



# DX NEWS

*the magazine of the  
National Radio Club*

— SINCE 1933 —

VOLUME 52    ISSUE 13    January 7, 1985

You'll notice that in this issue that the Musings and DDXD Columns didn't make it...so we've ran most of the Mark Connelly article, "The Mini-MWDX-3", the rest of the article will run next issue. We do have on hand several more articles by Mark...so look for them soon. The DDXD column is somewhere inside Dave's new Computer that he got for Christmas... come to think about it so was Dave last we heard, hi..... and Pauls column....well....maybe it hitched a ride to the pole with Santa!!

Last issue we ran out short of room so now I'll continue with more of what we got in the mail that may be of interest to you....it was to me!

**The Grove Catalog** 36 pages stuffed full of products for the serious and not so serious listener. From antennas, to receivers, to books, to just about everything you need to get into some serious listening. You can get this catalog for yourself by writing to: Grove Enterprises, Box 98, Brasstown, NC, 28902

**Global Flashes**, the periodical produced by the Radio Communications Society of the World. This magazine is set in large type (in otherwords not reduced like DX NEWS), and contains all sorts of info for the HAM and SWL. US\$15.00 per yr, US\$10.00 per yr for Vets & Handicapped. Write for info or membership to: RCSW, Global Flashes, 224 Linden Ave., Ithaca, NY 14850.

**Radio Station Telephone Numbers**, If you want to see station telephone numbers in the next logbook then send those numbers into Albert Lobel. Next time your passing thru any city, stop by the nearest phone booth and jot down any radio station phone numbers, AM and FM, and send them to Albert Lobel. Where to send those numbers: P.O. Box 26762, San Diego, CA 92126. By the way, we'd prefer the studio number rather than the front office or transmitter site, if you do send the others make sure you specify which is which, thanks.

**DECALCOMANIA** The club for collectors of promo materials & recordings from BCB stns, will be moving its publishing operations effective January 15th. The bulletin will now be produced by David C. Lasky, RD#1 Hillcrest Ave., Olean, NY 14760. The PR operations will remain with Mark Strickert in CA. Club dues for 10 bulletins per year are US\$6.50 per year to US, \$7.00 to Canada, and US\$14.00 for elsewhere. More info can be obtained by writing to: DECALCOMANIA, Box 355, Berkeley CA 94701-0355.

**CPC TESTS:** Times are Eastern Local Time

Jan 21 WQPM-1300 Princeton, MN 0100-0130, ND 1kw pattern, w/ TT, music & frequent ID's. Reports to: Todd Rust, CE, WQPM, Box 188, Princeton, MN 55371.  
Thanks to Todd Rust for reporting this to us. (along w/a dozen NRCers!)

#### LOOK INSIDE:

- |                           |                                   |                    |
|---------------------------|-----------------------------------|--------------------|
| 2...AM Switch             | 3...IDX                           | 7...Afr Graph      |
| 8...Formats               | 9...Mini-MWDX-3                   | 21...Verie Signers |
| 23...Station Profile-WEEG | 24...Your Name and NRC Addresses! |                    |

**THE WORLD'S OLDEST AND LARGEST ALL MEDIUM-WAVE DX CLUB**

## AM SWITCH

Jerry Starr, c/o WHOT Radio, 401 N. Blaine Ave., Youngstown, OH 44505

## CALL LETTER CHANGES

Old call:	New call:	Old call:	New call:
550 WDRV NC Statesville	WEAM	1170 WCOV AL Montgomery	WACV
590 KHQ WA Spokane	KLSN	1220 WKTZ FL Jacksonville	WRXJ
750 *New NY Canton	WYHV	1240 WUSW FL Cross City	WDFL
850 KLEU IA Waterloo	KQOI	1310 WNSY VA Newport News	WGH
920 WKSD SC Orangeburg	WHHT	1460 *New PA Tunkhannock	WEMR
1160 *New MI Fenton area	WFEN	1540 KJZZ WA Bellevue	KLSY

++WVSI-1000 Jupiter, FL asks for it's call change to WFXI to be recinded, they remain WVSI and WFXI goes back into the "available" file.

## APPLICATIONS FOR NEW STATIONS

None

## GRANTS FOR NEW STATIONS

670 CO Commerce City: 25000/1000 U4  
750 NY Canton: 10000/1000 U4

## APPLICATIONS FROM EXISTING FACILITIES

880 KIKR TX Conroe: add 1000 watts DA night  
930 KBNG WA Yakima: to Union Gap, WA 5000/500 U2  
1130 WOGY MN Minneapolis: daytime power to 50000  
KY00 MO Bolivar: power to 25000 D3  
1150 KNED OK McAlester: 1000 watts night  
1230 WKCE TN Harriman: night power to 1000 U1  
1240 WSDR IL Sterling: night power to 1000 U1  
WVWC NC Wilkesboro: night power to 1000 U1  
1340 KTOW OK Sand Springs: night power to 500 U1  
1450 WKEI IL Kewanee: night power to 1000 U1  
1490 WAQX NY Syracuse: night power to 1000 U1  
1580 WJTX IL Urbana: to Tolono, IL on 870 kHz with 1000 D3. Was reported by a usually reliable source as a grant and was thus reported in the last AMS. Since then we received two other sources and both list this as an application. We spoke to the GM of WJTX by phone and he confirms that this is still an APPLICATION, no grant has yet been made.

## GRANTS FOR EXISTING FACILITIES

560 KMON MT Great Falls: changes in antenna system  
840 KIKN TX Pharr: changes in antenna system  
910 KURY OR Brookings: changes in antenna system  
1000 KHAM AR Horseshoe Bend: power to 1000  
1030 WMIN MN Maplewood: relocate XR  
1150 WSNW SC Seneca: changes in antenna system  
1290 KIVY TX Crockett: changes in antenna system  
1340 WOYL PA Oil City: night power to 1000  
1370 WLLW NC Lillington: changes in antenna system  
1450 WKIP NY Poughkeepsie: night power to 1000 U1  
KCTI TX Gonzales: day power to 1000 U1  
1510 WLKR OH Norwalk: changes in antenna system  
1590 WARV RI Warwick-East Greenwich: changes in antenna system

## OTHERNESS

680 \*App CO Wellington: application for new station denied in the same action granting the new Commerce City on 670 kHz.  
950 KFSA AR Fort Smith: application to increase day power returned  
1580 KNIX AZ Tempe: application to increase night power returned  
1590 WCSL NC Cherryville: application for power increase returned

73 and Good DX,

Jerry &amp; BKF

Jerry Starr &amp; Buffalo K. Foonman

## INTERNATIONAL DX DIGEST

Chuck Hutton, 437 Hardendorf Ave., Atlanta, GA 30307

Times are GMT

For ELT subtract 5 hours.

Deadline: Monday

First thing, I wish to thank the thoughtful DX'ers who send me a Christmas card. I can tell you that I really appreciate that little touch and that it helps balance out all those nights during the year when I stay up late into the night or re-arrange my schedule or miss out on something that I wanted to do. So again, thanks for the cards and I wish I could send each and every one of you a card.

Those of you searching for a new Caribbean station to hear and that aren't blessed with coastal locations or long Beverages like some might want to give a try for Grenada on 535. On some nights they are 100% readable but a bit noisy on my trusty TRF. Not there every night but often enough to make me think most of you could catch it sooner or later.

Brian Vernon passes along: KABN-830 and KLAM-1450 were noted with SNN news on the hour and KKEN-980 seems 24 hours NSP w/All star country music.

- 155 WEST GERMANY 12/5 2344 man and woman singing in GG. Good. (Stonebridge)  
155 USSR Khabarovsk/unid 11/29 0836 two stns mixing, both probably Soviet, male w/talk dominant but wavy singing noted u/this. (Vernon)  
164 FRANCE Allouis 11/27 0952 two males talking, but male noted w/talk at 1120, sig a bit wavy by then. (Vernon) 12/5 2345 man singing in FF. Good. (Stonebridge)  
173 USSR Yakutsk 11/29 0838 singing, Kremlin Bells 0900, fair signal for once. (Vernon)  
173 USSR 11/27 0026 man singing followed by man talking in RR. USSR assumed, 5 listed. Poor. (Stonebridge)  
179 EAST GERMANY Oranienberg 11/27 0953 singing then woman anncr, good sig. (Vernon) 12/5 2348 man and woman singing in GG. Poor. (Stonebridge)  
182 TURKEY Polati 12/6 0216 two males singing religious type music. Turkey assumed here as only one listed. Poor. (Stonebridge)  
182 USSR Petropavlovsk 11/29 0900 Kremlin Bells banging away also on 173, 155, 236 in passing. This by far the most heard LW BC stn here. (Vernon)  
185 WEST GERMANY Europe #1, Saarlouis 11/27 0956 only bits of audio making it, freq would indicate this. (Vernon) 12/5 2348 man talking in GG followed by woman singing. Fair. (Stonebridge)  
191 USSR Blagoveshchensk 11/30 0900 Kremlin Bells then male and female to 0911, woman mentioned a programma, listed as local in WRTH. Report sent but.... (Vernon) Hold your breath buddy...Chuck  
200 ENGLAND Droitwich 12/6 0207 man reading the BBC news on the BBC World Service followed by What The Papers Say. Poor under beacon QRM. (Stonebridge)  
209 ICELAND Vatnsendi et al 11/30 0840 Joni Mitchell's "Parking Lot" (a song with little relevance to Elsa, right? Chuck), fair topping the beacons, heard well sometimes but mostly....(Vernon) At least you get to hear them at all-Chuck  
227 POLAND Konstantynow 11/26 0405 male anncr w/crowing cock then female anncr, xint sig. (Vernon) 12/5 2350 modern band type music. Poland assumed here as only one listed. Fair. (Stonebridge)  
236 USSR Magadan 11/29 0839 noted w/talk, poor // 182. (Vernon)  
236 UNID probably a TA Soviet, male and female w/talk u/beacons 11/27 1121. (Vernon)  
236 UNID 12/6 0231 music followed by man talking, too much beacon QRM to get language. Luxembourg and USSR listed, poor. (Stonebridge)  
263 UNID 12/6 0228 man talking in unid lang, too much beacon QRM to identify, three listed, poor. (Stonebridge)  
272 CZECHOSLOVAKIA Topolna 12/6 0250 faint music under beacon QRM. Czech assumed as only one listed. Poor. (Stonebridge)  
515 CANADA Edmonton CKUA my unid of 11/27 turns out to be CKUA-580. How it got down here is beyond me. Fair. (Stonebridge) Was this some sort of spur or was the whole thing way down here? Chuck  
531 AUSTRALIA W. Kempsey 2MC 1514 12/6 old Buddy Holly record followed by 2MC ID at 1516. Fair. (Stonebridge)  
531 ALGERIA Ain Beida 12/6 0216 usual chanting, poor, just audible above noise level. (Stonebridge)  
535 GRENADA R. Grenada 12/9 2243-2300 1&c, solid signal w/jazz then BBC news on the hour; must be at least 50 kw now. (DeLorenzo) 12/10 0007-0202 weak with long newscast with special sound effects (guns going off, hi-Chuck) in between news blocks. Later heard w/classical music and at 0115 w/pop mx program. S/off at 0202 with anncr and anthem. (Rigas) (Welcome, mister....Chuck) 12/10 2352 poor to fine signal with some local QRM. Heard reggae type music then at 2355 announcement of shows coming up

- 4 during the following hour. Then some kind of numbers were given (example 6-57, N-31, N-57, etc.). Presumed lottery. ID at 2359, clear! (Klinger) Bingo it is-Chuck
- 550 CUBA R. Rebelde, 12/11 2359 poor to fair with ID at 2359 with some GRM. Parallel to 590. (Klinger)
- 550 HAWAII KMJ Mailuku 12/13 1340 fair with talk on Catholic Relief Services, ID, pop music. (Woods)
- 580 MEXICO XEMU Piedras Negras 11/18 1118 (easy to type-Chuck) good with TC's and many mentions of Piedras Negras in ads. (Rigas)
- 580 PUERTO RICO WKAQ San Juan heard over domestics with ads for Miramar 0520 12/8. (Renfrew)
- 580 VENEZUELA YMJ Maracaibo 11/17 0038 in SS. Fair in Mexican stn null w/live sports event and ID. (Rigas)
- 610 MEXICO XEEL Fresnillo 11/18 1224 very poor w/several Radio Progreso ID's and mentions of Fresnillo in ads. In SS. (Rigas)
- 612 MOROCCO Sebaa-Aioun 12/2 0546 fair with chanting. Some "ticking" GRM from Nantucket LORAN-C harmonic was a problem at times. (Connelly)
- 620 ALASKA KGTL Homer 11/28 noted w/a few KENY, KGTL ID's between EZL mx to 0400. (Vernon) Pardon my confusion but who is KENY? Chuck
- 655 EL SALVADOR San Salvador YSS 12/2 0630 fair to good with classical mx. (Connelly)
- 660 HONDURAS LV de Honduras 12/12 1141 in SS. Very poor in WMAQ stop w/sports, news, TC's and one ID. (Rigas) In case anyone cares, they are several hundred (maybe half a KHz) high and splittable from 660 here-Chuck
- 666t LITHUANIAN SSR 12/12 weak piano mx, 0228 male annrc, tough w/KDLG-670 and KFAR 660 splatter. (Vernon)
- 670 VENEZUELA Caracas YVLL 12/16 0422 applause, SS talk, Rumbos ID, good. (Connelly)
- 690 ANGUIILLA 12/02 0253 EE preaching by black woman, dominant o/Cuba/CBF. (Connelly)
- 700 COLOMBIA Cali HJXC 12/2 0300 Sutatenza ID heard amidst graveyard-like pile of SS LA stations. (Connelly)
- 700t GUATEMALA 12/2 0300 station w/Mundial in ID noted battling with HJXC and others. It might have been TGRH. (Connelly)
- 702 AUSTRALIA 2BL Sydney 12/1 1120 election results, network program noted on 774, 936, 738, 1548, 837 between 1102-1131. (Vernon)
- 710 VENEZUELA Caracas YVKY 12/2 0303 totally atop WDR--Caracas ads, R. Capital reverberated ID then "Ghostbusters". (Connelly)
- 720 COLOMBIA Barranquilla 12/2 0304 Emisoras Unidas ID, 5 note chimes in bad SS LA jumble. 12/16 0410 loud w/ID, chimes, accordion mx, SS vocals. (Connelly)
- 720 JAMAICA Kingston 12/2 0552 dominant w/"Caribbean Wing Ding Show". Caribbean and US soul hits were played by a DJ who used weird sound effects, yelled things through a reverb unit over the records, and seemed stoned. (Connelly) 12/14 0300 world and local type news, poor under WGN. At 0314 male announcer gave obituaries. Kinda strange! At 0315 nice clear ID "This is Radio Jamaica". My first Jamaican. Almost like a local for the ID. Then faded back to poor. (Klinger)
- 730 MEXICO XEX R. Festival, Mexico City with nice musical ID at 0011 12/11. Local announcements, into slow song, sounded Christmasy. Fair signal. (Klinger)
- 740 CUBA Camaguey 12/15 0600-0800 taking turns with the YV being on top, heard with a comedy play w/studio audience called "Ranchero Romero" and a few typical Cuban mx programs a la "From the Land of Music". (Orcutt)
- 740 VENEZUELA Maracaibo 12/15 0600-0800 fair-good with R. Maracaibo ID's, Vals (what's that? Chuck) and EZL music, local ads. Mixing with R. Progreso. (Orcutt) 12/2 0637 festive LA mx, R. Maracaibo ID o/other SS LA's. (Connelly) R. Maracaibo 12/15 0842 good, atop w/ID between 2 lively SS vocals. (DeLorenzo)
- 750 COLOMBIA Medellin HJDK 12/2 0310 Medellin and Bogota mentions u/YUKS. (Connelly)
- 750 NICARAGUA R. Sandino 12/15 0900 good w/ID o/WSB and 2nd LA. (DeLorenzo) Heard almost every time I look for it: 0730 11/26, 0730 12/2, 0500 12/14... usually under or even with WSB. R. Sandino was very rare in the past; perhaps they've overhauled or boosted their transmitter? Always parallel to 6200 short wave. (Renfrew)
- 750 VENEZUELA Caracas YVKS 12/2 0310 US hits o/HJDK and WSB. (Connelly) 12/7 0051 poor in partial WSB null w/US rock mx and R. Caracas ID's. In SS. (Rigas) 0013 12/11 with interference from WSB Atlanta; poor to fair signal with Stevie Wonder song, 0017 ID'ed as "Caracas". (Klinger)
- 756 UNID 1437 12/6 man and woman talking in EE, both Australia and New Zealand listed. Poor. (Stonebridge)
- 760 COLOMBIA Barranquilla HJAJ 12/2 0424 dominant w/talkshow, RCN mentions. (Connelly)
- 765 SENEGAL DAKAR only fair w/man in FF, string mx, man in vernacular 0708-0712 12/17. (DeLorenzo)
- 770.5a UNID (probably HJKH) 12/2 0558 SS LA here a bit off channel; putting a nasty het on WABC. (Connelly)
- 774 UNID 1418 12/6 with NA pop records, never heard an ID. Probably 3LO. Poor. (Stonebridge)
- 792 AUSTRALIA 406 Brisbane 12/1 1122 classical mx, good signal. (Vernon)
- 800 NETHERLANDS ANTILLES 12/12 fair signal, Spanish (can't make out next word-Chuck) class show at 0123 then (or this one-Chuck) type music. Some fading, no CKLW. (Klinger) Tried hard to read those words Robert but in spite of the fact that your handwriting is decent enough I just can't figure out what they are-Chuck
- 810 BAHAMAS R. Bahamas 12/12 local announcements and news. Many references to Bahamas. Colombia under them (HJCY), poor to fair signal. Nice clear ID at 0029 "This is the Bahamas Radio Network". (Klinger)
- 810 COLOMBIA HJCY Bogota 11/16 0152 in SS. Poor in WGY null w/news and ID's. Poor in WGY null w/news and ID's. Per verie received from stn, power is 120 kw not 250 kw as stated in WRTH. (Rigas) The 120 kw figure I can believe-they just don't have the signal a 250 kw'er ought to have-Chuck
- 810 GREENLAND Upernavik 11/27 1057 male w/Danish talk, ex 850, this plus 900 and 990 all leave their OC on after s/off. Noticed a shift in frequencies to joint N. American and European channels by Gronlands Radio? (Vernon) Wonder why? Maybe it reduces heterodyne interference from North America and Europe simultaneously since Greenland is in-between..Chuck
- 825 ST. KITTS R. Paradise 12/11 fair to good signal, religious type music 0023 then preacher came on with sermon about Romans, chapter 5. You know the rest. (Klinger)
- 828 UNID 1345 12/6 with NA pop records, no ID's heard. Suspect 3GI as this has been heard here before. Poor. (Stonebridge)
- 830 BELIZE Belize City, R. Belize 0111 11/13 good with EE in WCCO null with news and promo. (Bueneman)
- 837 AUSTRALIA 4RK Rockhampton 11/27 1005 waltz mx, // 855 good sigs. (Vernon)
- 837 UNID TA with man in unid lang on good carrier 12/17 0625-0658; DF and general cx indicate Canary Islands. (DeLorenzo)
- 846 KIRIBATI T3KI Tarawa 12/3 0720 military band mx then trumpet sound and "post time" announcement (meaning a race is about to start), seemed to be a native play across the hour at 0800, xint audio, past seasons this has had a good carrier w/weak audio, audio certainly better and stronger here. (Vernon) Maybe their signal will make a comeback-seems like when they first came on the air they were much easier on the west coast and would make it to the east coast on occasion. I used to get the carrier a few times a year but now I get nothing-Chuck
- 846t USSR Elista 12/10 0306 female w/RR sounding talk, weak mx, 0309 was not // 873, may have been Program One as listed, gone before // found. New here. (Vernon)
- 860 BRAZIL Rio de Janeiro ZYJ459 12/2 0601 good with PP man DJ, international MoR hits. (Connelly) Not too far away is the day when all music everywhere will sound the same and there will be no unique reflections of cultures in their music.....Chuck
- 870 COLOMBIA HJSB Barranquilla 11/17 0156 in SS. Fair in WML null w/Emisora Mar Caribe ID in between live sports event. (Rigas)
- 870 COLOMBIA 12/16 0325 atop channel w/Barranquilla ads and mentions. (Connelly)
- 873 USSR Mezen 12/10 local like signal, mx w/woman annrc to 0200, pips then male with talk (probably news), all Mayak Program Two. Noted 0259 w/single Mayak IS, weak Mayak IS continued under OC, carrier cut 0300. Nothing noted on Mezen-918 before 0300 however, male w/talk at 0300:30 so maybe Program Two on 873 to 0300 then Program Two on 918 from 0300? (Vernon) If you say so-Chuck
- 890 UNID 12/2 0610 R. Superior ID, Nicaragua mention, enjoyable LA mx through low co-channel growl and massive het and stop from stronger Algeria-891. (Connelly)
- 891 ALGERIA Algiers 12/2 0602 very good w/AA talk by man, 12/9 0311 male acapella AA chant, xint. 12/16 0325 xint w/male AA chant. (Connelly)
- 895 COLOMBIA Santa Marta HJPM 12/2 0607 poor to fair w/repetitive SS LA mx. (Connelly)
- 900t BARBADOS 12/11 Mike McDonald song, poor most of the time, fair at other times. Interference from CHML. Presume Barbados with Caribbean accented announcer. If it is Barbados, it would be my first from there. (Klinger)
- 900 GREENLAND Umanak 11/27 1057 male w/Danish talk // 810, this seems to be land-linked to Nuuk, noticeable delay on 810 and 990, must be satellite fed. (Vernon)
- 9

- 932 AUSTRALIA 72R Hobart 12/1 1114 ABC election coverage, poor signal but readable and was // 1548 all the time, no local results. (Vernon)
- 936 UNID 11/27 1008-1023 BFL mx, no anncts, good signal at times, any word on Saipan's KSAI 10 kw rig? (Vernon) None that I know of but I'll keep my eyes open-Chuck)
- 970 COLOMBIA HJME Maicao 12/9 2323 in SS. Heard w/local mx and R, Peninsula ID. (Rigas)
- 1008 UNID 1454 12/6 Huey Lewis and the News record followed by DJ in EE. Too much slop from CBR-1010 to hear any ID. Poor. (Stonebridge)
- 1017 AUSTRALIA 2KY Sydney 1448 12/6 NA pop record followed by clear 2KY ID at 1453. Fair. (Stonebridge)
- 1020 VENEZUELA La Asuncion YVRS 12/2 0432 boisterous Mundial Margarita ID's, atop YUMX. KDKA way below both YU's. (Connelly)
- 1020 VENEZUELA Maracaibo YUMX 12/2 0432 R. Calendario briefly heard w/Rumbos doorbells and Maracaibo mentions/ads, through stronger YVRS. (Connelly)
- 1026 AUSTRALIA 4MK Mackay 1451 12/6 best DU of the day, finally faded out at 1612 (past sunrise). Many NA records and time checks (UTC+10). Pips and news on the hour, but unable to get an ID because of bleed through from CFGP-1050 (60 miles away). Because of time difference, 4MK presumed. Fair (Stonebridge)
- 1035 PORTUGAL Lisboa 12/2 0616 bits of PP talk and mx, in WB2 slop. (Connelly)
- 1062 PORTUGAL Sao Salvador 12/2 0620 fair w/2 anners in PP. (Connelly)
- 1071t INDIA ATR Rajkot 12/9 1728 seemed to be bits of Hindi type mx, but very weak. (Vernon)
- 1071 LATVIAN SSR 12/10 0303 USSR anthem at s/on, very weak. (Vernon)
- 1100 ANTIGUA St. John's ZDK 12/2 0441 good w/reggae show o/HJAT and WWWE. (Connelly) 12/9 2140-2200 l&c, alone w/Christmas mx and messages from callers. (DeLorenzo)
- 1116 ITALY Bari et al 12/2 0502 man and woman in II, poor. (Connelly)
- 1134 INDIA AIR Calcutta 12/9 1730 Hindi mx through the Indian hour (usually pips and EE nx noted at 1730 in past years), good signal noted in passing. (Vernon)
- 1134 SPAIN 12/2 0458 good w/rock hits in SS and EE (WNEW phased). (Connelly)
- 1198 WALLIS ET FUTUNA Matu Utu 12/3 0816-0827 two males noted w/FF talk, poor signal. (Vernon)
- 1314 NORWAY Kvitsoy 11/26 0158 end of EE pgm about the oil industry in Norway, 12/9 0203 male with EE introduction to rr mx, keep forgetting to check but maybe a regular EE pgm around these times. Stn usually xint here. (Vernon)
- 1375 ST. PIERRE ET MIQUELON with local WXXI now off each day until 1100 its possible to hear RFD at 1030 s/on. Have checked many times, however with little luck, except 1030 12/9 when FF speaker faded in, probably with news, only to fade out by 1040. Will keep trying, who knows when WXXI will go NSP like its FM. (Renfrew)
- 1386 SOLOMON ISLANDS Lata 11/27 1100 flute IS then male w/EE news // 945, good signal from this lately. (Vernon)
- 1413 OMAN Masirah Island 12/9 1726 male with EE talk. (Vernon)
- 1413 SPAIN Zaragoza (?) 12/2 0526 SS talk and music in slop. (Connelly)
- 1422 ALGERIA Algiers 12/7 0504 male AA chant very good, well o/the German. (Connelly)
- 1440 LUXEMBOURG Marnack 12/7 0501 GG talk mixed w/jumble of domestic stations. (Connelly)
- 1440 SAUDI ARABIA Ras-as\_zawr 12/9 1727 male with AA type talk, good signal. (Vernon)
- 1467 MONACO Monte Carlo 12/7 0454 superloud (strongest TA)-xint w/hymn having Salvation Army Band type accompaniment, then GG talk by man. 12/7 2012 heard an hour before local sunset w/SS talk, fair to good. (Connelly)
- 1481 UNITED ARAB EMIRATES Dubai 12/9 1727 AA singing, good. (Vernon)
- 1485 SPAIN 12/7 0507 news in SS, good. (Connelly)
- 1512 SAUDI ARABIA Jeddah 12/9 1733 male w/AA wailing, strange why SA-1521 has never been noted here. (Vernon) Awful unbelievable I'd say. How could this be in so often and well while 1521 is unheard at all?? A great mystery of life....Chuck
- 1521 SAUDI ARABIA Duba 12/7 0302 AA talk, xint, creaming WKBJ. (Connelly) Now I know what has happened to all the SA-1521 signal, Brian. Connelly is sucking it all out of the air before it gets to Elsa-Chuck
- 1530 VATICAN CITY 12/7 0513 religious music mixing with WCKY. (Connelly)
- 1557 FRANCE Nice 12/7 0440 good w/romantic FF female vocal. (Connelly)
- 1566 SWITZERLAND noticed German language speakers under the het and stayed with it until 0700 12/15 when 5 pips were heard (the last one higher in pitch), amusical waterfall sound then ID as Schweizer Radio. WRTH lists s/off as 0700 but I could hear snatches of music including "O Come All Ye Faithful" (probably not Tunisia!) until fade-out around 0715, which corresponds with sunrise map. Country #39. (Renfrew)

- 1566 UNID 12/12 1515 fair with male in RR changing to female also RR (Hey! I didn't know they had those male to female changes over there in Russia too....Chuck) at 1521. 12/13 1233 good with female in Asian language with western Christmas carols in background (Oh Come All Ye Faithful) with Asian vocalist. Probably South Korea as reported by Vernon last March. (Woods)
- 1575 UNID 1405 12/6 Englebert Humperdink record followed by DJ in EE. No ID's heard. Suspect 200. Poor. (Stonebridge)
- 1584 SPAIN 12/2 0538 good with SS talk then US soul hit "There's No Stopping Us". 12/7 0435 SS talk, good. (Connelly)
- 1610 ANGUILLA Caribbean Beacon 12/14 with female preacher. Poor to fair signal, some GRM. Religious type music during sermon. Faded some at 0256, ID at 0300 for both AM and FM stations. (Klinger)

Nice column! Lots of new reporters! Happy IDXD editor! Welcome to Bob Klinger, Frank Orcutt and Christos Rigas; not often I get three new fellows in one issue and sometimes I don't even get three people old or new. Thanks for joining in and reporting to IDXD you three.

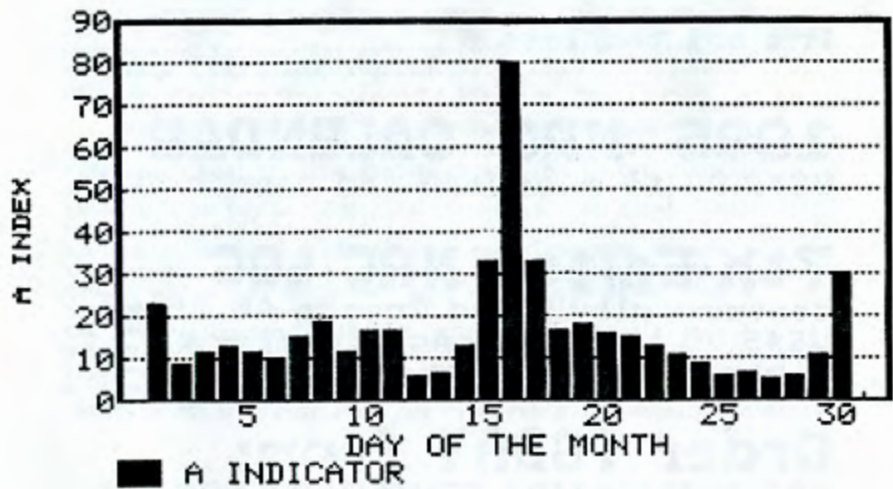
Eric Bueneman	Hazelwood, MD	Superradio II, DX200, R. West loop
Mark Connelly	W. Yarmouth, MA	R390A, ICF2001, 2 30 meter LW's phased with mini-MWDX-3 phasing unit
Marc DeLorenzo	Holliston, MA	HQ100, phased LW's
Bob Klinger	Harrisburg, PA	ICF6500W
Frank Orcutt	Buffalo, NY	??? (didn't see your radio/antenna-Chuck)
Jim Renfrew	Rochester, NY	HQ150, SM1
Christos Rigas	Chicago, IL	R2000, ICF2002, Kowalski loop, LW
Mike Stonebridge	Fox Creek, ALTA	R7, 1400' west Beverage
Brian Vernon	Elsa, Yukon Terror	FRG7000, R7A, 150-300-350 meter LW's and MFJ-955 longwave tuner
Jack Woods	Waldport, OR	XCR-30, Hot Rod loop

\*\*\*\*\*See you next time\*\*\*\*\*

## AFR GRAPH

Russ Edmunds, 753 Valley Road, Blue Bell, PA 19422

AFR GRAPH/NOVEMBER 1984



# FORMATS

Tony Fitzherbert, 356 Jackman Avenue, Fairfield, CT 06430

Things are sort of slow during this holiday season as far as format changes go. Many PD's and GM's do not want to rock the boat, so to speak during the lucrative pre-Christmas season, and others, stuck with a loser of a format are trying to ride into 1985 before changing things. Of course, religion is an anytime change, as several broadcasters believe...and there are a few surprises this time. Our hosts this time are Jerry Starr, of Youngstown, OH, Dave Schweikart, of Fairfax, VA, regular contributor Pete Nolan, and one from Tony Fitzherbert...here we go!!

640	WHLO	OH	Akron	-	Contemporary Christian on 12/25/84!! (JS).
910	WGRT	IN	Indianapolis	-	Ex WATI w/ BFL, now REL, GOS (PN).
950	WYDE	AL	Birmingham	-	Drops rock oldies for REL (PN).
890	KQLX	ND	Lisbon	-	New station, CWM "Q Country" (PN).
1040	WJTB	OH	North Ridgeville	-	Black album rock (PN).
1070	CKST	AB	St. Albert	-	Now silent (PN).
1150	WHUE	MA	Boston	-	Drops all news and CNN for BFL, "Stereo 1150", with Mutual News on the half hour, returns to former format (TF).
1180	WPKB	KY	Florence	-	New station, AD. CON. (PN).
1280	KLUP	OK	Poteau	-	Was KTEW, CWM, now REL (PN).
1310	WEEL	VA	Fairfax	-	Drops all news for EZL, now known as "1310AM (DS) Beautiful Music", with Virginia Net News on the hour, nightly SP from 0000-0600 (0700 weekends).
1330	KCLM	CA	Redding	-	Drops CWM for automated EZL (PN).
1340	KLKI	WA	Anacortes	-	Ex KAGT, now CWM "Lucky 13" (PN).
	CKWK	NF	Corner Brook	-	New station, CWM (PN).
1390	KPPL	CO	Westminster	-	Ex KJZZ w/ jazz, now BLK "K-People" (PN). (PN)
1530	KTCR	OK	Wagoner	-	Ex KWOK, CWM, still CWM "Town and Country Radio"
1540	KZRK	AR	Ozark	-	Is now silent (PN).
	KLSY	WA	Bellevue	-	Ex KJZZ, jazz, now AD. CON. "Classy" (PN).
1570	KGCR	OK	Pryor	-	Ex KMYZ, CWM, still CWM "Green Country Radio" (PN)
1590	WASE	NY	Brockport	-	Now silent (PN).

And, thus another column reflecting rising careers, and falling careers. It is amazing what the drop of one percentage point in the ratings can do to the career of some hapless PD who is not savvy to the tastes of his/her market area. Well, that is what keeps interest in our hobby...or profession, isn't it. Look for a lot of format changes in the next month or two. And, when you hear them, there are a lot of us who would like to hear of them, too. And, a happy 1985 to one and all!!

73's from.....

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## THE MINI-MWDX-3 A Simple, Effective Phasing Unit

Mark Connelly - WALION DX Labs - 95 DEC 1984

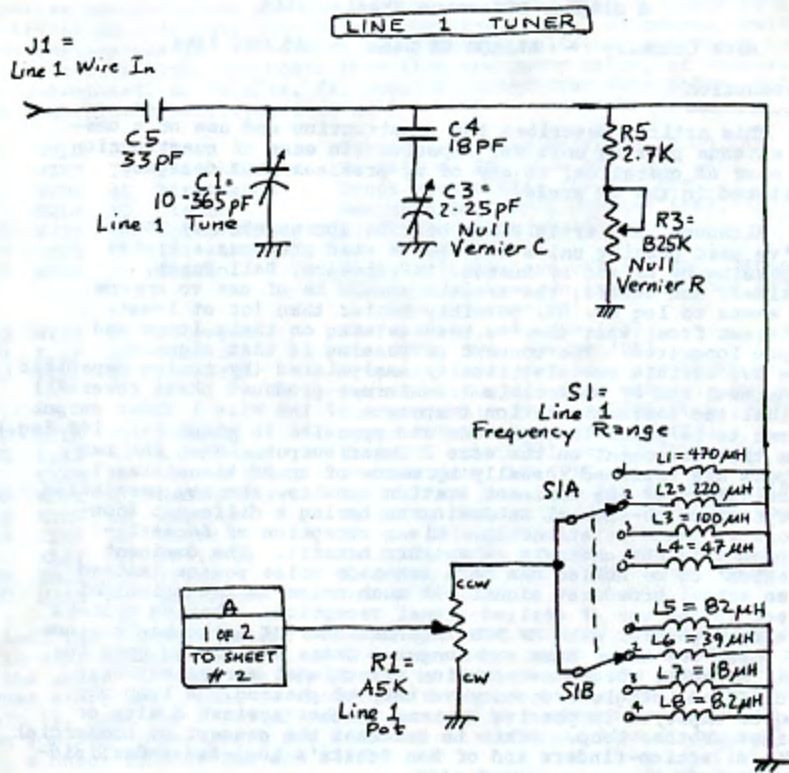
### Introduction

This article describes the construction and use of a one-box antenna phasing unit far superior (in ease of construction and ease of operation) to any of my previous MWDX designs published in the DX press.

Although this article may best be appreciated by those who've used phasing units and who've read previous articles on phasing by me and by Hutton, DeFrancesco, Hall-Patch, Herkimer, and others; the article should be of use to anyone who wants to log new DX, possibly better than (or at least, different from) what they've been getting on their loops and simple longwires. The concept of phasing is that signals from two aerials are electrically manipulated (by tuning capacitor adjustment and by selectable transformer-produced phase reversal) so that the dominant-station component of the Wire 1 Tuner output is set to be equal in amplitude and opposite in phase (+/- 180 deg.) from that component on the Wire 2 Tuner output. When the two outputs are combined (usually by means of an RF transformer), cancellation of the dominant station results, thereby permitting reception of co-channel subdominants having a different (non-opposite) phase relationship. Clean reception of formerly-slopped adjacent channels is another benefit. The dominant "station" to be nulled can be a man-made noise source instead of an actual broadcast signal, if such noise is the principal object in the way of desired-signal reception. Phasing systems have been popular with MW BCB international-DX enthusiasts since the '60s; 160-meter hams and longwave DXers have found uses for them, as well. Broadcast-station directional arrays employ a specialised, single-frequency variety of phasing. A loop may also be employed in phasing systems, either against a wire or against another loop. (This is somewhat the concept of commercial radio direction-finders and of Ron Schatz's Loop-Sense-Cardioid-Array scheme.)

A design approach embodied in the Mini-MWDX-3 is a one-box system with available options. The types of options are outlined at the end of this article; most deal with coverage of frequencies such as longwave and tropical-band shortwave. The inductive-coupling option is designed to provide better coupling to some aerials, notably long ones.

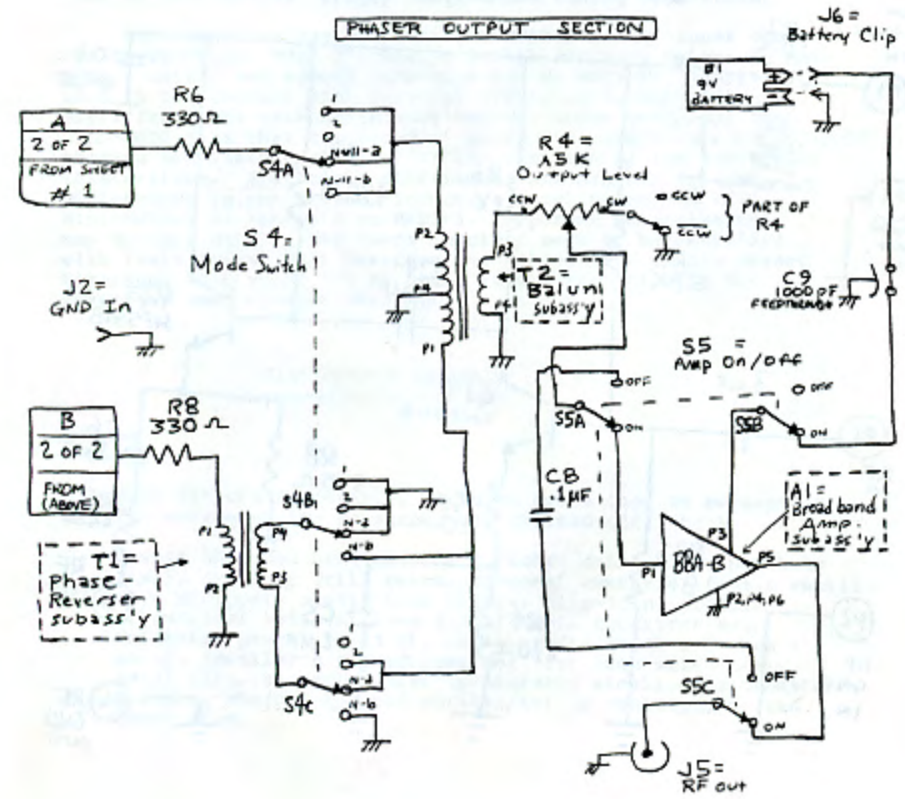
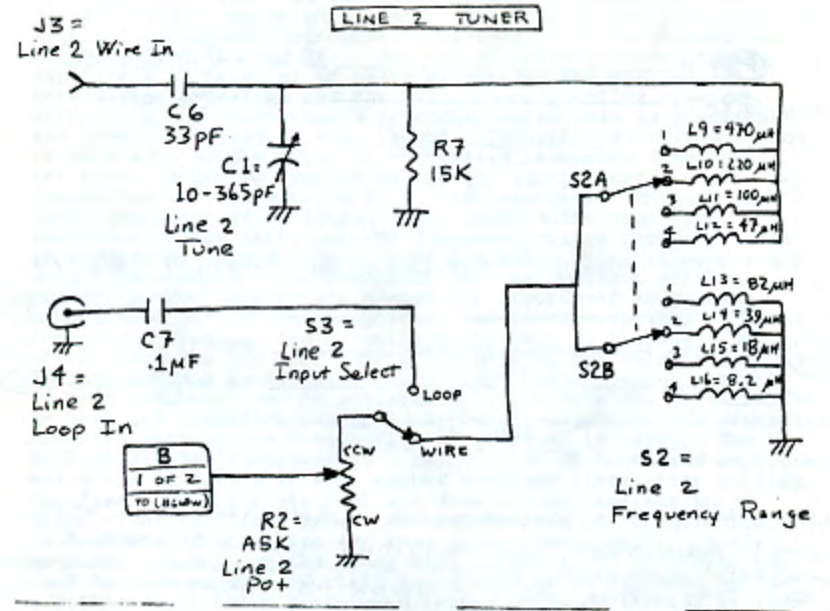
It should be noted that phasing of very short (e. g. less than 58'/15 m. at 1 MHz) wires is best left to a modular (3 box) phasing system consisting of two Q-spoiled FET-input active wire tuners driving a phaser output module (POM) box having an amplifier (broadband, or (preferably) tunable) at the output of its balun transformer. For most applications where sufficiently-long wires WILL be available, the one-box approach to phasing is hard to beat. The Mini-MWDX-3 may easily be packed into a suitcase along with a Palomar loop, a couple of 100' rolls of wire, and one of the new synthesised portable receivers for an airline-portable DXpedition setup with maximum "bounce to the ounce". (Operation with portable receivers should be done with the Mini-MWDX-3 amplifier on, so that the unit's output will override stray pickup from the receiver's rod or whip antenna.)



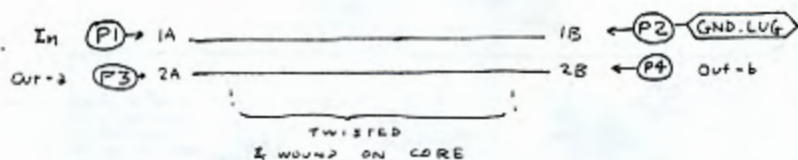
APPROXIMATE FREQUENCY RANGES

POSITION #	FREQ. RANGE, KHZ
1	480 - 650
2	620 - 900
3	880 - 1300
4	1250 - 1700

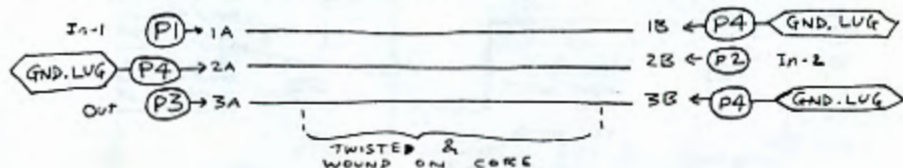
RANGES SHOULD BE SOMEWHAT WIDER THAN THE ABOVE IF SHORT TO MEDIUM LENGTH (UNDER 100M/328 FT) WIRES ARE USED. BEVERAGE USERS MAY FIND THE INDUCTIVE-COUPLING OPTION (OPTION #1) BENEFICIAL IN ENSURING A REASONABLE AMOUNT OF RANGE OVERLAP.



T1 = 30 TURNS (BIFILAR) ON AMIDON FT-82-77.

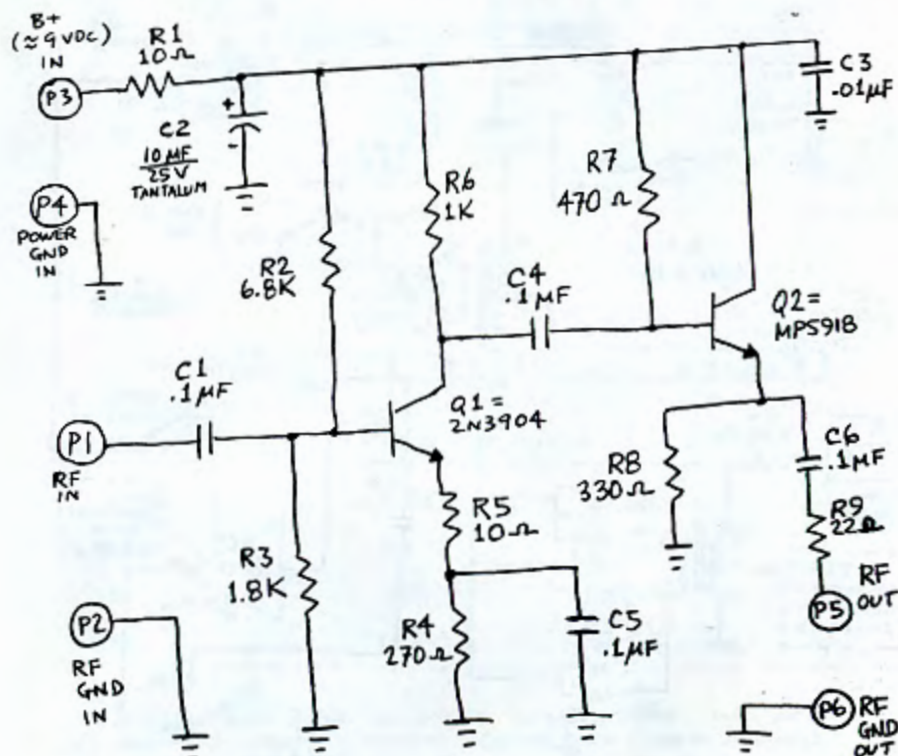


T2 = 30 TURNS (TRIFILAR) ON AMIDON FT-82-77



A1 = BBA-B BROADBAND AMPLIFIER CARD

NOTE: COMPONENT DESIGNATIONS ON A1 ARE A COMPLETELY SEPARATE ENTITY FROM COMPONENT DESIGNATIONS ON THE MAIN MINI-MWDX-3 SCHEMATICS.



### The MWDX-3 family of phasing units

The Mini-MWDX-3 is the latest model to evolve from the overall MWDX-3 design philosophy. This design has done away with the cumbersome ungrounded tuning-capacitor subassemblies of the MWDX-1, 2, and 2A. The use of rotor-grounded tuning capacitors in parallel LC tanks eliminates the problem of hand capacitance once and for all. Loose coupling of wire aerials to the input tuners provides tuning that is predictable and less influenced by wire length. Inductive voltage division is used as a simple means of converting impedance from high (at tank) to medium (coming out of the input tuner). Q-spoiling is incorporated to provide manageable changes in phase angle-per-pF of tuning capacitance shift away from resonance; phase shift-per-kHz frequency change from resonance is reduced by this scheme in such a fashion that, on moderately strong AM signals, both sidebands (on the dominant station) as well as its carrier are adequately suppressed to permit subdominant DX station reception. The loose coupling, inductive division, and Q-spoiling all help to provide ease of construction and use. The other side of the coin, however, is that maximum achievable output level (as a passive phaser) is less than what can be achieved by tight-coupling of aerial to tank and transformer-type tuner-output-impedance transformation. Luckily, gain at the frequencies of interest is cheap. The Mini-MWDX-3 has incorporated a built-in 20 dB broadband amplifier which can be kicked in when wanted stations (left after nulling the "pest" dominant station) are down at the receiver noise floor. The amplifier module can recover all of the gain lost by design simplification and then some. The classic tightly-coupled approach, on the other hand, costs a lot more when you realize that molded inductors would have to be replaced by a multitude of bulky hand-wound tapped coils on toroids or rods (not to mention the "klugey" ungrounded tuning capacitors).

Neil Kazaross has been using a MWDX-3 family tuner dubbed the "proto(type) MWDX-3"; George Hakiel and Marc DeLorenzo have MWDX-3 units, and Robert LaMorgese has an MWDX-3P (passive; used in conjunction with external APT-style tunable output amplifier). The main difference between these units and the Mini-MWDX-3 is that the non-Mini units are housed in a 10"x6"x3.5" chassis box instead of the 7"x5"x3" box used by the subject of this article. Electrical differences are minimal (slight differences in pot scheme, inductive coupling option to Mini-MWDX-3 is standard on MWDX-3, component nomenclatures may differ, etc.). The DXers involved seem to be satisfied with their units; Neil Kazaross has gotten MWDX on his phased Beverages that could not be heard with a loop or with the Beverages used without phasing.

### Mini-MWDX-3 Assembly

#### Outline

1. Read article thoroughly. Make an extra copy to be kept at the workbench (to be marked-up, checked-off, etc.)
2. Ensure that you have necessary tools: drill bits (per hole list), drill or drill press, diagonal cutters (large & small), wire stripper, needle-nose pliers, slip-joint pliers, screwdriver sets (slotted & Phillips), nutdriver set, soldering pencil (~ 25 W), ohmmeter (to check switches & pots), jeweller's screwdriver set (for knob setscrews), metal file, accurate ruler (preferably steel) or micrometer/caliper, sharply-pointed scribe/awl or centre punch, and bench vise.

3. Purchase all necessary parts (per Level 1 & 2 parts lists). When all parts are acquired, organize parts & tools in a spacious, well-lighted work area.
4. If substitute mountable components are used, adjust hole list as required. Accurately mark chassis box hole locations (per hole list) with scribe. Drill each hole initially with a .113" bit; then drill holes listed as larger with the actual specified size bit. Holes larger than .25" should be drilled to .25" as an interim step to prevent jumping of the subsequently-used larger bit.
5. Assemble ground hardware to the chassis as follows:  
(Locations per hole list)  

OUTSIDE BOX	INSIDE BOX
G1 = head of 4-40X.25 screw	#4 solder lug, 4-40 nut on screw shaft
G2 = head of 4-40X.25 screw, #4 solder lug	4-40 nut on screw shaft
6. Mount battery holder J6 at right side holes 5 & 6. The holder is mounted on the outside of the box so that its terminals point downward. At each hole, a 4-40X.25" screw is inserted through the battery holder & the chassis so that its head is outside and its threads are inside the box. On the inside threads, place a #4 split lockwasher (against the chassis); then secure the washer with a 4-40 nut. Torque tight.
7. Mount C1 inside the box so that its shaft protrudes out through top side hole 2. Mounting hardware (consisting of 6-32X.25" screw, a #6 split lockwasher between screw head & flat washer, and a #6 flat washer between split washer & chassis external surface) should be installed at top side holes 1, 3, & 4 once the capacitors threaded holes have been aligned to mate with these three holes.
8. Mount C2 inside the box so that its shaft protrudes out through top side hole 21 and its threaded holes line up with top side holes 20, 22, & 23. Use hardware (of the same type used to mount C1) to mount C2 to the chassis at top side holes 20, 22, & 23.
9. Mount the following components with the hardware supplied with the components: A1, C3, C9, J1, J2, J3, J4, J5, R1, R2, R3, R4, S1, S2, S3, S4, S5, T1, T2. It's probably a good idea to apply a few drops of Loctite to C3's threads as it is only mounted at one location and might slip after repeated adjustment. "Loctiting" the threads of J1 through J5 is also recommended. Orient A1, T1, and T2 by consulting the drawings supplied with these subassemblies in conjunction with the Mini-MWDX-3 hole list. These subassemblies are, of course, mounted inside the chassis box: spacers should contact inside chassis surface; mounting screw heads & lockwashers are on the outside of the box.
10. Assemble molded inductors onto S1 & S2 in accordance with schematic and wiring/component connection list. Keep leads as short as possible.
11. Perform all operations on wiring/component connection list (other than those of assembly step 10). The schematic and the parts list should be kept handy for reference. Use of an ohmmeter is suggested to establish pin orientation on pots and switches.
12. Blow all solder splash and loose wire fragments out of the chassis box with high-pressure air, if available. Clean flux from solder joints with alcohol or another suitable solvent.
13. Inspect finished unit for proper connections, correct component values, and quality of workmanship.

14. Install knobs (refer to Level 1 parts list). Suggested orientations:

Knob pointer line position (control fully CCW)	Numbered knobs (on S1, S2, S4) should be set to approx. 1.3 with control fully CCW. Numbered knob on S5 should be set to 1.1 with S5 set fully CCW (off).
C1 9 o'clock	
C2 9 o'clock	
C3 9 o'clock = fully meshed	
R1 8 o'clock	
R2 8 o'clock	
R3 8 o'clock	
R4 8 o'clock	

15. Label controls & jacks.
16. Proceed to Operation Instructions and, hopefully, to some good DX!

#### Parts List for Mini-MWDX-3 phasing unit

NOTES: Prices (current DEC 1984) are subject to change. Fixed resistor prices are per pack of 5 pieces.

Level 1 list = electrical & major mechanical components  
Level 2 list = small hardware (total estimated price given instead of item-by-item listings)

RS = Radio Shack  
me = Mark Connelly - 30 William Road - Billerica, MA 01866

For addresses of other suppliers, consult recent Supplier List in DX News & DX Monitor and consult the Electronic Design Gold Book (at most technical college libraries).

#### Level 1

Component Designation	Description	Vendor	Stock #	Approx. Price \$
A1	broadband amp. subass'y	me	BBA-B	12.00
B1	9V battery	RS	23-553	1.99
C1	10-365 pF var. capacitor	Mouser	524-A1-227	12.00
C2	10-365 pF var. capacitor	Mouser	524-A1-227	12.00
C3	2-25 pF var. capacitor	Mouser	530-189-0569-1	3.00
C4	18 pF mica capacitor	Mouser	586-DM018	0.40
C5	33 pF mica capacitor	Mouser	586-DM033	0.40
C6	33 pF mica capacitor	Mouser	586-DM033	0.40
C7	.1 uF monolithic cap.	Digi-Key	P4525	0.18
C8	.1 uF monolithic cap.	Digi-Key	P4525	0.18
C9	1000 pF feedthrough cap.	Newark	19P2861	3.18
J1	banana jack (red)	RS	274-662	1.39
J2	banana jack (black)	RS	274-662	1.39
J3	banana jack (red)	RS	274-662	1.39
J4	BNC jack	RS	278-105	1.69
J5	BNC jack	RS	278-105	1.69
J6	battery holder	Acme (NJ)		1.50
L1	470 uH molded inductor	Mouser	43LS474	0.39
L2	220 uH molded inductor	Mouser	43LS224	0.39
L3	100 uH molded inductor	Mouser	43LS104	0.39
L4	47 uH molded inductor	Mouser	43LS475	0.39
L5	82 uH molded inductor	Mouser	43LS825	0.39
L6	39 uH molded inductor	Mouser	43LS395	0.39
L7	18 uH molded inductor	Mouser	43LS185	0.39
L8	8.2 uH molded inductor	Mouser	43LQ826	0.38



Level	1	-- continued		
Component Designation	Description	Vendor	Stock #	Approx. Price \$
L9	470 uH molded inductor	Mouser	43LS474	0.39
L10	220 uH molded inductor	Mouser	43LS224	0.39
L11	100 uH molded inductor	Mouser	43LS104	0.39
L12	47 uH molded inductor	Mouser	43LS475	0.39
L13	82 uH molded inductor	Mouser	43LS825	0.39
L14	39 uH molded inductor	Mouser	43LS395	0.39
L15	18 uH molded inductor	Mouser	43LS185	0.39
L16	8.2 uH molded inductor	Mouser	43LQ826	0.38
R1	5K audio-taper pot	Mouser	31CB305	0.99
R2	5K audio-taper pot	Mouser	31CB305	0.99
R3	25K linear-taper pot	me	R-B25K	1.50
R4	5K audio-taper pot	Mouser	31CB305	0.99
R5	2.7K resistor	Digi-Key	2.7KQ	0.25
R6	330 ohm resistor	RS	271-1315	0.39
R7	15K resistor	RS	271-1337	0.39
R8	330 ohm resistor	RS	271-1315	0.39
S1	3-pole, 4-pos. switch	Mouser	10WW034	1.00
S2	3-pole, 4-pos. switch	Mouser	10WW034	1.00
S3	SPDT on/on toggle switch	RS	275-326	1.99
S4	3-pole, 4-pos. switch	Mouser	10WW034	1.00
S5	6-pole, 2-pos. switch	RS	275-1306	1.19
T1	phase-reversing xfmr.	me	T1	7.00
T2	balun xfmr. subass'y	me	T2	8.00
--	knob for C1	Mouser	45KN017	0.54
--	knob for C2	Mouser	45KN017	0.54
--	knobs for S1,S2	RS	274-413 (pk 2)	1.39
--	knobs for S4,S5	RS	274-413 (pk 2)	1.39
--	knob for C3	Mouser	45KN013	0.42
--	knob for R1	Mouser	45KN013	0.42
--	knob for R2	Mouser	45KN013	0.42
--	knob for R3	Mouser	45KN013	0.42
--	knob for R4	Mouser	45KN013	0.42
--	chassis box (7"x5"x3")	Mouser	537-TF-782	4.33

## Level 2 -- Small Hardware

NOTE: Mounting hardware is supplied with the following Level 1 components: A1, C3, C9, J1, J2, J3, J4, J5, R1, R2, R3, R4, S1, S2, S3, S4, S5, T1, T2, knobs, and chassis box.

The builder must provide hardware as follows:

Components (Qty.) where used	Total Qty.	Description	Vendor	Stock #
C1(3), C2(3)	6	6-32X.25" screw	Mouser	572-01888
C1(3), C2(3)	6	#6 flat washer	Mouser	565-1150
C1(3), C2(3)	6	#6 split lockwasher	Mouser	572-00650
J6(2)	2	#4 split lockwasher	Mouser	572-00649
J6(2), G1(1), G2(1)	4	4-40X.25" screw	Mouser	572-01888
J6(2), G1(1), G2(1)	4	4-40 nut	Mouser	572-00404
G1(1), G2(1)	2	#4 solder lug	Mouser	565-1416-4
throughout box as req'd		wire, #22 insulated	RS	278-1294
throughout box as req'd		wire, #24 bare buss	RS	278-1341
throughout box as req'd		solder	RS	64-006

Mechanical hardware stock numbers sometimes represent packs with a greater number of pieces than required. Cost of Level 2 items actually used to construct one Mini-MWDX-3 is approximately \$ 6.

Based upon the foregoing Level 1 & Level 2 parts listings, the estimated total cost of components required to build the Mini-MWDX-3 phasing unit is in the vicinity of \$ 110 (US) as of DEC '84.

## Hole List for Mini-MWDX-3 Phasing Unit

BOX USED = 7" X 5" X 3" aluminium (Mouser 537-TF-782, or equiv.)

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, inches.

## LEFT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	J1	Wire 1 In, banana jack	-0.75	0.5	0.3125
2	J2	Earth GND In, ban. jack	0.0	0.5	0.3125
3	J3	Wire 2 In, banana jack	0.75	0.5	0.3125
4	G1	GND hardware (int. lug)	0.0	1.125	0.113
5	S3	Line 2 Input Select, shaft	1.125	1.125	0.25
6	S3	Line 2 Input Select, tab	1.375	1.125	0.113
7	J4	Loop In, BNC	1.5	0.5	0.375

## TOP SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	C1	Line 1 Tune - screw 1	-2.78125	3.875	0.14
2	C1	Line 1 Tune - shaft	-2.25	3.875	0.5
3	C1	Line 1 Tune - screw 2	-2.25	3.34375	0.14
4	C1	Line 1 Tune - screw 3	-1.71875	3.875	0.14
5	S1	Line 1 Freq. Range - shaft	-0.5	4.0	0.375
6	S1	Line 1 Freq. Range - tab	-0.5	3.5	0.14
7	R1	Line 1 Pot - tab	0.625	3.875	0.14
8	R1	Line 1 Pot - shaft	0.9375	3.875	0.3125
9	S4	Mode Switch - shaft	2.25	4.0	0.375
10	S4	Mode Switch - tab	2.25	3.5	0.14
11	C3	Null Vernier C - shaft	-1.0	2.5	0.28
12	R3	Null Vernier R - tab	-0.1875	2.5	0.14
13	R3	Null Vernier R - shaft	0.125	2.5	0.25
14	R4	Output Pot - tab	0.6875	2.5	0.14
15	R4	Output Pot - shaft	1.0	2.5	0.14
16	A1	BBA-B Amp. - hardware 2	2.0	3.0	0.113
17	A1	BBA-B Amp. - hardware 1	3.0	3.0	0.113
18	A1	BBA-B Amp. - hardware 4	2.0	2.0	0.113
19	A1	BBA-B Amp. - hardware 3	3.0	2.0	0.113
20	C2	Line 2 Tune - screw 1	-2.78125	1.5	0.14
21	C2	Line 2 Tune - shaft	-2.25	1.5	0.5
22	C2	Line 2 Tune - screw 2	-2.25	0.96875	0.14
23	C2	Line 2 Tune - screw 3	-1.71875	1.5	0.14
24	S2	Line 2 Freq. Range - shaft	-0.5	1.0	0.375
25	S2	Line 2 Freq. Range - tab	-0.5	0.5	0.14
26	R2	Line 2 Pot - tab	0.625	1.125	0.14
27	R2	Line 2 Pot - shaft	0.9375	1.125	0.3125
28	S5	Amp. On/Off - shaft	2.25	1.0	0.375
29	S5	Amp. On/Off - tab	2.25	0.5	0.14

## RIGHT SIDE

Hole #	Comp. Desig.	Description	X	Y	D
1	T1	phase-rev. - hardware 2	-2.0	1.875	0.113
2	T1	phase-rev. - hardware 1	-1.0	1.875	0.113
3	T1	phase-rev. - hardware 4	-2.0	0.375	0.113
4	T1	phase-rev. - hardware 3	-1.0	0.375	0.113
5	J6	battery holder - screw 1	-0.48438	2.75	0.113
6	J6	battery holder - screw 2	0.48438	1.875	0.113
7	C9	B+ in feedthrough cap.	0.0	1.1875	0.188
8	G2	GND hardware (ext. lug)	0.75	1.1875	0.113
9	J5	RF out to RX., BNC	0.0	0.5	0.375
10	T2	balun - hardware 2	1.0	1.875	0.113
11	T2	balun - hardware 1	2.0	1.875	0.113
12	T2	balun - hardware 4	1.0	0.375	0.113
13	T2	balun - hardware 3	2.0	0.375	0.113

Wiring / Component Connections  
for standard Mini-MWDX-3 phasing unit

\*\*\*\*\*

NOTES: W = insulated wire (approx. #22 AWG)  
BW = bare solid (buss) wire  
TP = twisted-pair of insulated wires

C1 stator pins closest to J1 will be referred to as side A.  
C2 stator pins closest to J3 will be referred to as side A.

Use "spaghetti" (plastic insulation) on all component leads longer than 0.5".

\*\*\*\*\*

## OUTSIDE BOX:

From	To	Description
J6 + pin	C9 external pin	1" W
J6 - pin	G2 external lug	1.5" W

## INSIDE BOX:

From	To	Description
J4	S3 "Loop" pin	C7
J3	C2 side A stator 1	C6
C2 side A stator 1	C2 side A stator 2	1" BW
C2 side B stator 1	C2 side B stator 2	1" BW
C2 side B stator 1	jct. L9/L10/L11/L12	3" W
S2A pin 1	jct. L9/L10/L11/L12	L9
S2A pin 2	jct. L9/L10/L11/L12	L10
S2A pin 3	jct. L9/L10/L11/L12	L11
S2A pin 4	jct. L9/L10/L11/L12	L12
jct. L13/L14/L15/L16	jct. L9/L10/L11/L12	R7
jct. L13/L14/L15/L16	C3 rotor	3" W
S2B pin 1	jct. L13/L14/L15/L16	L13
S2B pin 2	jct. L13/L14/L15/L16	L14
S2B pin 3	jct. L13/L14/L15/L16	L15
S2B pin 4	jct. L13/L14/L15/L16	L16
S2A arm	S2B arm	0.5" BW
S2A arm	S3 "Wire" pin	4" W
J2	G1 internal lug	1.5" BW
J2	R2 CW pin	6" W (TP)
S3 arm	R2 CCW pin	6" W (TP)

## Mini-MWDX-3 Wiring/Component Connections, continued

From	To	Description
R2 CW pin	R3 CCW pin	4" W
R3 CCW pin	C3 rotor	1.5" BW
R3 CCW pin	R1 CW pin	4" W
R3 arm	R3 CW pin	0.5" BW
R1 CCW pin	S1A arm	3" W
S1A arm	S1B arm	0.5" BW
jct. L5/L6/L7/L8	R3 arm	R5 + 2" W
S1A pin 1	jct. L1/L2/L3/L4	L1
S1A pin 2	jct. L1/L2/L3/L4	L2
S1A pin 3	jct. L1/L2/L3/L4	L3
S1A pin 4	jct. L1/L2/L3/L4	L4
S1B pin 1	jct. L5/L6/L7/L8	L5
S1B pin 2	jct. L5/L6/L7/L8	L6
S1B pin 3	jct. L5/L6/L7/L8	L7
S1B pin 4	jct. L5/L6/L7/L8	L8
C1 side A stator 1	C1 side A stator 2	1" BW
C1 side B stator 1	C1 side B stator 2	1" BW
J1	C1 side A stator 1	C5
C1 side B stator 1	C3 stator	C4
C1 side B stator 1	jct. L1/L2/L3/L4	3.5" W
R2 arm	T1 "In" pin (P1)	R8 + 3" W
R1 arm	S4A arm	R6 + 3" W
T1 "Out a" pin (P3)	S4C arm	4" W
T1 "Out b" pin (P4)	S4B arm	5" W
S4B "1" pin	S4B "2" pin	0.5" BW
S4B "2" pin	S4B "Null-a" pin	0.5" BW
S4B "1" pin	S4C "Null-b" pin	2.5" W
S4C "Null-b" pin	T2 ground lug	3" W
T2 "In 2" pin (P2)	S4A "Null-b" pin	3" W
S4A "Null-a" pin	S4A "Null-b" pin	0.5" BW
S4A "1" pin	S4A "Null-a" pin	1" W
S4B "Null-b" pin	S4C "2" pin	1" W
S4C "2" pin	S4C "Null-a" pin	0.5" BW
S4C "Null-a" pin	T2 "In 1" pin (P1)	1.5" W
T2 "Out" pin (P3)	R4 CCW pin	4" W
R4 CW pin	R4 switch side nr CCW pin	1.5" W
Al pin P2	R4 switch side nr CW pin	1" BW
R4 arm	S5A arm	3" W
S5A "off" pin	S5C "off" pin	C8
S5A "on" pin	Al pin P1	3" W
S5B arm	Al pin P3	2" W
S5B "on" pin	C9 internal lead	3" W
S5C arm	J5	3" W
S5C "on" pin	Al pin P5	2" W

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## "Mini-MWDX-3" Phasing Unit Operation

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## Case 1: Two-Wire Phasing

- 1.0 Initialise Controls
- 1.1 Set C1, C2, C3, & R3 to midrange (pointers at 12 o'clock).
- 1.2 Set R1, R2, R4 to fully CCW (pointers at approx. 8 o'clock).
- 1.3 S1, S2, & S4 will be set in sections 2.0 & 3.0.

- 1.4 Set S3 to Wire and set S5 to Amplifier Off.
- 1.5 Connect wire antenna #1 to J1, earth ground to J2, wire antenna #2 to J3, receiver to J5, and a 9-volt battery to J6. (No connection to J4)  
Wires used should be of similar length; minimum suggested length = 50 ft./15 m.
- 2.0 Line 1 Tune  
-----
- 2.1 Set S4 to 1.
- 2.2 Set S1 to position with strongest wanted-frequency signal, or set S1 according to "look-up table".
- 2.3 Adjust C1 for maximum signal at frequency of operation. If the peak is near the COW (fully meshed) position of the C1 knob, set S1 to the next COW position; then repeak C1. If the peak is near the CW (fully open) position of the C1 knob, set S1 to the next CW position; then repeak C1.
- 3.0 Line 2 Tune  
-----
- 3.1 Set S4 to 2.
- 3.2 Set S2 to position with strongest wanted-frequency signal, or set S2 according to "look-up table".
- 3.3 Adjust C2 for maximum signal at frequency of operation. If the peak is near the COW (fully meshed) position of the C2 knob, set S2 to the next COW position; then repeak C2. If the peak is near the CW (fully open) position of the C2 knob, set S2 to the next CW position; then repeak C2.
- 4.0 Equalise Levels  
-----
- 4.1 Switch S4 between 1 and 2; note (on S-meter or audibly) which S4 position yields the stronger signal from the STATION TO BE NULLED (hereafter to be defined as the "pest" station).
- 4.2 If S4 position 1 yielded a stronger pest level, adjust R1 until the S4 position 1 & position 2 pest station strengths are approximately equal.
- 4.3 If S4 position 2 yielded a stronger pest level, adjust R2 until the S4 position 1 & position 2 pest station strengths are approximately equal.
- 5.0 Initiate Nulling  
-----
- 5.1 Switch S4 between Null-a & Null-b positions. Leave S4 on the position which offers the lower level of pest signal / greater evidence of subdominant stations.
- 5.2 If you had used R2 (step 4.3) or had used neither R1 or R2 in section 4.0, tweak C1 to get a "dip" (null of pest). Leave C1 at dip point & fine-tune dip further by successive adjustments of R2 & C1. Then tweak C2 for any additional further nulling.

To be CONTINUED.... SOON!

# VERIFICATION SIGNERS

Wayne Heinen, 4131 S. Andes Way, Aurora, CO 80013

Catch "AM Interlude" on HCJB Saturday nights.

Please put all contributions in frequency order and make them as legible as possible! A frequently asked question is how often is often enough, when sending in v/s? Once per quarter will help keep the info fresh to the membership. A biggy with lots of support. Here we goo...

540	WAR01mz	Jo Anne Schultz	OFM	BH	940	CEM	Lee Fortune M	FP
550	WHLM1m	Eddie Muscovitch	CE	BH	950	WCOT	David Wright	FP
560	CFOS1	Rick Moss	ECM	BH		KRSI	Wm Robinson	CE
	WEBC	R.H.Ferguson	P	FP		WBKH	Earl Hart	FP
	WIS	J.G.Lovelady	AGM	FP		WBBF	Herb Petrie	FP
	KLVL1	Robert Tindle	TD	GM		WFTC	Wm W.Wyatt	OpM
570	WACL	J.S.Rivers	Jr.	FP		WQBE	Lester Lovejoy	CE
	WNAX	Jerry Oster	OfM	FP	960	KLTF	Gordy Lonnon	CE
580	WKTY	M.G.Balwell	PD	FP		CKWS1	Kevin Trudell	VP
	CFRA	W.G.Roach	CE	FP		WTCH	Tom Ashenbrenner	
	RJRq	W.Matthews	CE	BH	970	WVOJ	C.R.Buckner	GM
	WCHSfB	Vic Marino	PD/OpM	BH		KNUU1z	Patricia Brooks	Trfd
590	WMBS	Larry Campbell		FP	980	WBSS	Robbie George	CE
	KLBJ	Bryan Alan	King	RM		WTOT	J.K.Brewer	GM
600	WREC	M.W.Clay	Engd	FP		WDVH	G.W.Fogle	CE
610	WHYM	Bob Rogers	GM	FP		WBOP	Wayne Coleman	GM
	KDAL	J.R.Snee	GM	FP		WAZS	W.L.Phillips	P
650	WKKQ1	Jerry J.Collins	M	WM		WHAW	T.B.White	M
690	KCTJ	Ed Garrett	PD	FP		CHEXrc	Stuart Harrison	Promo
	KGGF	Al Diller	CE	RM		WTRY1	David Abdoe	CE
710	WKRG	T.H.Brown	Su	FP	990	WPIK	Jerry Ray	GM
	WDSM	Ken Buehler	GM	FP	1000	WKMK	Bob Watson	GM
730	WFMC1	M.D. Farley		GM	1010	WCBP	Wes Howard	VP
	WL1L1	Joanne Greenway	Trfd	GM		WBIX	M.S. Cowart	SlsD
740	WSBR	Rick Rieke	CE	FP		WMIN	Mark Andrews	PD
	WCWY	Mike Clingenpeel		PSD	RM	WELS	J.P. Hankins	GM
770	KUOM	Marion Watson	M	FP	1030	WXSS1m	Hugh Roberts	GM
	WPZY	L.N.Feldsteen	GM	FP	1050	WROS	Loretta Whitley	FM
	WLW11	R.E.Perkins	P/GM	KG	1060	KYWg	E.G.Walden	EM
780	WCKB1	u/u	GM	GM	1070	CHOK1	Dave Sorrell	PromoD
790	WNWS	R.A.Vanhook	E	FP		WSCPfmb	Doreen Hanson	CE
	WPFA	A.Schneider	GM	FP		WTSO	Sherman Stern	CE
	WTNY	D.C.Alexander		FP	1080	KRLDqmb	R.M.Jenkins	CE
	WEAQ	Wm Holden	CE	FP	1090	WMFL	J.H yden	
	WSIG1	Alan Arehart	CE	BH	1110	WSFW1b	Marie L. Parish	Trfm
	WETBfH	C.W.Williams	ACE	KG	1120	KLIM	Jo Ann Todd	Trfm
800	PJBqzbz	Janet Ludlom		BH	1130	WBZTpu	Jay D. LaSeine	OpM
	WSUZ	Brenda Poole	GM	FP		WMGA	John McCraniv	CE
850	WRUF	E.A.Sliman	CE	FP		WGUF	J.W. Newman	CE
	WCGY	Steve Cody	PD	FP		WASP	David Bridges	PD
	WCGY1bz	Bert Brown	CE	KG	1140	WCJW	John B Weeks	CE
	WVFR1	Dennis Jackson	(NRC)	KG		KATT	Paul Gleiser	VP/GM
860	KWRF	Richard Haycock	PD	RM		CR1q	u/u	
870	WCHU	Lew E. Mengle	AE	FP	1150	KCKY1	Jack Finlayson	P
	KAAN	Gregg Richwine	E	WM		KWKY	Sly Newman	CE
880	WEEG1	Malcolm Watson	GM	KG		WJEM	Vance Ross	PD
900	WKDW1	Bill Betlej	DoE	BH		WTYC	Rico Craft	OpM
	WJWL	S.G.Wallace	E	FP		CKOCq	u/u	
	WMOP	B.W.Baskin	Sr.	FP		WTAW	Tony Nemece	CE
	KTIS	Wayne Pedersen	M	FP	1160	WTYN	Mike Stowers	
910	WKCN	Paul Mason	NxD	FP	1170	4VRScn	u/u	
	WPLA	Al Berry	M	FP		WXAX	Arthur James	VP
920	KVEL1m	Jim Leonard	OpM	WH		KSTT	T.L.Graver	CE
	WTRS	Deborah Reeves		FP	1220	WSCR1	John Saville	OpM
930	WYUS	Dennis Hazzard	PD	FP		WGN1L	Bill Musser	GM
	WJAX	J.T.Fawkes	CE	FP		WKBK1b	Peter Schmitt	
	KDHL	J.E.Hyde	CE	FP		WABF	R.A.Clark	P
940	WECC1	Carl E. Stump	E	HH		CJSS	Mark Foreman	TD
	WLQH	Norma Schossler	M	FP	1230	WKHT1mbz	Steve Brody	
	WRPX	Wm C.Cornwall	P	FP		WMAF	Kathleen Schrey	BusM
	WCSW	S.T.Lutz		FP		WIGS	Janice Rayno	

1230	WTSV	Ron Cote MxD	FP	1410	KRIG	Larry Hawkins GM	FP
	WXAP	Harry Thomas O/M	FP		WOTT	Dan Denny PD	FP
	WJOY	Dennis Snyder CE	FP		KBCC1	Mike Robinson GM	PT
1240	WBGC	Homer L.Rhoden P	FP	1420	KJCK1	David M.Weise OpD	PT
	WWWC	Carmen James PD	FP		KBTN1	D.L.Winegardner GM	PT
	WJNC	Craig Thomas PD	FP		WVJS1b	Michael Fleming DoE	BH
	WSKI	Thomas L.Cheney PD	FP		WAOC	T.Wayne Sims P	FP
1250	WNER	George R.Bay Jr. GM	FP		WWSR	D.R.Kimel P	FP
1250	WYSR	Frank Turner	FP	1440	WUJL	Robert Rodgers GM	FP
1260	WNRK1	Dave Schmidt CE NRC'er			WNVF	Robert Wright CE	RM
		HH/BH/KG		1450	KLMX	Wm E Sanders OpM	WM
	WSUAL	Herbert Levin P	BH		KWHW	Don Smith CE	WM
	WSUAL	Freddie Cruz DJ	BH		WBSR	Richard A Storm GM	FP
	KROX	Wm. J. Kratzer Jr CEWM			WTAL	D.C.Keyes P	FP
	WPHB1	C.Dean Sharpless CE GM			WSPB	Joe DeMay OpM	FP
	WZB01	Joyce S Lee OpM	GM		WWAM	Becky Flores	FP
1270	WDLA1	Philip G.Vassey CE	HH		WVLD	Robert LaFore CE	FP
	WBHC	Tony Gross	FP		W TSA	Bernie Hartnett PD	FP
	WNOG	M. Moore PD	FP		CHUC	D.T.Conway GM	FP
1280	WGTX	Martha K.Dees	FP	1460	WBAR	James Fling CE	FP
	WEXI	Wayne Markham GM	FP		WPDQ	Ray Barnes CE	FP
1290	WKNE	Howard Corday PD	FP		WPAF	Larry Lord M	FP
	WJBRm	David Mackenzie CE	BH		KDWA	D.L.Baudoin P	FP
	KGVO	James A.Bender E	WM		WJKX	u/u GM	FP
1310	WDKD1	Don H. LaDuke GM	GM	1470	CHOW	Larry Holleran DoE	JK
	KFSB1	Richard Chogwin P	PT		WPDm	Lloyd G.Howe CE	FP
	WTLB1	Paul A.Dunn P/GM	BH		WINH	Harry R.Fogel P	FP
	WHEP	Jim Stewart	FP	1480	WAPG	Murray Benton E	FP
	WGKR	Donald Hughes	FP	1490	KOKC	Steve Adams M	WM
	WAUC	James Hardman VP	FP		WTCS	Scott Reppert MxD	JK
	WNSY	Will Bevis CE	FP		KBUR	Bernie Garcia CE	WH
1320	WCVR	Tim Hoehn APD	FP		WGCH	Chris Lucas PM	FP
1330	WCVC	Brien R.Sorne	FP		WCKC	Jan Taylor DoAdv	FP
1340	WRTH	David C.Taylor	FP		WOFN	J.E.Gant CE	FP
	WTAN	Mark Brewer E	FP		WSIR	Lori Dale NxD	FP
	WWFL	Kenneth R.Peach GM	FP		WRND	Ernest Tuller S1S	FP
	WDSR	Dean Blackwell GM	FP		WICY	M.C.Tachley GM	FP
	WPBR	Everett Aspinwall Jr	FP		WWIL	C.L.Lewis CE	FP
	WR0D	Rob Jack	FP		WKVT	Marilyn Fulper-Smith	NxD
	WMGI	George Conso CE	FP	1500	WIXR	E.Backup	
	KROC	Guy Gentling GM	FP		WGUL	Jeff Miller TD	FP
	WDCR	John May NxD	FP		KSTP	Norm Paetznick	FP
	WMSA	Victor A Perry M	FP	1510	WAUK	Don Hunjadi AE	WM
	WIRY	Robert Broadwell CE	FP		WWBC	Ronald Stanton AOfM	
	W00W	Jack Wood	FP		WMIB	Paul Martin CE	FP
	W0KE	Harry C Weaver GM	FP		WKRO	Doug Penovi	FP
	W00W1	Danny Jacobson	GM	1520	WKRE	Phil Badger ACE	FP
1350	WLLY	O.Epperson	FP	1530	WIZYL	Chris Harrell OpM	HH
	KMAN1m	Lowell E.Jack GM	WH	1540	CHIN	Trevor Joice DoE	FP
	WFTW	C.Shellenberger TD	FP		KNGL	J.L.Engel GM	WM
	KSCJq	u/u CE	PT		KUQQ	Duane A.Sedge CE	WM
	WYXW	John Newman P	FP		WTB11	Barry K.Wilson AM	KG
1370	WCOA	Darrel Tate	FP		WEVR	Carol Hansen	GM
	WLOP	Dean Webster Jr. CE	FP	1550	CBEq1	Margaret Beetcher	
	WJWS1m	Ron Major MxD	BH			P.R.Rep	BH
	WFEAL	Keith Lemire ChOp	PS			u/u AM	GM
1380	CKLC	Albert Aufleger	FP	1560	WYZD1	Jeff Hogan CE	FP
	WTOBq	Larry Schropp CE	BH	1570	WHOG	Mike Stukey CE	FP
	WRBq1b	Ralph Beaver CE	KG		WOTB	Al Stokes VP	FP
	KCIM	Debra Kulbel OfM	WM		CHLO1	Harry Pressey CE	GM
1390	KKCM	Mark L.Spring PD	FP	1590	WCAM1b	Joel L.Barnes ExVP	KG
1400	WIRA	Joice Mercer PD	FP		WZIPLb	Ric Williams A	KG
	WSTC	J.W.Donahue OfM	FP		WATM	Keith Lindsey OpM	FP
	WPRY	Harry S.Hagen GM	FP		WKRb	Helen Emmons	FP
	WFTL	Wm.J.Wheatley VP	FP		WIXK	Joan Becker	FP
	KLBB	Scott Christensen CO	FP	1600	WKEN	M.L.Betler CE	FP
	WTSL	Daniel Clark GM	FP		WOKB	Lesli Schorr TM	FP
	WDNY	David Mance GM	FP		WJNJ	Jerry Brown	FP
	WGTN	David W.Nichols GM	FP		WKWF	Martha Johnson	FP
	WCOS	J.Boyd	FP		WGIV	Hal Harrell GM	FP
	KVOP	Al Byers	WM		WCWC	Gary R.Miller CE	WM

That's one thing we haven't seen much of is a two page verie signers column, especially one that was preceded by a column per month for the last three months. I truly appreciate the support for the column!

Here are the contributors: BH- Bob Harrison NJ, KG- Kermit Geary PA, HH- Hank Holbrook MD, GM- Greg Myers VA, PT- Phil Tallman OK, PS- Paul Stephan CT, NEW CONTRIBUTORS TO THE COLUMN (or in a few cases back after a long absence!) JK- Joe Kureth MD, RM Robert Mielcarek WS, and a complete list of 1984 v/s from FP- Frederic Pollard FL.

I hope old St. Nick and the mail man were good to you this season & let's look foward to a great year in '85....73 WAYNE (WH) in CO



# WHLO/AM 640

## STATION PROFILE

Tony Fitzherbert, 356 Jackman Avenue, Fairfield, CT 06430

WEEG - 880 KHz

by Jim Paige

September 15, 1984 was the air date for Jefferson, Georgia's first radio station. WEEG, owned and operated by Appleton Communications of Tucker, Georgia, signed on the air. This represented three years of planning and work by Kathy and Jack Appleton, President and Vice President, respectively. The initial applications was filed with the FCC in February 1981.

WEEG is a daytime operation, on clear channel 880 KHz, with a power of 5000 watts. WEEG is presently awaiting presunrise authorization. "Great 880", stresses local programming for the people of Jackson, Banks, Barrow, and Clark counties. Among the many programs on WEEG are "Community Calendar", many religion programs on Sunday, Georgia Network News, and many agricultural programs for the local farm economy.

WEEG is endeavoring to become the leader in the Northeast Georgia Piedmont area, programming "Progressive" country music, with gospel music programmed for the midday hours. "Great 880" has plenty of competition from established country stations, such as WPLO, WMD, and several FM's. With its powerful 5000 watt signal, General Manager Malcom Watson, along with Program Director Tony Childress hope to make WEEG a dominant market force. The studios and offices are located at 1 Jefferson Square, in downtown Jefferson, and the 227 foot tower is located on Galilee Road in Jackson County. WEEG's mailing address is P.O.Box 880, Jefferson, GA 30549. The station's telephone number is 404-367-9334. WEEG is also looking forward to hearing from listeners and D'Kers alike, and will verify accurate reports.

The writer would like to thank Len Shackelford of WEEG for his help with this station profile. And the National Radio Club wishes WEEG's staff and management the best of luck with their new station.