length Switch to its "next longest position" (medium if it had been on short; long if it had been on medium), then repeat step 3.4. A suitable peak should now be obtained.

4.0 Line 2 Tune

- 4.1 Set R2 fully CW (pointer at 8:00 / max. level).
- 4.2 Set S2 to Line 2 (12:00 / centre) position.
- 4.3 Adjust C2 for maximum signal at operating frequency.

5.0 Level Comparison / Equalisation

- 5.1 Observe S-meter or audible signal level of station to be nulled as you set S2 to 1 and then to 2.
- 5.2 If the signal noted with S2 on 1 is stronger than that noted with S2 on 2, adjust R1 until the levels seen at both the 1 and the 2 positions of S2 are the same. If you adjusted R1, go to section 6.0.
- 5.3 If the signal noted with S2 on 2 is stronger than that noted with S2 on 1, adjust R2 until the levels seen at both the 1 and the 2 positions of S2 are the same.

6.0 Null-Type Switch (S3) Setting

- 6.1 Set Function Switch (S2) to Null position (pointer at 1:00 / fully CW).
- 6.2 Set Null-Type Switch (S3) to Null-a and then to Null-b while observing S-meter or audible signal level. Leave S3 on the position which yields the greater null of the unwanted "pest" station (i. e. leave S3 on the position with the weaker pest station signal / greater evidence of subdominant station(s)).

7.0 Nulling

- 7.1 Adjust the capacitor on the line corresponding to whichever pot (R1 or R2) is still set at its initial fully-CW setting. (C1 corresponds with R1, C2 with R2). If both pots are at fully CW (no difference in line 1 & line 2 levels had been noted in section 5.0), start by adjusting C1.

[What you are adjusting-for is maximum null of the "pest" station: that is, establishment of the maximum null of wanted (previously-subdominant) signals to unwanted "pest" signal.]

- 7.2 Adjust the pot on the line opposite that of the capacitor you just tweaked (e. g. adjust R2 if you just tweaked C1) to deepen the null further. If the null depth is best with that pot fully CCW, leave it there and see if adjusting the other pot will deepen the null.
- 7.3 Make small successive adjustments of C1, C2, and whichever pot was used last in step 7.2 until maximum null depth has been obtained. Use C3 (Null Vernier), if necessary, to achieve the final amount of pest-cancellation attainable. Subdominant signal(s), if present, should now be audible with greatly diminished interference.

8.0 Amplification

- 8.1 If the desired signal(s) left after nulling the unwanted-dominant signal are too weak for adequate reception, perform the steps which follow in this section.
- 8.2 Set R3 to minimum output / fully CW (pointer at 4:00).
- 8.3 Set S5 (Amp. switch) to "On". Gradually bring R3 successively CCW, increasing RF output. Set R3 as far CCW as you can without introducing spurious mixing responses from stations not on the frequency of operation. In rural areas, full-gain amplifier operation (R3 at max. level setting) should be achievable without the introduction of "spurs": maximum realisable amplifier gain is approximately 20 dB.
- 8.4 Slight re-adjustments of the controls - (R1 or R2) and (C3) - may be needed to obtain the greatest null depth on the "pest" station.

Loop vs. Wire Phasing with the MWDX-4 Phaser

Follow two-wire procedure with following changes:

Before section 1.0:

/* Note: Loop to be used must have

- a) a Q-spoiling pot shunting the L-C tank (value = 10K or 25K, linear taper). This pot should be capable of being switched in or out by a toggle switch (to be referred to as the Q-switch).

OR

- b) a tank-shunting Q-spoiling fixed resistor (10K or 15K) that can be switched in or out (by Q-switch); and a non-Q-spoiling level (amp. gain) pot.

The pot used will be referenced as the Loop Pot. */

Section 1.0 changes (steps replace those of same number) ...

- 1.3 Connect loop's output cable to J7. Initially set loop power switch to off.

- 1.5 Set S6 Line-2 Input (Loop/Wire) select switch to Loop.

(No changes to sections 2.0, 3.0)

Section 4.0 changes (steps replace those of same number) ...

- 4.1 Turn on loop power. Set loop's Q-switch to High-Q position. Set loop pot to max. level position.

- 4.3 Adjust loop tuning cap. for maximum signal at operating frequency; then set Q-switch to Low-Q.

Section 5.0 change (step replaces that of same number) ...

- 5.3 If the signal noted with S2 on 2 is stronger than that noted with S2 on 1, adjust the loop pot until the levels seen at both the 1 and the 2 positions of S2 are the same.

(No changes to section 6.0)

Section 7.0 changes (steps replace those of same number) ...

7.1 Adjust the capacitor on the line corresponding to whichever pot (R1 or the loop pot) is still set at its initial max. level setting. (C1 corresponds with R1, the loop tuning cap. with the loop pot). If both pots are at their max. level settings (no difference in line 1 & line 2 levels had been noted in section 5.0), start by adjusting C1.

[What you are adjusting-for is maximum null of the "pest" station: that is, establishment of the maximum ratio of wanted (previously-subdominant) signals to unwanted "pest" signal.]

7.2 Adjust the pot on the line opposite that of the capacitor you just tweaked (e. g. adjust the loop pot if you just tweaked C1) to deepen the null further. If the null depth is best with that pot at its initial setting (e. g. fully CCW for R1), leave it there and see if adjusting the other pot will deepen the null.

7.3 Make small successive adjustments of C1, the loop tuning cap., and whichever pot was used last in step 7.2 until maximum null depth has been obtained. Use C3 (Null Vernier) and slight physical re-positioning of the loop, if necessary, to achieve the final amount of pest-cancellation attainable. Subdominant signal(s), if present, should now be audible with greatly diminished interference.

Section 8.0 change (step replaces that of same number) ...

8.4 Slight re-adjustments of the controls - (R1 or the loop pot) and (C3) - may be needed to obtain the greatest null depth on the "pest" station.

Two-Wire Phasing with Mini-MWDX-4 series Phasing Units

Follow the MWDX-4 series Two-Wire Phasing procedure with the following changes:

Change all references to MWDX-4 to read Mini-MWDX-4.

Delete steps 1.1, 1.5, & 1.7.

Change step 1.4 to read as follows:

1.4 Connect output cable from J4 to receiver or to input of optional external amplifier (tuned or broadband) whose output feeds the receiver. If an external amplifier is used, set its function switch to "Off/Bypass" until section 8.0.

Section 8.0 header should read:

8.0 Amplification (optional)

Delete step 8.2.

Change step 8.3 to read as follows:

8.3 If you have an amplifier or active tuner in the line (up to now this has been in the "Off/Bypass" mode), set it up to amplify the phaser's output. Adjust active tuner controls, including regeneration if present, as if tuning a wire antenna. Adjust level control on amplifier or active tuner, if necessary, to prevent spurious responses, overloading, or oscillation.

Table 3 Hole List for MWDX-4 series phasing units

BOX USED = 7" X 5" X 3" (Mouser stock # 537-IF-782)

X = horizontal distance, in inches, from the vertical centreline (VCL) on the side observed. Negative values of X are left of VCL; positive values of X are right of VCL.

Y = vertical distance, in inches, from the bottom horizontal edge of the side observed.

D = hole diameter in inches.

+++++
LEFT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	C3	Null Vernier Cap. - shaft	-1.375	1.125	0.28
2	J1	Line 1 Wire Ant. ban.jack	-0.75	0.5	0.3125
3	J3	Earth GND In ban.jack	0.0	0.5	0.3125
4	J2	Line 2 Wire Ant. ban.jack	0.75	0.5	0.3125
5	S4	Length switch - tab	-0.25	1.125	0.113
6	S4	Length switch - shaft	0.0	1.125	0.25
7	G1	GND H/W - int.lug	0.625	1.125	0.113
8	J7	Loop In - BNC jack	1.375	1.125	0.375

+++++
TOP SIDE

Mounting holes on C1 & C2 must be tapped to 6-32 threads.

Hole #	Comp. Desig.	Description	X	Y	D
1	C1	Line 1 Tune Cap. - H/W 1	-2.75	3.838	0.14
2	C1	Line 1 Tune Cap. - shaft	-2.5	3.375	0.5
3	C1	Line 1 Tune Cap. - H/W 2	-2.75	2.912	0.14
4	C2	Line 2 Tune Cap. - H/W 1	-2.75	2.088	0.14
5	C2	Line 2 Tune Cap. - shaft	-2.5	1.625	0.5
6	C2	Line 2 Tune Cap. - H/W 2	-2.75	1.162	0.14
7	R1	Line 1 Pot - tab	-1.125	3.75	0.14
8	R1	Line 1 Pot - shaft	-0.8125	3.75	0.3125
9	S3	Null type switch - tab	-1.0	2.5	0.113
10	S3	Null type switch - shaft	-0.75	2.5	0.25
11	G2	GND H/W - int.lug	-0.1875	2.5	0.113
12	R2	Line 2 Pot - tab	-1.125	1.25	0.14
13	R2	Line 2 Pot - shaft	-0.8125	1.25	0.3125
14	S1	Freq.Range switch - tab	0.0	3.5	0.14
15	S1	Freq.Range switch - shaft	0.5	3.5	0.375
16	S2	Function switch - tab	0.0	1.5	0.14
17	S2	Function switch - shaft	0.5	1.5	0.375
18	A1	BBA-B Amp.Card - H/W 2	2.0	4.5	0.113
19	A1	BBA-B Amp.Card - H/W 1	3.0	4.5	0.113
20	A1	BBA-B Amp.Card - H/W 4	2.0	3.5	0.113
21	A1	BBA-B Amp.Card - H/W 3	3.0	3.5	0.113
22	T1	Phase Reverser Card- H/W 1	1.875	2.4	0.113
23	T1	Phase Reverser Card- H/W 2	1.875	1.6	0.113
24	R3	Output Pot - shaft	2.875	2.0	0.3125
25	R3	Output Pot - tab	3.1875	2.0	0.14
26	S5	Wire/Loop switch - shaft	1.875	0.625	0.25
27	S5	Wire/Loop switch - tab	1.875	0.375	0.113
28	S5	Amp. On/Off switch - shaft	2.75	0.625	0.25
29	S5	Amp. On/Off switch - tab	2.75	0.375	0.113

+++++
RIGHT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	J6	battery holder - H/W 1	-1.875	1.0	0.113
2	J6	battery holder - H/W 2	-1.0	1.0	0.113
3	C10	B+ in feedthrough cap.	0.0	1.1875	0.188
4	G3	GND H/W - ext.lug	0.75	1.1875	0.113
5	J4	RF out to RX - BNC jack	0.0	0.5	0.375
6	J5	RF to car RX - H/W 1	1.5	1.288	0.14
7	J5	RF to car RX - body	1.5	0.894	0.5
8	J5	RF to car RX - H/W 2	1.5	0.5	0.14

Table 4 Hole List for Mini-MWDX-4 series phasing units

BOX USED = 5" X 4" X 3" (Mouser stock # 537-TF-779)

X, Y, D parameters are as defined in Table 3.

+++++

LEFT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	C3	Null Vernier Cap. - shaft	-1.375	1.125	0.28
2	J1	Line 1 Wire Ant. ban.jack	-0.75	0.5	0.3125
3	J3	Earth GND In ban.jack	0.0	0.5	0.3125
4	J2	Line 2 Wire Ant. ban.jack	0.75	0.5	0.3125
5	S4	Length switch - tab	-0.25	1.125	0.113
6	S4	Length switch - shaft	0.0	1.125	0.25
7	G1	GND H/W - int.lug	0.625	1.125	0.113

+++++

TOP SIDE

Mounting holes on C1 & C2 must be tapped to 6-32 threads.

Hole #	Comp. Desig.	Description	X	Y	D
1	C1	Line 1 Tune Cap. - H/W 1	-1.75	3.338	0.14
2	C1	Line 1 Tune Cap. - shaft	-1.5	2.875	0.5
3	C1	Line 1 Tune Cap. - H/W 2	-1.75	2.412	0.14
4	C2	Line 2 Tune Cap. - H/W 1	-1.75	1.588	0.14
5	C2	Line 2 Tune Cap. - shaft	-1.5	1.125	0.5
6	C2	Line 2 Tune Cap. - H/W 2	-1.75	0.662	0.14
7	R1	Line 1 Pot - tab	-0.125	3.25	0.14
8	R1	Line 1 Pot - shaft	0.1875	3.25	0.3125
9	S3	Null type switch - tab	0.0	2.0	0.113
10	S3	Null type switch - shaft	0.25	2.0	0.25
11	G2	GND H/W - int.lug	0.8125	2.0	0.113
12	R2	Line 2 Pot - tab	-0.125	1.0	0.14
13	R2	Line 2 Pot - shaft	0.1875	1.0	0.3125
14	S1	Freq.Range switch - tab	1.0	2.75	0.14
15	S1	Freq.Range switch - shaft	1.5	2.75	0.375
16	S2	Function switch - tab	1.0	1.0	0.14
17	S2	Function switch - shaft	1.5	1.0	0.375

+++++

RIGHT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	TAL	Phase Rev. card - H/W 1	-0.875	1.3	0.113
2	TAL	Phase Rev. card - H/W 2	-0.875	0.5	0.113
3	J4	RF Out - BNC jack	0.0	0.5	0.375

Parts Lists for MWDX-4 and Mini-MWDX-4 phasing units

- Table 5 = "upper level" of electrical & major mechanical components
- Table 6 = TAL phase-reversal transformer card subassembly components
- Table 7 = A1 (BBA-B) broadband-amplifier subassembly components
- Table 8 = small hardware

* = MWDX-4 only § = Mini-MWDX-4 only

Vendor Abbreviations

- DK = Digi-Key - P. O. Box 677 - Thief River Falls, MN 56701
- MCL = Mini-Circuits Lab. - 2625 E. 14th St. - Brooklyn, NY 11235
- MCU = Mouser Electronics - 11433 Woodside Ave. - Santee, CA 92071
- 16 NEW = Newark Electronics - (many locations)

Table 5 = "upper level" of electrical & major mechanical components

Component Designation	Description	Vendor	Stock #
<u>BOX</u>			
\$ —	chassis box (5"X4"X3")	MOU	537-IT-779
* —	chassis box (7"X5"X3")	MOU	537-IT-782
<u>SUBASSEMBLIES</u>			
* A1	broadband amp. subass'y	[see Table 7]	
TAL	phase-reversing xfmr. card	[see Table 6]	
<u>CONTROLS</u>			
C1	10-365 pF var. capacitor	MOU	524-A1-227
C2	10-365 pF var. capacitor	MOU	524-A1-227
C3	2-25 pF var. capacitor	MOU	530-189-0569-1
R1	10K linear-taper pot	MOU	31CT401
R2	10K linear-taper pot	MOU	31CT401
* R3	5K audio-taper pot	MOU	31CB305
S1	4-pole, 6-pos. switch	MOU	10WV046
S2	4-pole, 3-pos. switch	MOU	10WV043
S3	DPDT on/on toggle switch	RS	275-663
S4	DPDT on/off/on toggle	RS	275-664
* S5	3PDT on/on toggle switch	RS	275-661
* S6	SPDT on/on toggle switch	RS	275-662
<u>JACKS - CONNECTORS</u>			
J1	banana jack (red)	RS	274-662
J2	banana jack (red)	RS	274-662
J3	banana jack (black)	RS	274-662
J4	BNC jack	RS	278-105
* J5	Motorola jack	MOU	16R107
* J6	battery holder (Keystone 1290)	MOU	534-1290
# J7	BNC jack	RS	278-105
<u>ELECTRICAL COMPONENTS</u>			
* B1	9V battery	RS	23-553
C4	68 pF mica capacitor	MOU	ME232-1500-068
C5	100 pF mica capacitor	MOU	ME232-1500-100
C6	68 pF mica capacitor	MOU	ME232-1500-068
C7	100 pF mica capacitor	MOU	ME232-1500-100
C8	.1 uF monolithic cap.	DK	P4525
C9	39 pF disc cap	MOU	21CB039
* C10	1000 pF feedthrough cap.	NEW	19F2861
* C11	.1 uF monolithic cap.	DK	P4525
L1 through L24		MOU	[see Table 1 & catalogue]
R4	100 ohm resistor	RS	271-012
R5	100 ohm resistor	RS	271-012
* R6	68 ohm resistor	RS	271-010
* R7	680 ohm resistor	RS	271-021
<u>KNOBS</u>			
—	knob for C1	RS	274-415 (pk 2)
—	knob for C2	RS	274-415 (pk 2)
—	knob for C3	RS	274-415 (pk 2)
—	knob for R1	MOU	45KN013
—	knob for R2	MOU	45KN013
* —	knob for R3	MOU	45KN013
—	knob for S1	MOU	45KN013
—	knob for S2	MOU	45KN013

Table 6 = TAL phase-reversal transformer card subassembly components

Designation(s)	Description	Vendor	Stock #	Qty.
BD	perfboard(8.6"x1.2")	RS	276-1396 (cut)	1
H1, H2	4-40 x .25 screw	DK	H142	2
H1, H2	4-40 x .5 spacer	MOU	565-2332	2
H1	#4 split lockwasher	MOU	572-00649	1
H2	#4 solder lug	MOU	565-1416-4	1
P1, P2, P3, P4	flea-clip .042"	MOU	574-T42-1/100	4
T1	1:1 RF transformer	MCL	T1-6	1
W	bus wire	RS	278-1341 approx.	6"

Table 7 = A1 (BEA-B) broadband-amplifier subassembly components

Designation(s)	Description	Vendor	Stock #	Qty.
BD	perfboard(1.4"x1.4")	RS	276-1396 (cut)	1
C1, C4, C5, C6	.1 uF mono. cap.	DK	P4525	4
C2	10 uF/25V tant. cap.	DK	P2049	1
C3	.01 uF cer. disc cap.	RS	272-131	1
H1, H2, H3, H4	4-40 x .25 screw	DK	H142	4
H1, H2, H3, H4	4-40 x .5 spacer	MOU	565-2332	4
H1, H2, H3, H4	#4 split lockwasher	MOU	572-00649	3
H4	#4 solder lug	MOU	565-1416-4	1
P1, P2, P3, P4, P5, P6	flea-clip .042"	MOU	574-T42-1/100	6
Q1	2N3904 NPN	DK	2N3904	1
Q2	MPS918 NPN	DK	MPS918	1
R1, R5	10 ohm res.	RS	271-1301	2
R2	6.8K res.	RS	271-1333	1
R3	1.8K res.	RS	271-1324	1
R4	270 ohm res.	RS	271-1314	1
R6	1K res.	RS	271-1321	1
R7	470 ohm res.	RS	271-1317	1
R8	330 ohm res.	RS	271-1315	1
R9	22 ohm res.	RS	271-005	1
W	bus wire	RS	278-1341 approx.	1"

Small hardware [* = component only used on MWDX-4 series]

NOTE: Mounting hardware is supplied with the following components: C3, J1, J2, J3, J4, * J7, R1, R2, * R3, S1, S2, S3, S4, * S5, * S6, knobs, and chassis box.

The builder should have a good stock (min. 20 pieces / item) of each type of hardware in Table 8.

Table 8 small hardware

Description	Vendor	Stock #
4-40x.25" screw	DK	H142
4-40 nut	DK	H216
#4 split lockwasher	MOU	572-00649
#4 solder lug	MOU	565-1416-4
6-32x.25" screw	DK	H154
6-32x.375" screw	DK	H156
6-32 nut	DK	H220
#6 split lockwasher	MOU	572-00650

MISC. - bus wire, hook-up (insulated) wire, coax. cable, twisted-pair wire, solder -- "AS REQUIRED"

A P P E N D I X

Building the MWDX-4 and the Mini-MWDX-4 series of phasers

Most construction notes & documentation (other than the previous hole lists) apply to both series of units. If a note applies to only one series of unit, it will be identified as such.

Step-by-step instructions (à la Heathkit) are not included, as this is intended to be a project for people with at least a modicum of "homebrewing" experience.

The construction outline is as follows:

1. Preparation

- a) Ensure that work area is equipped with common electronics-industry assembly tools.
- b) Gather parts required (see parts lists, schematics).
- c) Make a copy of this article to keep at the workbench for possible marking-up / checking-off purposes.

2. Chassis-Drilling

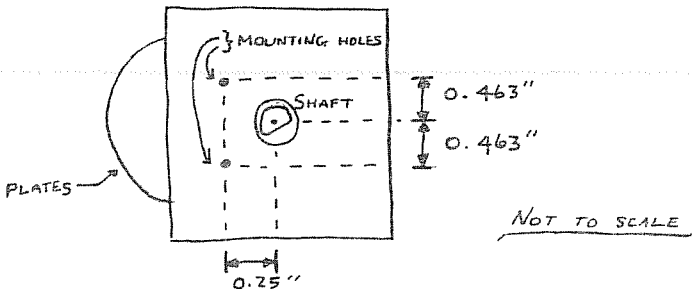
- a) Ensure that hole list is adjusted (if necessary) if you have substituted components different from those on the parts lists.
- b) Use an accurate draftsman's steel ruler and a scribe / swf to draw 1"-spaced X & Y coordinate grid lines on the top, the left side, and the right side of the chassis box to be used. Coordinate conventions are defined in the hole lists.
- c) Mark each hole locus with scribe. Dig the scribe into the metal enough that a small drill bit (e. g. .113") will not slip.
- d) Drill each hole initially with a small drill bit: e. g. .113".
- e) Drill all holes with proper-size bit, per hole list. Holes to be larger than .25" should probably be drilled with a .25" bit as an interim measure to prevent slippage of larger bits.

3. Component Preparation

- a) Variable Capacitors C1 & C2: Use a 6-32 taper to tap (put threads in) the mounting holes identified by Figure 3.

Figure 3

TOP (SHAFT-END) VIEW OF VARIABLE CAPACITORS
SHOWING MOUNTING HOLES TO BE TAPPED



- b) T1 subassembly: Assemble T1 transformer & hardware onto 0.6" x 1.2" vectorboard as shown in Figures 4, 5A, and 5B.
- c) S1 Frequency-Range Switch: Assemble inductors L1 through L24 (per schematic and Table 1) onto S1. Switch Position 1 (lowest frequency range) is fully counterclockwise (CCW) if switch is observed from the shaft side. Keep lead lengths as short as possible; try to minimize volume occupied by S1 and its inductors.
- d) [WDX-4 series only] EBA-B Broadband Amplifier Card subassembly: Assemble the EBA-B Amp. Card (refer to following Figure 6 and previous Figure 2 and Table 7). An International Crystal Manufacturing BAX-1 amplifier may be substituted for the EBA-B; however, the EBA-B has somewhat better dynamic range and better performance into low-impedance outputs than the BAX-1 has. EBA-B hardware assemblies H/W 1, 2, & 3 are the same as that depicted by Figure 5A; assembly H/W 4 is the same as that depicted by Figure 5B. The same H/W assemblies may be employed if an I. C. M. BAX-1 amplifier card is to be installed instead.

Figure 4

(H/W 1 is shown in Figure 5A; H/W 2 is shown in Figure 5B.)

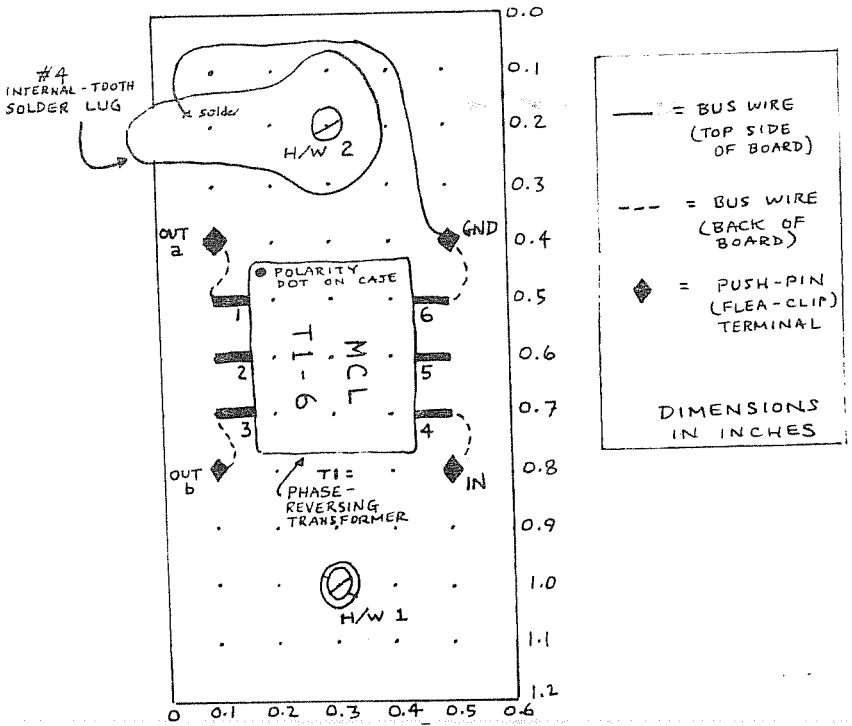


Figure 5A

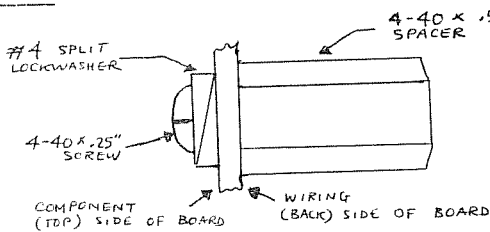


Figure 5B

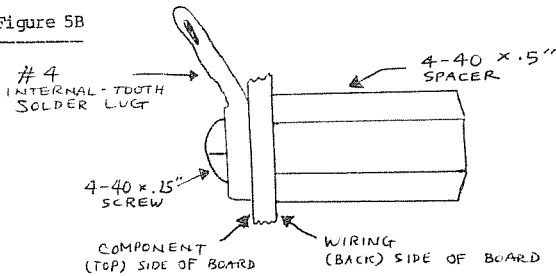
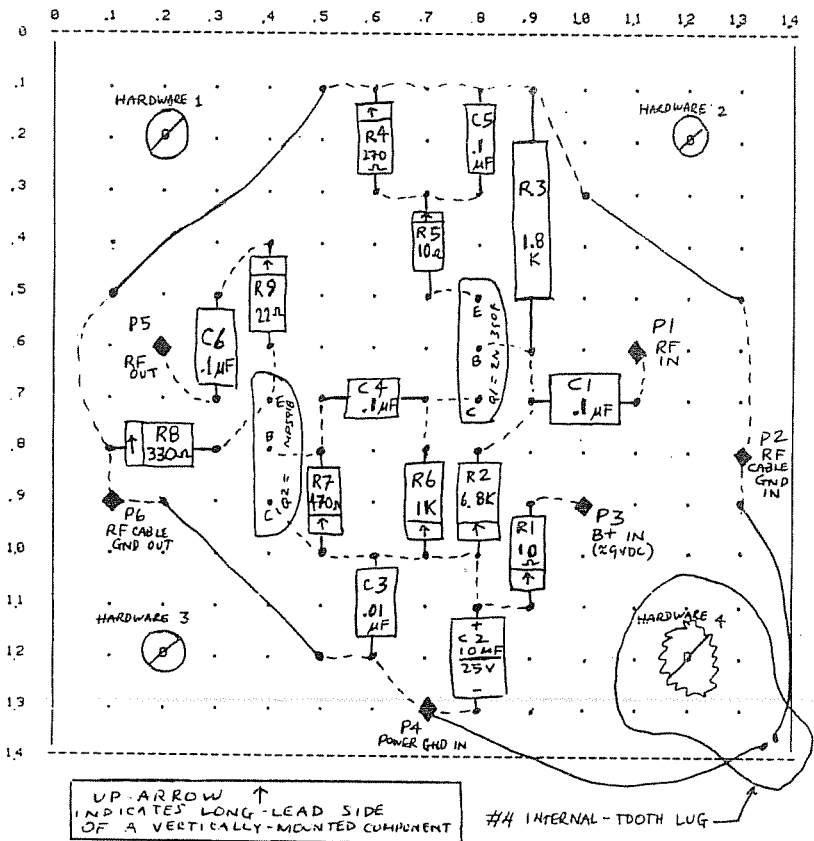


FIGURE 6 MWDX-4 PHASING UNIT: A1 SUBASSEMBLY
BBA - B BROADBAND AMPLIFIER CARD "ROADMAP"
 WATSON DX LABS : REV = 20 JUL 1984



VECTORBOARD / PERF BOARD USED IS 1.4" X 1.4"

FOR SCHEMATIC, SEE FIGURE 2.

FOR PARTS LIST, SEE TABLE 7.

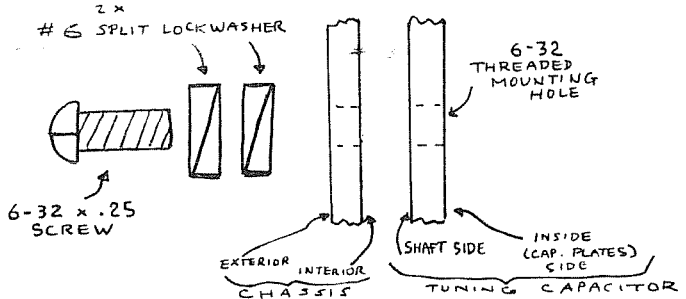
GAIN \approx 20 dB , 0.1 TO 30 MHz

BBA - B CARD
 COMPONENT DESIGNATIONS ARE A SEPARATE ENTITY
 FROM THE DESIGNATIONS OF MAIN-ASSEMBLY COMPONENTS.

4. Component Mounting

- a) Mount C1 and C2 per hole list and Figure 7.

Figure 7 Exploded view, C1 & C2 mounting H/W
(2 locations per capacitor)



- b) Mount TAL subassembly per hole list: use a 4-40 x .25 screw with a #4 split-lockwasher (flat of screw head against lockwasher; lockwasher against exterior surface of box). (2 mounting locations)
- c) [MWDX-4 series only] Mount A1 (BBA-B or BAX-1) card subassembly in the same manner used to mount the TAL card. (4 locations)
- d) Install grounding hardware assemblies (see Figures 8A & 8B) at loci called out on hole list.

Figure 8A

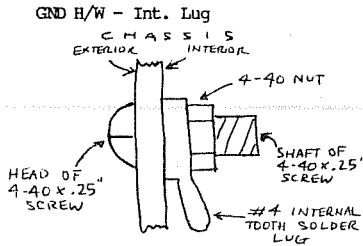
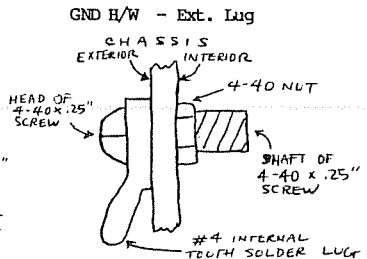


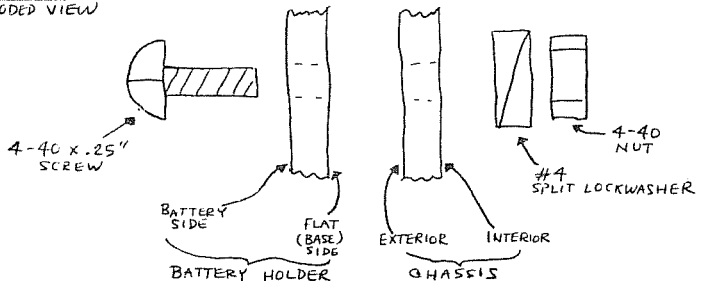
Figure 8B



- e) [MWDX-4 series only] Install Keystone 1290 battery holder (J6) per hole list. Use the two mounting holes at the end of the battery holder opposite that of the terminals. Use hardware depicted by Figure 9 at each mounting hole.

Figure 9

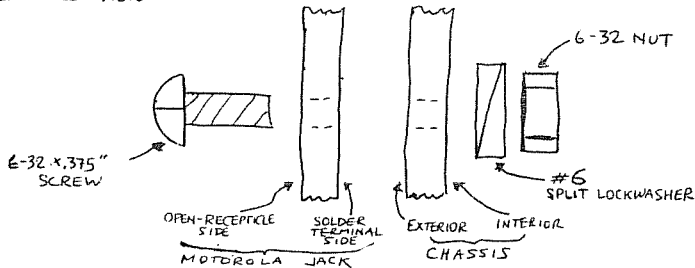
EXPLODED VIEW



- f) [MWDX-4 only] Mount Motorola jack (J5) in accordance with Figure 10 and hole list (2 mounting locations).

Figure 10

EXPLODED VIEW



- g) Assemble all other components (refer to hole list, schematic, and parts list) with the mounting hardware supplied with these jacks, pots, switches, etc.
- h) Install knobs (as indicated by parts list) on all appropriate controls. Pointer orientation should conform to Table 6.

Table 6 Control Orientation Conventions

* = MWDX-4 series only

S4	short = left / medium = centre / long = right
C3	fully open (Cmin) = 12:00 / fully meshed (Cmax) = 6:00
C1	fully open (Cmin) = 12:00 / fully meshed (Cmax) = 6:00
C2	fully open (Cmin) = 12:00 / fully meshed (Cmax) = 6:00
R1	max.level = fully CW = 8:00 / min.level = fully CW = 4:00
R2	max.level = fully CW = 8:00 / min.level = fully CW = 4:00
R3	max.level = fully CW = 8:00 / min.level = fully CW = 4:00
S3	Null a = left / Null b = right
S1	range 1 = fully CW = 9:30 / range 6 = fully CW = 2:30
S2	Line 1 = 11:00 / Line 2 = 12:00 / Null = 1:00
* S6	wire = up / loop = down
* S5	Amp. On = up / Amp. Off = down

5. Circuit Connection (Wiring)

Use the schematic to make wiring connections within the unit. Lead lengths should be kept as short and as close to the chassis as practicable. "Hook-up" wire (approx. #20 A.W.G., insulated) is to be used with the following exceptions:

- a) [Both series of units] Install 3.5" twisted pair:
 - Cond. 1: From S3A arm - To TAL Out-b pin
 - Cond. 2: From S3B arm - To TAL Out-a pin
 - b) [MWDX-4 series only] Install 4" RG-174 coax (or other shielded cable):
 - Cond. 1 (hot): From SSC "On" pin - To P5 of A1 card
 - Cond. 2 (GND): From TAL GND lug - To P6 of A1 card
 - c) [MWDX-4 series only] Install 4" RG-174 coax (or other shielded cable):
 - Cond. 1 (hot): From SSA "On" pin - To P1 of A1 card
 - Cond. 2 (GND): From TAL GND lug - To P2 of A1 card
6. Final Touches: Affix suitable labels to controls. Check all wiring. Blow any solder and wire scraps out of unit; clean flux from solder joints with alcohol or another suitable solvent.

/* END */

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The IRCA is a non-profit organization devoted to the hobby of hearing distant stations on the AM broadcast band (510 - 1620 kHz). The official publication of the IRCA, is published six times a year from May to August. The "DX Monitor" is published monthly from September to April. The "DX Monitor" contains membership listings, articles on radio stations, receiver reviews, technical articles, DX tips, and other material of interest to radio hobbyists. IRCA is a member of AMARC, the Association of North American Radio Clubs.

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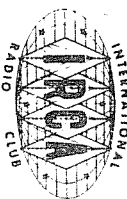
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