



DX NEWS

*the magazine of the
National Radio Club*

— SINCE 1933 —

VOLUME 53 ISSUE 11 December 16, 1985

I've received here several complaints about the change to the nine digit zip code. Well, to put it simply, it saves the club \$180 a year!!! Not bad, huh. Also on this subject, PLEASE, don't worry about getting your extra 4 digits for your zip code. If you look on the back, you'll see its already there. Those without the extra digits yet, will soon have your extras...that is, as soon as the post office system can find you in their machines. All we ask is that when you do give us address changes, please let us know your new nine-digit code then. By the way, Sue, who mailed it last week, got snapped by the local newspaper photographer who was doing a story on the Post Office. Picture is on page 27.

From Mike Addy comes word that WFEN-1160 from Fenton MI is now on the air with 768watts temporary, soon to be 1000w. They are Adult Contemporary and have a silent period from Midnight till 5AM (EST). They came on the air Sunday December 1st.

From William Moser comes word that KLDI-1210 Laramie, WY is now on the air. They were heard in ND on December 5 at 6:21PM, ET. Slogan is "the 10,00 watt stereo diamond", in the gem city. Format seems to be Adult Contemporary. Signal was under KGYN most of the time.

Gateway DX Monitor Service formerly the Gateway DX Club International is offering call letters (prefix is WSL or KSL), this according the Eric Bueneman. Send an SASE to: 836 Lamplight Lane, Hazelwood, MO 63042-3407. Call letters will be assigned or you can request one. Plus they offer an assortment of awards too.

In this issue, is the HAM list, which can be found on page 13 under the header of Headquarters Bytes. We don't have a header for the Ham list so I stuck it there.

CPC TEST Times listed are Eastern Time

Dec 16 KFJM-1370 Grand Forks, ND 0100- , various tones, Reports to: John H. Aasen,
Monday Technical Director, Box 8116, Grand Forks, ND 58202. Arranged by John Rieger,
DX midAmerica Editor.

Dec 26 WSJC-810 Magee, MS 0215-0245, 50KW ND, Tones, "Weird Music", Lots of
Thursday IDs along with Morse IDs. Reports to: Walter Hearn, CE, Box 426, Magee, MS
39111. Arranged for the NRC by Christopher Baskind.

Just because you don't hear the test doesn't mean you don't have to thank the station for putting on the test. Why not drop the station a postcard and tell them thanks for running the tests. They need the feedback to see if there was anyone listening and to assure them that the test was tried for and worth putting on.

LOOK INSIDE:

2...AM Switch	4...DDXD	8....FORMATS
10...Stn Profile - KTWG	12...CONTEST	13....HAM LIST
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RADIO EARTH CAN BE HEARD on Sundays 1900-2200 UTC on 11790KHz

Listen to HCJB "DX Partyline", 0230 UTC Saturday night, for the "AM Interlude" Program with Wayne Heinen. Other stations carrying NRC items include Radio Earth, Radio RSA, and KCBI!

AM SWITCH

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

CALL LETTER CHANGES

Old call: New call:

640	*New	FL	Wildwood	WPMA
880	WPRX	PR	Sabana Grande	WBOZ
960	KOOT	UT	Provo	KLZX
1000	KMLO	CA	Vista	KKOS
1090	WBOZ	PR	San German	WSOL
1290	WSHF	AL	Sheffield	WHCM
1370	KMMM	TX	Rollingwood	KOKE
1380	WKY	KY	Winchester	WHRS
1450	WHYB	SC	Myrtle Beach	WCSE
1560	KPWS	LA	Crowley	KAJN+

+KAJN never changed to KPWS on AM. This change was for their FM only.

APPLICATIONS FOR NEW STATIONS

680	MT	West Helena:	5000 D1
700	VA	McLean:	220 D1
740	WA	Auburn:	5000/800 U4
890	MA	Dedham:	25000/1000 U4 (2500 CH)
	NM	Bernalillo:	10000/1000 U4 (second application)
	PA	Nicholson:	10000 D3 (second application)
	VA	Falmouth:	25000 D3 (1000 CH) (second application)
900	MN	Blackduck:	5000 D1
1050	CA	Frazier Park:	2500 D3 (reapplication)

GRANTS FOR NEW STATION

640	FL	Wildwood:	1000/1000 U1
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APPLICATIONS FROM EXISTING FACILITIES

600	WSOM	OH	Salem:	power to 1000
640	WFNC	NC	Fayetteville:	antenna from U2 to U1 for this frequency move
1130	WDGY	MN	Minneapolis:	night power to 30500
1180	KERI	CA	Wasco:	day power to 50000, antenna to U4
1380	WOLA	PR	Barrabquitas:	antenna from U4 to U1
1400	KCHS	NM	Truth or Consequences:	power to 1000/1000 U1
1500	WGMF	NY	Watkins Glen:	to 1490 kHz 1000/1000 U1
1530	KSMM	MN	Shakopee:	power to 8670 D3
1580	KTLU	TX	Rusk:	power to 1000

GRANTS TO EXISTING FACILITIES

930	WBYG	IL	Sandwich:	powers to 710/2200
980	KMIN	NM	Grants:	to 1400 kHz 1000/1000 U1
990	WZZD	PA	Philadelphia:	relocate XR
1250	KLAZ	AR	Little Rock:	powers to 2500/5000, relocate XR
1380	WZEL	GA	Young Harris:	to 770 kHz 750 watts D1
1430	KNTA	CA	Santa Clara:	night power to 2500, relocate both day and night XR sites
1490	WYKR	VT	Wells River:	to 1100 kHz with 5000 D1

OTHERNESS

700	*App	AR	Marvel:	application for new station returned
	*App	FL	Union Park:	application for new station returned
840	WBHY	AL	Mobile:	station is silent
980	WJIW	NY	Cazenovia:	requests extension of CP
1020	*App	TN	Alcoa:	application for new station DISMISSED
1040	WBEB	KY	Athens:	requests extension of CP
	WJOR	TN	St. Joseph:	new station is on, heard here 11/30, CW/GOS format
1060	KAHU	HI	Hilo:	requests extension of CP
1110	KKLC	LA	Pineville:	station is silent
1170	WDFB	KY	Junction City:	new station is on the air with REL format
1200	CFG0	ON	Ottawa:	is here 50000/50000 U4 ex-1440 kHz

1250	KBBI	AK	Homer:	move to 890 kHz won't occur "for at least 1 1/2 years"
1300	KKQA	UT	Nephi:	application for new CP to replace expired CP DENIED
1310	WKQJ	MS	Hattiesburg:	let CP for 5000 watts expire, remains 1000
1320	WKPG	MS	Port Gibson:	this station has been silent for several years
1410	WAMK	MA	Brockton:	station is silent
1430	WLAU	MS	Laurel:	went silent 11/15, no plans to return soon
1510	WKPO	MS	Prentiss:	station is silent
1540	WWMK	MI	Harrison:	granted extension of CP
1580	WEBG	PA	Ebensburg:	application to move to 650 kHz DENIED
	WSSL	MS	Centerville:	station has been silent for eight months, owner had no plans to reactivate it

Dazzit for this time around. Thanks to member Chris Baskind for sending an extensive list of changes in his area, particularly the list of silent stations. Since this information never appears in the FCC's Public Notices, the only source of this info is from you the membership. Are there any silent stations in your area? Let me know.

73 and Good DX,
Jerry & BKF

Jerry Starr & Buffalo K. Foonman

BOOST FOR AMs

FCC Proposes Wiping Out All Limits On AM-FM Simulcasting

In its first major step aimed at breathing new life into the AM band, the FCC last week proposed dropping all curbs on AM-FM format duplication. For communities of over 25,000 population, those rules now limit an FM to simulcasting no more than 25% of the programming of a commonly-owned AM.

"The FM radio service is now a fully competitive and viable component of the radio industry," said the Commission. "It is no longer necessary to foster separate programming of FM stations through program duplication limits." According to RADAR, AM stations now account for 29% of all radio listening. There are 486 AM stations on the air, compared to only 386 commercial FMs.

FMs No Longer Need Protection

The simulcast rule was adopted in 1964, when it was feared that

stand-alone FMs couldn't survive against competition from FMs that could duplicate large amounts of programming from sister AM stations. Other goals of the rule were to encourage consumers to buy FM sets, and reduce the "inherent inefficiency" of duplicated programming.

At first the rule applied only to markets of over 100,000 population and allowed simulcasting half the time. In 1977 the limit on duplicated programming was lowered to 25%. And in 1979 markets between 25,000 and 100,000 population were brought under the 25% rule.

Four Stations Hit With \$19,000 in Fines

Over \$19,000 in FCC fines have been issued to four radio stations in recent weeks, including two educational FMs accused of airing paid promotional announcements on behalf of for-profit businesses. Those violations cost WVRM/Hazlet, NJ and WQMC/Greece, NY \$5000 and \$2500, respectively.

In other action, the Mass Media Bureau slapped KRTZ/Cortez, CO with a \$6000 forfeiture for running spots promoting a local bingo hall. KXVQ/Pawhuska, OK was fined \$5000 for a series of technical viola-

More Nighttime Combo Broadcasting

The Commission said last week "that to permit program duplication might result in expanded radio service, especially in the nighttime period, when it may not be economically advantageous to program the two stations separately."

Even though it has turned a deaf ear on industry complaints of economic harm in Docket 80-90 and other proceedings, the Commission said it hopes to give AMs an economic shot in the arm: "We

believe that for many AM-FM combinations it is now the case that the viability of the AM station depends on its association with a stronger FM facility.

"A reduction of AM operating expenses at this particular time could mean the difference between success or failure for marginal AM stations, and whether such stations continue to provide service to the population of their local communities."

Comments on the proposal (Docket 80-337) are due January 2; reply comments on January 17.

Radio pioneer Beaton dies

LOS ANGELES (UPI) — William J. Beaton, a pioneer in the California radio industry, has died at his home after a lengthy illness. He was 80.

Beaton, owner of stations KJLV-AM in Glendale and

KNRY-AM in Monterey, moved to California in the 1920s when radio was in its infancy.

He was the only broadcaster to serve as the president of the Southern California Broadcasters Association four times, a position he last held in 1969. He also served as the president of the California Broadcasters Association in 1954.

He was general manager of radio station KMPC in the 1940s, and converted station KWKW in Pasadena into one of the nation's first 24-hour Spanish stations. Dubuque, Iowa "Telegraph Herald" 10-24-85 1440 NRJ/SC

Radio noise may be linked to street light

Dear Write to Know: I read the letter from H.W.L., Centerville, who complained about the buzzing on the radio between 8 p.m. and 5 a.m., and the explanation given by a radio engineer that it was "industrial noise." I noticed the same thing on my radio several times, happened to look out the window and discovered that the street light was flickering at the same time the buzzing occurred. I later called Commonwealth Electric Co., giving the number on the pole, and when the light was replaced, I heard no more buzzing. This happened on two different street lights in my neighborhood. I pass this on to your readers who may be as frustrated as I was.

D.C.C., Harwichport

Dear D.C.C. Thanks for writing. CAPE COD TIMES

DOMESTIC DX DIGEST

Dave Schmidt, 42 Chelwynne Road, Castle Hills, New Castle, DE 19720

Here is the NRC column which is almost as exciting as a trip to Newark, NJ! When sending your items in, please type or neatly write, use one side of the paper, leave some space (skip a line) between items, EST, and all that jazz. Here we go:

EMERGENCY BROADCASTS

- 1140 WASG AL ATMORE - 11/20 2316 hurricane updates, REL music, o/WRVA at times. (DLH)
1560 WFSP WV KINGWOOD - 11/7 1800-1850+ good in WQXR's null w/reports of flooding, closed roads, cancellations, EEL music. 11/9 1810 still on w/info on temporary housing, etc. (KG-PA)

DX TESTS

- 1370 WMGO Not heard. (KG-PA)
1420 WJUS No sign of test, strong OC noted o/WBK all AM and french, suspect it was CJMT. (JS-OH).....Not heard. (JM-PA).....I tried to get in touch w/C W Williams on this, phone was taken out of service so suspect he may be at another station, will dig into this. (DS)

FREQUENCY CHECKS

- 2nd Mon - KQNK-1530 w/TT. (JP-ON)
3rd Tue - WJUN-1220 tentative w/TT. (JP-ON)
WAHT-1510 w/TT. (JP-ON)



radio WEKZ green county broadcasting corporation
P.O. BOX 480 WINDSOR, WISCONSIN 53156 • 608 321-2161

SPECIAL

- 560 WIND IL CHICAGO - Noted in November running ads to tune to WBBM for news/info., pending change to Spanish. (KDF-IL)
630 WBMQ GA SAVANNAH - 11/22 0016+ very good w/CFBK w/oldies, 'Solid Gold Music for Solid Gold people!', ads, CBS news at :30, jingle/IDs, ex-WKBX. (JM-PA)
690 WNZK MI WESTLAND - 10/19 1400 strong w/ethnic program, Ided as 'Americas newest AM station'. (JP-ON).....New station, directional to protect CBF in Windsor, licensed for 24 hours but likely won't be ready 'probably for a long time' per phone call to station. Add.: Box 12369, Detroit, MI 48212. (JHR-II-MI)
730 KSVN UT OGDEN - 11/12 0935 w/Original Station slogan, still in English, has not switched to KXKQ yet. (DKK-CA)
790 KXTC CA CLOVIS - 11/9 0910 thru/o/KABC w/Big Band format, better days w/5000 watts but still u/KABC nites, was off for about 6 months. (DKK-CA)
830 KNCO CA GRASS VALLEY - 11/21 1909-1930 w/ads for Grass Valley, Yuba City, NV City, ID's, weather, nice homey format, ex-1250. (S-CA)....11/21 1400 w/news, weather, sports, ads, etc. 'AM 83' ID's, fair daytime signal, mixed bag MoR format. (DKK-CA)
1080 WKV WV HURRICANE - 11/11 1645 fair w/ID, CW music, ex-WZTQ. (JP-ON)
1140 KCMJ CA PALM SPRINGS - 11/21 in all day w/CBS news, CW music, Big Country ID's, ex-1010. (DS-CA)
1290 WJGS MI HOUGHTON LAKE - 11/11 1221 very weak in deep CJBK null w/Paul Harvey, ID. Ex-WHGR. (JP-ON)
1450 WJBX CT BRIDGEPORT - 11/24 1540 noted on ET w/Sinatra music, ID's w/item RS to start at 1000 11/25, there goes 1440-1460 here! (TP-CT)....and the neighborhood in the rest of the place! (DS)
1590 WCZN PA CHESTER - Noted 12/2 0500 w/s/on, CW format, ID's as 'Country Cousin', Mutual news on hour, local at :30. Ex-WQIQ, category: Yeechl (DS-DE)

MIDDAY - MIDNIGHT

- 540 KMMT IA PORT DODGE - 11/25 1742 w/cancellations, clustered ads, weather. (DLH)
KNAK UT DELTA - 11/10 1930 noted w/American Country Countdown, again 11/11 1950-2000 w/CW music til s/off, stated PSA/PSSA power as 17 watts!(LHC)
560 WFRB MD FROSTBURG - 11/23 1540 very loud on usually blank daytime channel w/ID, usually signals onset of winter. (JS-OH) My signal is from the outside temp. (DS)
KWTO MO SPRINGFIELD - 11/14 1744 w/SW MO football program. (DLH-IN)
580 CKAP ON KAPUSKASING - 11/21 1935+ very good at times w/rock music, AM 58 ID's, many local ads, bits of WCHS/CPRA at times, has been showing up alot at night lately, isn't that great? (JM-PA) So is shoe polish! (DS).... 11/20 2300 fair w/news, sports, ads, no ID but local cities mentioned in newscast. (DLH-IN)
610 WR0S KY RUSSELLVILLE - 11/24 1739 very good w/ads, PSAs, gospel music, news, funeral anc'ts, then faded. (JM-PA)

- 630 WPRO RI PROVIDENCE - 11/13 1722 rose in WMAI's null w/news promo, music, Accu-weather, rare here on night pattern. (KG-PA)
CFBK ON HUNTSVILLE - 11/21 2033+ good at times w/remote from local business, MoR music, ads, ID's duald w/CFBQ-1340, address given as Box 630, noted w/s/off 0100. (JM-PA) We had a member there. (DS)
650 WKQK MN NASHAWAUK - 10/19 1915-1930 good is WSM null w/CW music, local news, lost at pattern change. (JP-ON)
660 WESC SC GREENVILLE - 11/23 1530 unusually loud this afternoon, Big Country Radio ID's. (JS-OH)
670 KXWI AR GLENWOOD - 11/15 1735 tentative w/CW music, ads, local mentions. (DLH)
710 WPNR VA CHRISTAINSBURG - 11/20 1702-1715 very loud o/WOR/etc. w/CW music, 1s time noted on this call. (JS-OH) I think they're up to 5000 watts again as they were loud while I was in NC, plus the DA goes W/NW. (DS)
720 WMYX GA HOGANSVILLE - 11/20 1730-1745 w/B/Sol/Dance music til s/off, dual ID w/LaGrange, Urban Dance 720, very little looped WGN (and we all know what that means!). (JS-OH) No we don't...tell us, please! (DS)
WOCR NC BREVARD - 11/20 1712-1730 atop looped WGN w/CW music, female anc'r, town is pronounced Bre-VARD. (JS-OH)
740 WLWI AL MONTGOMERY - 11/19 1737-1745 fair in CBL's null w/clustered ads, phone in contest, oldies, lost at PSSA power cut. (KG-PA)
750 KJEL MO LEBANON - 11/3 1734 good in WSB null w/address, trivia contest promo, REL music. (KDF-IL)
WHEB NH PORTSMOUTH - 11/18 1721 booming in w/ads, AM 75 ID's, where WSB be? Not here! (LM-NY) It be gone! (DS)
760 KMTL AR SHERWOOD - 11/23 1752-1800 very readable u/looped WJR w/preacher, s/off w/instr. SSB, never thought I'd hear this w/WJR so close. (JS-OH)
WCHP NY CHAMPLAIN - 11/9 1617-1630 fair in WJR's null w/sacred music, add. to write for info on station, no data s/off, closes w/musical theme. (KG)
770 WJMW AL ATHENS - 11/23 1722 up briefly for loud ID then back u/WABC/din, this happens about once every 15 years! (JS-OH) They haven't been here for 15 years! Are you pray to the Charlie McCarthy syndrome? (DS)
790 CKSO ON SUDBURY - 11/22 1808 good w/rock music, DJ chatter, ads. (LM-NY)
WAEB PA ALLENTOWN - 11/22 1810 fair, w/jingle/ID, 'Sixties at 6' oldies show, faded to CKSO. (LM-NY)
830 UNID 11/16 1655 CW music, 'The new voice for the valley' slogan, missed ID, fair/good signal, looping SW/NE, who? (DLH-IN)
KBOA MO KENNETT - 11/13 1726 poor w/WCOO w/sports show. (DLH-IN)
CFJR ON BROCKVILLE - 11/10 1615 fair o/WCOO w/ads, pop music. (JP-ON)
840 CHUR ON NORTH BAY - 11/9 1640 good o/WHAS w/ads, ID, rock music. (JP-ON)
890 WQIS MS LAUREL - 11/24 1733 readable u/WLS/891 het w/Jackson State football, many local ads, s/off 1801 in middle of half-time show! Hope nobody wanted to hear the second part of the game! (JS-OH)
UNID 11/7 2238 strong TT o/WLS, possible KDXU, very strong. (LHC-CA)
920 WBBB NC BURLINGTON - 11/16 1641 ads, college football, way atop. (TF-CT)
930 WCNR PA BLOOMSBURG - 11/16 1638 college football scores, music, w/WPAT/WBEN. (TP)
970 WFUN OH ASHTABULA - 11/15 1551 in WAVG null w/pop music, ads, ID. (DLH-IN)
980 KDSJ SD LEAD - 11/21 2233 poor w/ID thru WONE w/tentative high school basketball game, thanks to Kramer/Jasinski for tip. (KDF-IL)
1010 KXEN MO ST LOUIS-FESTUS - 11/3 1744 poor w/instr. music, brief s/off. (KDF-IL)
1030 WXSS TN MEMPHIS - 11/10 1749 1800 strong in WBZ's partial null w/gospel music, ads, ID, lost at power change. (KG-PA)
WMIN MN MAPLEWOOD - 10/19 1905 strong o/WBZ w/Mutual news, CW music, bit of freq. causing a 100 hz hum. (JP-ON)
1050 UNID 11/19 2252 w/French/EZL music, poor o/u XBG til fade out. (DLH-IN)
1070 WINA VA CHARLOTTESVILLE - 11/20 1700 ID, CBS news, lost to WIBC/CBA. (TP-CT)
1080 KSCO CA SANTA CRUZ - 11/3 1940-2000 fair w/heavy KNX-1070/XSPRS-1090 splash w/football summary, PSA, gone at pattern change. (LHC-CA)
1090 WBAL MD BALTIMORE - 11/15 1726 fair in WWWE-1100 splash w/sports. (DLH-IN)
KLSC CA AURORA - 11/21 1844 w/Denver ads, atop then gone at power change. (DKK)
1130 WCXI MI DETROIT - 11/16 1630 good in WNEW null w/CW music. (LM-NY)
1140 WIXC AL HAZEL GREEN-HUNTSVILLE - 11/21 1743 CW music, ID, s/off w/'Wick-see in Dixie' slogan, few bars of Dixie played. (DLH-IN)
1150 WMST KY MT STERLING - 11/22 1750 poor thru WMEX/noise w/female anc'r, ads. (LM)
1180 WSAF GA TRION - 11/10 1709 fair o/u WHAM w/news, weather, sports. (JP-ON)
1190 CHTN PEI CHARLOTTETOWN - 11/22 1830 fair thru WLIB w/Top 40 music. (LM-NY)
WKDJ PA HUGHESVILLE - 11/21 1300-1400 strong w/CW music, clustered ads, many 'Kadje (Cage)-1190 AM Stereo' ID's, o/background noise. (KG-PA)
WANN MD ANNAPOLIS - 11/21 1641-1647 good o/WOMO w/ad, jingle/ID, B/Sol music. (JM-PA)....11/20 1624 B/Sol music, way o/WLIB. (TP-CT)
1200 WAGE VA LEESBURG - 11/20 1640-1650 business news, ID, Mutual and local news(TF)

- 1200 WROX MA FRAMINGHAM - 11/23 1627 fair w/ID, pop music, mention made of upcoming pattern change. (KDF-IL) Big time stuff! (DS)...10/30 1704 mostly u/KFNW w/local news, sounded like 50 kw for sure! (JP-ON) It's not.
- 1210 KQTL AZ SAHURITA - 11/12 1926 up o/KCLG for ID in Spanish, Radio Que Tal. (DKK) UNID Since July '85, a very disturbing tone has been on this freq., noted nightly, likely someone off freq. (KASY or KRSV), bothersome at times, anyone else noting this? (DKK-CA) Not here-hi! (DS)
- 1250 KNEU UT ROOSEVELT - 11/6 1915-2000 fair o/u KTMS w/CW news report, female anc'r till s/off, '5000 watt voice of NE UT'. (LHC-CA)
- 1260 KWSU WA PULLMAN - 11/5 2029 weak u/KTMS w/stock market report, weather. (LHC) KKLR CA SAN FRANCISCO - 11/14 1924 u/KGIL w/traffic info, Trendformation Radio ID. (LHC-CA)
- CIHI NB FREDRICKTON - 11/22 1757 good o/all w/ads, end of DJ show. (LM-NY)
- 1270 KOOK CA TULARE - 11/9 1924 good w/female anc'r w/ads, promo, community note. (LHC) KAJO CA GRANTS PASS - 11/6 2006 briefly w/weather, ad, gone at pattern change (LHC)
- 1280 WLMJ OH JACKSON - 11/11 1701 faded up w/AM-FM ID then gone. (JP-ON)
- 1290 WKLB KY MANCHESTER - 11/12 1823 good/xlnt w/CW music, ads, ID. (DLH-IN)
- WKNE NH KEENE - 11/19 2247 up briefly thru CJBK w/ads. (LM-NY)
- KHSL CA CHICO - 11/14 1955 briefly noted w/ad, ID, CBS news. (LHC-CA)
- 1310 WNAE PA WARREN - 11/16 1605 fair w/ads, local news. (LM-NY)
- KTKR CA TAFT - 11/9 1933 good w/ad, football post game show. (LHC-CA)
- 1330 WADJ PA SOMERSET - 11/20 1630-1640 rock music, community notes, way o/WNYM. (TF)
- 1370 WGTB IN BLOOMINGTON - 11/15 1645 good at times w/CW music, ads. (JP-ON)
- 1380 WSYB VT RUTLAND - 11/18 1620-1634 o/all w/Elvis song, ID, news, ads. (KG-PA)
- 1390 WDOT VT BURLINGTON - 11/1 1736 strong w/weather, Country Giant IDs, good bet for anyone needing VT. (JP-ON) Maybe out there! (DS)
- WFBL NY SYRACUSE - 11/21 1758 thru din w/MXL, ID. (DLH-IN)
- 1430 WIL MO ST LOUIS - 11/13 1700 ID noted thru mess, an old AN pest not heard in over 10 years! (JP-ON)
- 1440 WKLN NC LEXINGTON - 11/13 1655 fair w/Gospel music, ID, local news. (JP-ON)
- 1450 WFER PA FRANKLIN - 11/9 1706 weak in mess w/ID then gone. (JP-ON)
- KEST. CA SAN FRANCISCO - 11/12 2029 strong o/pack w/ads, ID. (LHC-CA)
- WKXL NH CONCORD - 11/24 1614 female anc'r, CBS sports, faded to mob. (TF-CT)
- 1470 WHUT IN ANDERSON - 11/19 1904 noted w/OC, xmtr likely left on. (DLH-IN)
- WMGZ PA FARRELL - 11/9 1654 ID noted in mess, last heard '80 as WGBU. (JP-ON)
- WKWV PA ALLENTOWN - 11/13 1645 on top w/ID, CW music. (JP-ON)
- 1550 WCCZ FL NEW SMYRNA BEACH - 11/10 1730 strong in CBE's null w/full data s/off after WYNX's power cut. (KG-PA)
- 1570 WVVW WV ST MARYS - 11/17 1707-1714 atop w/weather, ID, gospel songs. (KG-PA)
- 1580 KOKB OK BLACKWELL - 11/22 2057 many local ads, likely now on nights! (KDF-IL)
- WHHM TN HENDERSON - 11/25 1859 poor w/CW music, ID, on PGSA or nights? (KDF-IL) UNID 11/15, 11/16 2359 steady TT heard both nights w/no ID's, breaks on hour and :30, who? (DLH-IN) Welcome to the CBJ AN show! (DS)
- 1590 KYDE AR PINE BLUFF - 11/17 2308 promos, B/Sol music, ID as 'Mighty 1590'. (DLH)

MIDNITE - MIDDAY

- 650 *UNID. 11/20 0205+ very strong TT in WSM null, looping NW, WKKQ? (JM-PA)
- 740 *KBRT CA AVALON - 11/4 0324 tentative w/strong OC o/KCBS, later w/REL music and OC, no ID noted. (LHC-CA)
- 840 *WHAS KY LOUISVILLE - 11/16 0320 noted w/OC this AM. (DLH-IN)
- KSNB OR SEASIDE - 11/4 0904 weak w/UPJ news, weather. (LHC-CA)
- 890 KDKU UT ST GEORGE - 11/18 0958-1050, 11/19 1909 xlnt w/bits of WLS w/contests, promos, requests for signal reports, ABC news. (LHC-CA)...11/20 0149 w/ID o/u WLS w/pop music. (DKK-CA)
- 910 KALL UT SALT LAKE CITY - 11/8 0955-1001, 11/12 0950 good o/KNEW w/ads, traffic report, news, gone at pattern switch. (LHC-CA)
- 920 KOLO NV RENO - 11/14 1003 noted w/CW music, much KJL-930 splash. (LHC-CA)
- 1050 KTBA AZ TUBA CITY - 11/1 0910 good o/XED w/local/regional news. (LHC-CA)
- 1110 KHAC AZ WINDOW ROCK - 11/4 0920 fair o/u KRLA w/Rise & Shine program, Moody B'Castg news, ad, soon faded. (LHC-CA)
- 1200 WAGE VA LEESBURG - 11/20 0630 ad, brief news, way atop freq. (TF-CT)
- 1250 KNEU UT ROOSEVELT - 11/12 1010 briefly noted w/ad, ID. (LHC-CA)
- 1260 WDCW DC WASHINGTON - 11/25 0135 way o/usual WBBG w/MYL, rarely heard. (JS-OH)
- 1290 WNBK NY BINGHAMPTON - 11/18 0015-0019 fair u/CJBK w/pop music, ID. (LM-NY)
- 1310 KZZP AZ MESA - 11/15 1009 noted w/ads, traffic report. (LHC-CA)
- 1340 WDCR NH HANOVER - 11/18 0022 fair u/din/noise w/rock music. (LM-NY)
- WNHC CT NEW HAVEN - 11/18 0024 fair, fading w/WDCR w/PSA. (LM-NY)
- 1350 KUNN CA BAKERSFIELD - 11/14 0940 topping KSRO/KCKC w/ID, CW music. (DKK-CA)
- 1370 WSPD OH TOLEDO - 11/18 0031 briefly good in WFEA null w/weather. (LM-NY)

- 1380 WNAQ CT NAUGATUCK - 11/19 0645-0702 usually on top w/sports, weather, ads, news on hour, many Stereo 1380 ID's duald w/Waterbury. (KG-PA)
- 1400 WRDO ME AUGUSTA - 11/16 0050 poor, up briefly w/promos. (LM-NY)

* T I S *

- 530 CFYZ ON TORONTO - Per verie, station runs 35 watts into a 35 ft mast atop a 4 story building, standard message is broadcast under normal conditions and special messages are sent if traffic warnings are needed. (KG-PA)

RANDUMBS

As reported at the start of this column, C W Willaims has been found! He's back at WJSO-1590, this time as CE. Anyone wanting a verie from WJSO should write to him, and he is very sorry for the no show of the WJUS-1420 test as he was in transit at the time.

CONTRIB'S AND ASSORTED SENDERS

JM-PA/John Malicky, Pittsburgh, PA/Superadio II
 KG-PA/Kermit Geary, Walnutport, PA/HQ180, R389, SM2, LW
 DLH-IN/Dave Hascall, Fortville, IN/Superadio, DX400, LW
 KDF-IL/Karl Forth, Chicago, IL/HQ160, IC R70, Loop, LW
 TF-CT/Tony Fitzherbert, Fairfield, CT/ICPS5W
 LM-NY/Laura McCusker, Kingston, NY/Superadio trio
 JS-OH/Jerry Starr, Hubbard, OH/HQ180, Loop
 DS-CA/Dan Sheedy, Encinitas, CA/6500W, Diopole, R70, LW, R4B, Loop
 JFON/Jeff Falconer, Clinton, ON/NoRd 515, RadioWest Loop, LW
 DKK-CA/Don Kaskey, San Francisco, CA/HQ140X, SM2
 JHRII-MI, John H. Rose II, Warren, MI/TRF
 LHC-CA/Les Carpenter, El Toro, CA/R2000, Frt 7700, Ant. Tuner, Car radio

And that's it for this time! 73's - Good DX!

KDKA Shakes 'Em Up In Pitt With Scoop On New Pirate Boss

By LENNY LITMAN

Pittsburgh, Nov. 19.

Bob Pompeani, one of the four sportscasters on KDKA-TV, shook up the sport news business here when he broke the story on the signing of the new g.m. of the Pittsburgh Pirates a day before the scheduled news conference.

Pompeani had the story Nov. 6, and went with it on the 6 p.m. news on KDKA-TV. That night, Doug Hoerth on KQV-AM had a caller tell him Syd Thrift had been named the new Pirate boss. Hoerth's response: "Who is Syd Thrift?"

On Nov. 7 both newspaper dailies had stories saying Thrift would be named and let it go at that. But Myron Cope, with the top-rated sports talkshow in the city, and Sam Nover, sports director at WPXI-TV, blasted the Pirates for the "leak."

Mention was made that Westinghouse Electric owns KDKA and has the broadcasting rights to the Pirates. Bruce Keidan, sports editor of the Pittsburgh Post-Gazette, wrote in his column, "World of his (Thrift's) coronation already has reached the public by means of a dispatch from the franchise's new semi-official news agency, KDKA Television, a Westinghouse affiliate."

Cope told David Fink, who writes the sports TV column on the Post-Gazette, that "If the Pirates think they can get by without the other stations in town, they're badly mistaken."

"Look at it this way. There'll probably come a time when the Pirates want a little help on something and want one of their people to be on my show. But if they leak tell him Syd Thrift had been named the new Pirate boss. Hoerth's response: "Who is Syd Thrift?"

Barbara Holsopple, radio-tv editor of the Pittsburgh Press, chided Nover for his commentary, saying it was "a childish tirade" and that "KDKA's story was a good reporter's effort rather than a gift from the ballclub."

Pompeani said he had been working on the story for three weeks and that he got it "without any Westinghouse connection."

Per. Kemp

'AMOS 'N' ANDY' SHOW A FUROR IN BOSTON

Boston, Nov. 19.

WEEI has been asked by a group of black clergymen to cancel broadcasts of the old radio comedy show "Amos 'n' Andy," which the station has aired twice as part of its radio classics series Saturdays at 8 p.m.

The tv version of the show was discontinued by CBS-TV 19 years ago.

"We intend to let them know that that sort of thing just isn't appropriate," Rev. Charles Steith, pastor of the Union United Methodist Church, said. "It's demeaning to black people, and unhealthy."

Doug Stephan, WEEI program director, said the station would discontinue the show "only if they gave me good reason to," adding he was unaware of the program's controversial history.

WFVR
1580

WONDERFUL FOX VALLEY RADIO
1880 PLAIN AVE., AURORA ILL 60505

KLEE **AM**
FM

212 1/2 EAST MAIN
OTTUMWA, IOWA 52501

FORMATS

Tony Fitzherbert, 356 Jackman Avenue, Fairfield, CT 06430

Here in Fairfield County, WJBX-1450 is scheduled to sign on the air at 10:00AM, on 11-25-85, after that frequency has been silent for eight months. Bridgeport Mayor Nicholas Paoletta will sign the station on the air. 1450 has been dark since WNAB left the air on April 1. The station will offer a combination of adult contemporary and rock oldies, and intends to give WICC a run for the money, according to a Bridgeport Post article. According to WJBX GM Robert Pantano, listeners will be encouraged to call the DJ's for on the air discussion and comment. Pantano noted that the station will emphasize the station's (and DJ's) personality, and that the DJ's will be "visible in the community". The station will broadcast from space in a refurbished warehouse at 1862 State Street Extension, around the corner from WDJZ-1530's studios and transmitter, and will use the old WNAB transmitter on a hill overlooking Route 8, in Bridgeport's North End.

WNAB had broadcast from an office on East Washington Street, in the heart of Bridgeport's crime ridden East Side. Initially on the air in 1964, WNAB saw its revenues go from \$603,000 in 1981 to \$375,000 in 1983. The WJBX owners bought the station for \$545,000. WNAB's final format consisted of an assortment of ethnic shows, MOR music, talk, and Mutual Network feed. The WNAB call stood for "We're Nuts About Bridgeport".

In other news, KPRC dropped the "Game Zone" format, after winding up as #26 in the Bay Area Arbs.

Our format column features a look at metropolitan Albuquerque radio, courtesy of Jerry Starr, who vacationed there over the summer, and Evolutions Editor Pete Nolan. Thanks go to the both of you for your contributions. And here we go with the fruits of many PD's imaginations....

570	KLUB	UT	Salt Lake City	- Drops Adult Standards for NX/TLK(N).
610	KRKE	NM	Albuquerque	- CHR(S).
690	WNZK	MI	Westland	- New station, ethnic for Metro Detroit.
710	WAQI	FL	Miami	- Ex-WGBS with NX/TLK, now Spanish(N).
730	KDAZ	NM	Albuquerque	- Spanish and English REL(N).
770	KOB	NM	Albuquerque	- NX, TLK, Talknet, KING overnight, some Ad. Con. during AM drive(S).
800	WCCM	MA	Lawrence	- Drops Ad. Con. for NX/TLK(N).
810	KAPE	NM	Santa Fe	- CWM(S).
830	KIKI	HA	Honolulu	- Drops CHR for SMN Ad. Con.(N).
840	CHUR	ON	North Bay	- New station, Ad. Con(N).
860	KARS	NM	Belen	- Spanish(S).
920	KQEO	NM	Albuquerque	- Oldies(S).
970	KBIT	MT	Billings	- Ex-KOOK, CHR, now CWM(N).
	KDCE	NM	Espanola	- CWM(S).
980	WRIP	GA	Rossville	- Now silent(N).
1000	KKIM	NM	Albuquerque	- REL(S).
1080	KWAI	HA	Honolulu	- Back on the air for a month with CHR, then silent again(N).
1150	KDEF	NM	Albuquerque	- MYL(S).
1190	KXKS	NM	Albuquerque	- Spanish "Super X".
1230	KSPA	NM	Alamogordo	- CWM(S).
1240	KJOP	CA	Lemore	- Drops Black programming, now all Spanish(N).
	KLTN	NM	Albuquerque	- Spanish(S).
1250	WOBQ	PA	York	- Ex-WNOW, CWM, now Adult Standards(N).
1260	KUSF	NM	Santa Fe	- Ad. Con. (S).
1270	KINN	NM	Alamogordo	- MOR drives, Spanish middays(S).
1310	KZZP	AZ	Mesa	- Drops CHR for SMN Ad. Con. (N).
	KDIA	CA	Oakland	- Back on the air with Black programming
	KXAK	NM	Albuquerque	- Contemporary Religion, Gospel Rock(S).
1340	KMAK	CA	Fresno	- Drops CWM for NX/TLK(N).
	KSYX	NM	Santa Rosa	- MOR, CWM, REL, T40(S).
	KKIT	NM	Taos	- CWM, Spanish, Tewa Indian Programs(S).
1350	KABQ	NM	Albuquerque	- Spanish(S).
1400	KTRC	NM	Santa Fe	- Ad. Con., A(1)news, RKO at night(S).
	KTNM	NM	Tucumcari	- CWM, some Spanish at night(S).
1420	WNWL	VA	Amherst	- Ex-WAMU, CWM, now SMN Ad. Con.(N).
1430	WBMK	TN	Knoxville	- Was Black, now silent(N).
1440	KMLB	LA	Morroe	- Now CWM, "K-14"(N).
1450	KRZY	NM	Albuquerque	- CWM(S).
1460	KLCZ	CA	Salinas	- Ex-Kdon, 1s Ad. Con. "Classy"(N).

1480	KIDI	ID	Gooding	- New station, CWM(N).
	WTDY	WI	Madison	- Ex-WISN, Ad. Con, now NX/TLK(N).
1500	KABR	NM	Albuquerque	- NavaJo, CWM, Educational (Indian Culture, etc)...noted that the station is licensed to the Alamo Community, and is non-commercial, is a 1000 watt daytimer(S).
1520	KAMX	NM	Albuquerque	- T40(S).
1580	KTSS	IA	Davenport	- Drops Ad. Con. for Black(N).
	KZIA	NM	Albuquerque	- NX/TLK(S).

All for this issue. Thanks, again, Jerry, and Pete...and for the rest of you, get those formats in. Also, for Station Profiles...I am looking for info on KLIP-1190, CHYR, and CLKW.....these three stations have a most interesting history, and I'd like to put together a profile on each. Also, am working on three more profiles from my Detroit and Toledo trip.....and have been offered assistance by the management of a 50 Kw giant in New York City to do a history of their station...so interesting Profiles are coming out of the past from several unique stations.

And, when you hear Classical Music on WNBC-660, let us know...as over 750 readers of DX News will be interested....

73's



Calling All DXers!

THE 1986 CHICAGO DX CONVENTION

Feb. 7-9, Gurnee Holiday Inn
Route 132 and I-94, Gurnee, Illinois

CALLING ALL DXERS FROM ILLINOIS, INDIANA, WISCONSIN, and anywhere else... If you're looking for a way to shake the winter blues, make plans to attend the winter DX event of the season -- the **1986 Chicago DX Convention** -- sponsored by the Chicago Area DX Club the weekend of Feb. 7-9, 1986, at the Gurnee Holiday Inn just north of Chicago.

Why shovel snow when you can relax in a Jacuzzi, or swim in the Holiday Inn's spacious indoor pool? Plus, you'll have the chance to meet some of the finest DXers from the Chicago and Milwaukee areas.

The registration fee includes a Friday night reception (6 p.m. to 11 p.m. -- all you can drink), Saturday banquet, plus a wide range of interesting and informative seminars and special events.

This is a convention for serious DXers, with sessions on hearing the rare stations, using audio filters and accessories, plus using the computer to enhance DXing. Guest speakers include Gerry Dexter, author of Clandestine Confidential, and Don Moore, who will discuss the Latin American shortwave scene, with slides from stations in Honduras, Ecuador, Peru, Uruguay and many other countries.

To register, send a check or money order for \$35 to Kevin Mikell, 241 North Hamlin Avenue, Park Ridge, IL 60068. If you plan to stay overnight, CADX has secured a block of rooms at the Holiday Inn for a special rate of \$40 per evening for a single, and \$47 per evening for a double. Hotel reservations must be made through the Holiday Inn either by phone (312) 336-6300, or by writing to 6161 West Grand Avenue, Gurnee, IL 60031. The registration deadline for both the convention and hotel rooms is **January 20, 1986**. When making your room reservations, be sure to mention the special CADX rate!

If you're a serious DXer, make plans to attend the 1986 Chicago DX Convention. When writing to Kevin, please provide him with a list of subjects you want to see covered by a seminar. We'll do our best to see that the topic is on the agenda -- volunteer lecturers will be welcomed! For more details, call Kevin Mikell at (312) 825-3608 or Austin Kelly at (312) 776-5144.

STATION PROFILE

Tony Fitzherbert, 356 Jackman Avenue, Fairfield, CT 06430

KTWG Radio: Ten Years After!

by TWR Missionaries Ed Flanagan & Jon Vaught
(TWR: Fall 1985)

A Guamanian family: "Our life has really changed... I have trusted Jesus as my Lord, my Savior, and my God... If at any time you come to our house, visit me at work or riding in our car, please don't be surprised that all our radios are tuned to KTWG. We are a KTWG family!"

A missionary on the remote island of Yap: "Your programs have challenged, encouraged, comforted and straightened me out! Again and again I praise the Lord for this 'spiritual well'."

A U.S. military family stationed in Guam: "Two years ago when we arrived on Guam the first item of furniture we unpacked was our stereo. We were feeling depressed and were homesick for family and friends. We turned on the stereo, without changing the radio dial, and the first thing we heard was KTWG! It was our confirmation from the Lord that there were other Christians here on the island and that He was with us!"

These are but a few of the many responses to Trans World Radio's "smallest voice" (in transmitting power) and its only local radio station ministry in this area of the world. Guam is indeed a strategic point on the globe for our superpower shortwave station, KTWR, to reach the millions of China. But what about the few thousand souls on Guam and Micronesia? Doesn't God care about them, too? His answer and our answer, is "YES!" As a result KTWG, a 10,000 watt AM (medium wave) station, went on the air August 22, 1975 to communicate the Gospel of Jesus Christ to the area.

KTWG's real baptism into community service came just a few months later with the heavy rains and high winds of super typhoon Pamela. In May of 1976, Pamela battered Guam for two days with winds up to 165 mph, destroying hundreds of the island's tin-roofed dwellings and stripping the island virtually bare of vegetation. The storm left thousands of inhabitants without power and water for weeks.

But KTWG suffered only minor damage and was able to stay on the air. The station became the local government's only link with its citizens, since the typhoon had crippled the rest of Guam's radio and TV stations. Every radio on the island was tuned to KTWG. As the listeners received vital government and civil defense bulletins, they also got an added bonus...they heard the Gospel!

Until 1982 KTWG operated out of a modular home located on a secluded winding road on Nimitz Hill. In November 1982 KTWG moved to Trans World Radio's new studio/office building, also located on Nimitz Hill, but on the more heavily-traveled Spruance Drive. The new structure houses the general offices for the Guam field, the shortwave studio ministry (KTWR) and KTWG. The staff praise the Lord for the new building, which is quite a change from the cramped quarters of the modular home; and for the added safety the new building affords during typhoons!

As the TWR-Guam staff celebrate KTWG's tenth anniversary, they look forward to another decade of service to the Lord and to the people of Guam, Northern Marianas and Micronesia. Please pray that God will continue to pour out His knowledge and wisdom on this area through KTWG.

The basic goal of KTWG is to build up the body of believers on Guam and in the surrounding area with sound Biblical teaching and good Christian music. Pastor Tom Larmore, of the Bayview Baptist Church on Guam, confirms

that KTWG is an important tool that helps local churches grow and minister.

KTWG's format is aimed primarily at an adult Christian audience. During most daytime hours, listeners hear a blend of Christian music and short features, as well as news updates from the wires of UPI and the International Media Service.

A variety of children's programs are aired weekday afternoons beginning at 3:30pm. Bible and family oriented begin at 6:30pm.

KTWG is expanding its ethnically-oriented programming. It currently airs a Tagalog program for Filipino listeners, and plans to introduce segments in Chamorro for local Guamanians. The staff also hopes that future research among the Japanese, Korean, Chinese, and other Micronesian peoples will lead to programming in those languages.

KTWG Radio operates on 801 kHz between 1955 and 1405 UTC.

(Thanks to Mark Rich of Denver for lending me the copy of Trans World Radio's Fall 1985 magazine. Typed by Wayne Heinen & the Apple IIIe)

Tiare Publications

BOOK NEWS

P.O. Box 493 • Lake Geneva, WI 53147

Are you still waiting for that illusive, impossible Radio Botswana QSL? Here's your chance to have "Mr. QSL" - Gerry L. Dexter go to bat for you!

To introduce his newest book - SECRETS OF SUCCESSFUL QSL'ING - Gerry has agreed to pick one lucky shortwave listener and go to work trying to verify Radio Botswana for that listener. Gerry will spend up to a year and make up to six attempts to get a Radio Botswana QSL for someone - maybe you!

SECRETS OF SUCCESSFUL QSL'ING is the complete guide to reception reports and QSL collecting, written by the acknowledged leader in the field and author of the famous World Broadcast Address Book (formerly the QSL Address Book). Apply the approaches and techniques described in "Secrets" and you're virtually guaranteed to improve your QSL returns!

SECRETS OF SUCCESSFUL QSL'ING takes you from a discussion of the what and why of QSLs on through basic reception reporting, the ins and outs of follow-ups, tentatives and prepared cards. You'll learn how to get the most out of your post office, how creating your own specialized lists can increase your response rate. You'll find out about peppering, shotgunning, the John Alden Technique and much, much more. Everything from taking care with dates to when you shouldn't send your photograph with a report.

SECRETS OF SUCCESSFUL QSL'ING - with Foreword by Ian Mc Farland, host of Radio Canada International's "SWL Digest" program - will be available in January, 1986.

The book is priced at only \$9.95, plus \$1 shipping and handling, \$2 s/h for foreign orders. U.S. funds only, please.

Advance orders may be sent to:

Tiare Publications
P.O. Box 493
Lake Geneva, WI 53147
U.S.A.

OH! To qualify for the Radio Botswana QSL attempt just send your name and address to: Gerry L. Dexter, RR4 Box 110, Lake Geneva, WI 53147. Deadline is March 30, 1986 with the winning name drawn March 31. No purchase necessary.

CONTEST ! CONTEST ! CONTEST ! CONTEST ! CONTEST ! CONTEST ! CONTEST !

Mark Connelly - WALION - 38 William Road - Billerica, MA 01866

I heard my first medium-wave Trans-Atlantic stations back in 1961. To celebrate 25 years of TA DX and to stimulate general interest in international DXing, I'm setting up the following listening contests:

Contest 1

* DXers living in the countries listed in the World Radio-TV Handbook's North America, South America, and Central America and the Caribbean (including Mexico) sections are eligible to enter Contest 1. DXers in Hawaii are also eligible for Contest 1.

* The first prize is a choice of a phasing unit or of a regenerative tuner (approx. value \$100). The second prize is *YET TO BE DETERMINED!* (HW)

* Stations received are eligible for points. These stations must be heard between 01 JAN 1986 and 31 DEC 1986. The stations must be in countries listed in the Europe, Africa, and Near and Middle East sections of the World Radio-TV Handbook. Eligible stations must be broadcasters heard between 520 and 1700 kHz.

* Points are scored as follows:

QSL for a 1986 reception
(xerox copy is to be submitted to me by 31 MAR 1987) 3 points

Reported to IDWD for first time
in 1986 by that reporter 2 points

Reported to IDWD two or more weeks
after a previous 1986 report 1 point

Contest 2

* DXers living in the countries listed in the World Radio-TV Handbook's Europe, Africa, and Near and Middle East sections are eligible to enter Contest 2.

* There is one prize, *To be a surprise... You'll know LATER!* (HW)

* Stations received are eligible for points. These stations must be heard between 01 JAN 1986 and 31 DEC 1986. The stations must be in countries listed in the North America, South America, and Central America and the Caribbean (including Mexico) sections of the World Radio-TV Handbook. Eligible stations must be broadcasters heard between 520 and 1700 kHz.

* Points are scored as follows:

QSL for a 1986 reception
(xerox copy is to be submitted to me by 31 MAR 1987) 3 points

Reported in DX News for first time
in 1986 by that reporter. 2 points

Reported in DX News two or more weeks
after a previous 1986 report. 1 point

I will keep a running tally of eligible loggings noted in DX News during 1986. The contest will be closed out on 31 MAR 1987 and winners will be notified in April or May of 1987. I reserve the right to give or to deny credit for UNID's (based on tip value), tentatives, and incorrect/inaccurate loggings. Points may be subtracted for obviously-fraudulent entries. In cases of ties, the DXer who heard the greater number of truly rare stations will win. The \$100 equipment prize will only be awarded to a DXer with a point total of at least 100; *THE OTHER PRIZE* will only be awarded to DXers with point totals of 50 or greater. (HW)

HEADQUARTERS BYTES

A word or two from Mike Knitter, Editor of DX News

Last Name	First Name	Man Call	State	CLASS	HAM OPERATION
Anderson	Gordon L.	N8CC	OH	T	2, 220, 440 FM, 7 Novice CW
Arey	Thomas J.	WB2GHA	NJ	G	80-10, 2FM
Bartlett	Charles L.	WB2BOY	NJ	G	
Baskind	Christopher	K4SYFE	MS		80 40 CW
Bergadano	Bill	KA2BH2	NY	T	440 FM
Bowker	John D.	WA2MEN	NJ	A	80-10 SSB
Callarman	John A.	K4PSPA	IL	N	
Carpenter	Leslie H.	W7E11	CA	T	
Casciato	A.C.	N4EI	VA	E	
Clary	James T.	WB91HH	CT	E	80-40 CW, 2FM
Coleman, Jr.	Bill	KA4DAP	NC	T	80/40
Connelly	Mark	WA1ION	MA	E	75AM, SSB
Crowell, M.D.	B.J.	KA0TX0	MN		
Cruser	Eric W.	W2OYR	NJ	A	160-10 AM, SSB
Dabelstein	Carl	K8SBV	KS	A	80-10 CW
Dellechiaie	Frank	K8BW	CA	E	
Dence	Harry F.	N4C8R	KY	A	
Dotson	Tim	KA80GL	KY	G	
Durocher	Conrad R.	WA1YTK	TX	T	
Earnhardt	Albert	WB4AFR	SC	E	160/80/40 CW, SSB
Edmunds	Russell J.	WB20JH	PA	T	2 SSB, FM
Fehr	Robert	K0WPK	MN	E	
Flanagan	Pat	W08NM	OH	A	160-10, 2H
Foltman	Dale C.	WB2SOK	NY	G	
Galerstein	Robert	WB2UGO	NY	G	
Goad	Edwin	K44UH	NC	E	
Greene	George	K8NDY	OH	T	
Gruis	Dr. Tom E.H.	K8HTF	IA	E	160, 6, 2, 220
Hackett	Robert	W5EPL	TX	A	
Hagan	James V.	WA4GPK	FL	T	2, 220, 432 + 1750 KHz
Hardy	William	KA7EJU	WA	N	40
Hartlage	William P.	WD4JLT	KY	N	
Headlee	James D.	KJ4B	NC	E	
Healy	Craig	KA1KDF	RI	A	80-40 CW & Phone
Heller	Herbert	K3DE	PA	E	10
Hill	James S.	WA1W	CA	A	
Hutton	Charles	WD4ELO	GA	A	160-10 CW, SSB
Jackson	Dennis	K1GHW	CT	A	160AM, 75SSB, 2FM
Jacobs	Glenn	K2EMJ	PA	G	
Johnson	Steve	K3LJN	MD	G	40-10 CW, 20 SSB
Kase M.D.	James P.	NA9P	IL		
Kay	John. F.	KA1XC	MA	A	
Keller	Lenny	WB9HMD	WI	A	
Kemp	Peter W.	KA1KD	CT	A	2H, 10-160; AM, CW, SSB, RTTY
Kennedy	David J.	K4HZF	VA	G	
Kennedy	Steve	KB4P2X	TN		40 CW
Kerchner	K.C.	KC91H	IL	A	10-80 CW, Eves, Wknds, 2FM
Kowalski	Ed	K3PIHK	PA	T	2FM; 6 SSB
Krzemien	Rick	KA91HK	IL	T	
Lovett	Brad	W4B1CC	IL	T	2FM
Maloney	Mike	AC5P	OK	E	
Marinana, MD	Al	AH600	HI	A	
Marvin	Bill	KB91V	MN	A	
May	Ronald A.	WB8INF	OH	G	
Mayer	Alan	WD91RV	CA	A	2-80 SSB, FM
McDowell	William G.	K4CIA	NC	E	
Merriman	Alan	K4GLU	VA	E	20 CW
Mestre	Jorge	KA4ETZ	VA	N	
Mitchell	Gary	K8BAC	CT	G	40/80/160 CW
Morris	James T.	WA6K8B	CA	G	10, 20 SSB & CW; 2FM SSB, 220, 440
Morus	John A.	KA11GP	NC	N	10/15/40/80 CW
Mount	Paul R.	WA2080	NJ	N	
Mullinger, Jr.	George	W4CNR	SC	A	40
Neal	Sam	N5AF	TX	E	
Nelson	Kurt A.	WB3LJA	PA	T	6 CW, AM, SSB, FM
Noffsinger	Ken	AEB1	OH	E	
Olson	Reginald L.	NH6T	CA	E	

Name	First Name	Han Call	State	CLASS	HM	OPERATION
Priester	Harry	W9FB0	IL	A		
Purdum	Gene	N8CKA	MI	G		
Putman	Larry	W8344D	GA	T		
Ramsey	John N.	N1AKB	CT	A		
Resnick	Al	K3PKR	IL	A		
Ridge	John T.	W4264D	NY	G		
Rose II	John H.	NJ8Q	MI	E		
Sawyer	Paul B.	W1MFE	MA	G		
Shahren	William	N1CQ	MA	E		
Shiels	John	W3QKP	PA	A	80, 15	
Simons Jr.	Dr. Lynn	AA4LH	AL			
Smith	Gardner	W9ALZ	DC	G		
Smith	Steve	W46S0C	CA	T		
Sparks	Erwin R.	N1ES	CT	E		
Stonier	Robert S.	N2CJS	NJ	G	2FM	
Swertfager	Howard J.	W420RX	NY	E		
Taylor	Charles A.	W091NP	MA	T		
Thompson	Bill	K4248B	NY	N		
Thompson	Gleann L.	W55UW	NH	A		
Truax	Dick	K89AU	KY	G	10-160 CW & SSB	
Tudenhaw	John	W0JRP	MO	A		
Viens	Daniel L.	W81CSV	NH	N		
Vogt	Larry T.	N4AA	VA	E		
Walker	Robert C.	K49V6D	MI	T	2FM	
Weil	Larry	K41BCP	MA	T		
Welsh Jr.	James J.	W20FF	NJ	T		
White	David	W1S2J	ME	G		

STATION PROFILE

Tony Fitzherbert, 356 Jackman Avenue, Fairfield, CT 06430

Clear Channel 650, WSM...Nashville, Tennessee Steve Kennedy K8HPXZ

Located just south of Brentwood, Tennessee; East of I-65 is the tower and transmitter of WSM-650. I have long been a fan of WSM, and The Grand Ole Opry. When I moved to Tennessee about 18 months ago, it was my desire to visit WSM and see firsthand the 50 KW facilities. Most of us have either visited, or seen pictures of studios used in a major station. But few ever go see the transmitter itself, which is a special domain of engineering excellence in radio.

The WSM tower and transmitter is located on Concord Road in an open area of at least 100 acres or more. The most obvious sight is the 806 foot diamond-shaped tower. It was made by Blow-Knox in 1932. There where 4 towers made of this design...WCRS-880, a station in Austria, and WLW-700. Of the 4 towers, only WSM and WLW still have them in use. When it was erected, the tower had a pole on top which made it in it's day the tallest tower in the US. Later, the pole was removed and given to a school located directly across the road from the station...now a flag pole. The tower is a 5/8th-wave series fed vertical. It has a width of 36 feet in the middle, guyed only at the middle with 8 guy cables which appeared to be 1 1/2 to 2 inches diameter. At several points, the steel members are 8" wide. Estimated weight is 500 tons!

At the time I visited the transmitter, Everett Lawson was on duty. WSM operates the transmitter by remote control. However, there is an engineer on duty during the day. Programming and control is via UHF or Microwave STL. On site, there is automatic logging equipment on hand to monitor the transmitter.

The transmitter building itself is rather large. Indeed, it was built in an era when Radio was in it's Golden Age. Entering it, there are offices for the engineering staff, a complete pantry for extended watches...all the comforts of 'home'. To the rear of the 1st floor is the transmitters.

WSM's first 50 KW transmitter was an RCA 50 KW rig. Later, in '64, a General Electric rig was added to replace the 32 year old RCA. In '81, a Continental unit was placed in service. The nearly 50 year old RCA is gone. 50 KW transmitters needs a lot of juice to run. The filaments of the finals alone require 300 amps. An interesting note is the Continental transmitter is not hi-level plate modulated...it uses a Dougherty Amplifier...like a linear amplifier...to amplify both RF and modulation from a lower powered exciter. The GE is plate modulated...more later.

As AM Stereo is the future of AM radio, WSM operates with a Motorola Stereo generator. Near the transmitter hall is an area where there are audio processors, modulation monitors, test gear, STL receivers...and even a Drake SPR-4. Mr. Lawson handed me a headset to listen to actual off-air programming in stereo. I was suprised at the audio...indeed it is at least as good...if not better than FM Stereo.

Audio is processed thru a CRL Stereo processor. I noted on a Belair Modulation monitor that modulation was seldom ever above 99%. In this day of modulation levels of 120% or even more...it is nice to know that there are stations which take pride in a very clean signal...WSM is no exception.

Down a spiral stairs was the basement. WSM planned this building to have complete facilities...a far cry of what exists at most stations. There is a complete shop for building almost anything an engineer could dream up! Lathes, drill presses, table saws, metal brake...you name it. In fact, several years ago there where 20 engineers who worked in the shop building all sorts of equipment for the station...and probably a few where hams brewing up a rig to put on the air!

In addition to the shop, there is a huge 150 KW generator available in case of a power failure. Nearby, there is a room where power can be switched from the local utility service to the generator. The voltage from the utility line is several KV...not the ordinary voltages in your home!

Prankster climbs radio tower!

STATE NEWS

A very brave or very foolhardy Halloween prankster climbed the 555-foot tower outside WRFD Radio at Rt. 23 and Powell Rd. early Wednesday and hung a dummy on it.

"They must have done a pretty good job of it, because people who saw it through binoculars called us and swore up and down it was a body," a spokesman for the Delaware County Sheriff's Department said.

Operations manager Bill DeWees said the climber broke through the gate on a fence around the tower.

"It would take a lot of guts to carry something up there the size of a person," DeWees said. He said the tower, which is about the same height as the LeVeque Tower, is made to sway in the wind.

The station had to hire a "tower man" to climb up and cut the dummy down. He reported some damage to the tower.

DeWees said if the climber had ascended the tower when the station was broadcasting, he would have been electrocuted by the 5,000 watts that surge through it. However, the station does not broadcast at night.

The station had to be shut down briefly about 10 a.m. today

while the tower man removed the dummy.

BOX 102, RED WING, MN. 55066

RADIO LOG

- KBCU 1070 kHz**
Stardust format. News on the hour. Sign on local sunrise. Sign off local sunset.
- KC12 990 kHz**
Spiritual and gospel music. Sign on 6 a.m. Sign off local sunset.
- KCOZ-FM 100.1 mhz**
Easy listening. News every hour with weather twice an hour. 24-hour schedule.
- KDAQ-FM 89.9 mhz**
National public radio. Classical music format with news, information and jazz. Sign on 5 a.m. Monday through Friday and 6 a.m. Saturday and Sunday. Sign off midnight.
- KDKS-FM 92.1 mhz**
Urban-oragressive music. News on the hour. Gospel music Sundays 6 a.m. to 12 p.m. 24-hour schedule.
- KDKI 1350 kHz (Mansfield)**
Country music. Sign on 6 a.m. Sign off sunset.
- KEEL 710 kHz**
Contemporary music. News on the hour. Sunday church 6 to 9 a.m. 24-hour schedule.
- KFLO 1300 kHz**
Religious gospel music. Sign on 6 a.m. Sign off local sunset.
- KJVC-FM 92.7 mhz (Mansfield)**
Adult MOR until 5:30 p.m. then contemporary music. Live sports. Sign on 6 a.m. Sign off 10 p.m.
- KLMB 1480 kHz**
Christian music. Sign on 6 a.m. Sign off local sunset.
- KLUV-FM 105.5 mhz (Haynesville)**
Easy listening music. Sign on 6 a.m. Sign off 11 p.m.
- KLUV-AM 1580 kHz (Haynesville)**
Easy listening music. Sign on sunrise. Sign off sunset.
- KMBQ-FM 92.7 mhz**
Contemporary music. 24-hour schedule.
- Country music 6 a.m. to 1 p.m.**
Contemporary music 1 p.m. to sign off local sunset. Inspirational music 11 day Sunday. North Gado Rebel sports.
- KOKA 1550 kHz**
Contemporary soul and some jazz. News at 45 minutes past the hour. 24-hour schedule.
- KRMD 1340 kHz, KRMD-FM 101.1 mhz**
Country music (simulcast 6 a.m. to 6 p.m.) News on the hour. 24-hour schedule.
- KSCU-FM 91.3 mhz**
Album rock, jazz, fusion and classical. News on alternate hours schedule. Sign on 2 p.m. Sign off 11 p.m.
- KTAL-FM 98.1 mhz**
Contemporary album rock stereo. News of 30 minutes before the hour. 24-hour schedule.
- KTUX-FM 98.9 mhz**
Top 40 music with entertaining personalities. 24-hour schedule.
- KVXI-FM 96.5 mhz**
Adult contemporary music. News on the hour. Sunday church 10:45 a.m. to 11:45 a.m. 24-hour schedule.
- KWKN 1130 kHz**
Country music. News on the hour and half-hour. LSU sports. 24-hour schedule.
- KWKH-FM 94.5 mhz**
Modern country music. News at 55 minutes past the hour. 24-hour schedule.
- KMAHT 1450 kHz (Marshall)**
Adult contemporary music. Texas State Network news. Sign on 5:30 a.m. Sign off midnight.
- KMAHT-FM 104.9 (Marshall)**
Beautiful music. News and weather on the hour. Sign on 5:30 a.m. Sign off midnight.
- KNCB 1290 kHz (Vivian)**
AP news on the hour and half-hour.

Back to the General Electric Transmitter... Since it is plate modulated, the modulation transformer, modulation reactor choke, and the large hi-voltage capacitors cannot be located inside the transmitter. Thus, WSM located them downstairs in the basement behind a steel cage. The original RCA transmitter in the 30's required to be water cooled. Intact is the evaporators to purify the water before it went into the old rig. In fact, in the early days; WSM had to make it's own water supply from creek water...there where no public water system nearby at the time.

The transmitters feed RF to the tower using a coaxial type feed. Instead of the usual coax lines we are familiar with...it uses an open wire coaxial feeder. This is made up of 4 wires which act as a shield arranged in manner where 2 additional wires carry the RF to the tower. This type of feed is unbalanced, and has an impedance of about 200 ohms. The impedance of the tower is about 30-32 ohms, and the Antenna current at the base is around 40 amps. The antenna tuning house is a brick structure containing the tuning network to match the 200 ohm line to the tower itself. WSM has the distinction of having the first FM station in the US. Prior to the present 88-108 MHz band, WSM had an FM transmitter on 47 MHz. The antenna for this transmitter was on the 806' tower... removed years ago. In 1968, WSM-FM took to the air.

As an engineer whose work has been at small stations, I was quite impressed to visit WSM. WSM, with it's long history of excellent service to Middle Tennessee, the famous 'Grand Ole Opry', and a commitment to leadership in AM broadcasting...is an example of what radio is to me. We need more stations which will strive for excellence like WSM; programming, commitment, engineering and equipment. I would like to thank Mr. Everett Lawson for his time and interest in showing me and my wife the facility.

-30-

SHOULD HAVE BEEN IN LAST ISSUE
UNDER "VERIE SIGNERS"

CONTRIBUTORS

AR- Andy Rugg, PD
BF- Buffalo K. Foonan, IDF
BN- Bill Nittler, CO
ERC- Ernest R. Cooper, MA
JC- Jackie Cole, CO
JS- Jerry Starr, OH
JW- John Wilkins, CO
KG- Kermit Geary, PA
KJ- Karl Jeter, GA
PT- Phil Tallan, OK
RD- Ron Downing, CO
WH- Wayne Heinen, CO
WM- William Moser, ND

20B ST. PETERSBURG TIMES ■ SUNDAY, DECEMBER 1, 1985

VIA TOM TOMLINS

Radio Latina finds new market in South American emigrants

Associated Press

DAVIE — When Tony Miranda wanted to start the first Spanish-speaking radio station in Broward County earlier this year, he received a chilly welcome.

"You go to any radio station here, they say, 'No Spanish. You take Dade. Isn't that good enough for you?'" Miranda said.

But he persisted, secure in his belief there was a market for Broward's estimated 67,000 Spanish speakers. On Aug. 5, Radio Latina, WAVS (1170-AM) was born.

AND WHEN thousands of Miranda's fellow Colombians were buried in a mud slide after a volcanic eruption in that South American nation, Radio Latins appealed for help and discovered plenty of folks were listening.

"If there's people here listening to us, we'll get a response," said Miranda, the station's vice president and general manager. "We started at 6 a.m. and by 7 a.m. the phones were completely full."

Miranda said the station has col-

lected \$23,000 in cash and an estimated \$50,000 worth of food and clothing from its listeners.

THE 5,000-watt station reaches into Dade County to the south and Palm Beach County to the north, but it is different from Dade's numerous Spanish stations in that it caters primarily to South Americans rather than to Cubans, Miranda said.

"The people in South America know about Castro," Miranda said. "But they don't want to hear about him anymore. It's too much."

The station often broadcasts South American soccer games on Sundays.

"Soccer is something holy to these people," Miranda said.

THE STATION also plays a good deal of cumbia, a type of music that's a favorite of Colombians and other South Americans, but less popular among Cubans.

The station, which has nine DJs and 10 other employees, is just breaking even now, Miranda said.

"Give me six months and you'll see what Radio Latina is," he said.

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

Mark Connelly — WALTON DX Labs
38 William Road — Billerica, MA 01866
11 OCT 1985

This article describes the construction and use of two similar series of antenna phasing units for reception enhancement. Previous models built here had incorporated two homemade transformers and several other components not readily available in retail electronics outlets. This new design eliminates such custom components in addition to offering, in most applications, improved performance over earlier designs.

These units allow the operator to phase-cancel a dominant (interference, or "pest") signal and thereby receive signals which were formerly covered by the QRM. The phasing scheme can produce a cardioid (unidirectional null) pattern, the null bearing of which is electrically steerable. Two antennae are required: these are typically two end-fed longwires of comparable length.

A two-wire phasing unit consists of two antenna-tuners with outputs that can be combined in both additive and subtractive modes by means of a switchable-phase (0 / 180 deg.) transformer in the output leg of one of the tuners.

Each tuner consists of input coupling (the S4 "Length Switch" and associated components), a parallel L-C tank circuit with a low/medium-impedance output "tap" on the inductance (done by means of an inductive voltage-divider in this case), and a tank-shunting pot which adjusts the Q and the output level of the tuner. Antennae having a predominantly capacitive component to their reactance may be tuned with S4 set to "Short" or "Normal"; antennae (typically longer wires) having a large inductive or resistive impedance component should be tuned with S4 set to "Long". The "Long" position shunts each wire input with a 188 ohm resistor, causing some signal attenuation. This is generally not a problem as longer wires that require the "Long" position usually provide more signal than needed anyway. Wires with R and/or L-dominated impedance could be coupled to the tanks inductively, but this would make the circuit more complicated than desired; the improvement in signal coupling would be of minor worth.

Before phasing (nulling) can begin, each tuner must first be adjusted independently for peak signal at the frequency of operation: this is done by setting the S2 Function Switch to the position corresponding to the single tuner being adjusted, the S1 Frequency Range (inductor) Switch to the appropriate range setting (per look-up table), the associated pot to its maximum Q/maximum level setting, and the tuner's variable capacitor to the position producing the strongest wanted-frequency signal.

Once the two tuner-output lines are in a peaked condition, the pot on the tuner yielding the stronger signal from the station to be nulled must be adjusted so that the "pest" station level is equal on both tuner output lines. Actual nulling may then commence.

The S2 Function Switch is set to the Null position: this combines the outputs of the two tuners. Whether this combination is additive or subtractive is determined by the S3 Null-type switch which is wired to the secondary of the T1L phase-reversing transformer card. The S3 position yielding greater "pest" signal reduction is the position to be used. Nulling requires phase-shifting of the signal on one of the tuner output lines. The tuner whose pot is set to the higher-Q position can be shifted more than the other tuner; therefore, the higher-Q tuner is chosen to be phase-shifted. The shifting is accomplished by offsetting the chosen tuner's variable capacitor from its initial (peaked) position. A significant null is usually attainable with this adjustment; further fine-tuning (as outlined by the operating procedures later in this article) is sometimes needed to get the maximum null obtainable. Formerly subdominant signals occasionally are reduced in absolute strength when the "pest" is nulled; however, the wanted-signal to "pest" ratio is almost always improved dramatically.

WVTA
AM 1230 RADIO
A DIVISION OF WALTON DX LABS

Reduction of wanted subdominant signals is generally minimal if there is a substantial difference in great-circle bearing between the wanted signal(s) and the signal being nulled. Use of Beverage-length aerials also reduces the likelihood of mutual cancellation. The angle (horizontal and/or vertical) between the two wires used is not overly critical: useful nulls have been obtained with parallel wires, wires at a right angle, wires in opposite directions, and wires separated by just about any other angle.

Parallel Beverages, one terminated and configured to favour a particular target area (e. g. Africa), and the other unterminated, are said to give particularly good results, especially when the locality chosen has salt water in the direction of desired DX and blockage (hills, mountains, lossy ground) towards "pest" domestic stations.

At this point, it is worth mentioning that the signal ("station") to be nulled can be a local noise source (e. g. light-dimmer, TV) rather than an actual signal from a communications transmitter. The benefits of such a system should be obvious to those involved in weak-signal reception on frequencies below 5 MHz - e. g. the 160-m. ham, the Trans-Atlantic broadcast-band DXer, the LOWER band operator, and the tropical-bands shortwave buff.

Nulling by means of a phasing unit has certain similarities to obtaining a null by mechanically rotating a directive antenna such as a loop or a Yagi beam, despite the fact that the patterns of a two-wire phaser, a loop, and a Yagi are all different. The greatest similarity regards stability of a null. A null will always be more stable if there is stability in horizontal and vertical arrival angles of the signal to be nulled. High-angle skywave, by itself or mixed with groundwave, is notoriously difficult to keep nulled because of the rapid arrival-angle variations and the multiple paths usually involved. Low-angle skywave and pure groundwave can be nulled to a greater depth (with less need for re-adjustment of nulling controls) than that of short-skip.

MWDX-4 and Mini-MWDX-4 series

MWDX-4 series phasing units are housed in chassis measuring 7" x 5" x 3" (17.8 x 12.7 x 7.6 cm). Mini-MWDX-4 series phasing units are housed in chassis measuring 5" x 4" x 3" (12.7 x 10.2 x 7.6 cm).

The MWDX-4 series offers built-in amplification capability; the Mini-MWDX-4 series units are passive. Mini-MWDX-4 units are intended for urban-site applications: those for which use of a broadband-amplifier is not recommended because of the potential for overload. If gain is desired at high-signal-level sites, an external high-Q / high-dynamic-range TUNABLE output amplifier should be placed between the phasing unit's output and the receiver's input.

Both series of phasers offer two-wire phasing capability; in addition, loop vs. wire capability is offered on the MWDX-4 series. The loop to be used must have certain modifications (this is discussed later in this article).

Individual models are designated MWDX-4A, MWDX-4B, MWDX-4C, MWDX-4D, Mini-MWDX-4A, Mini-MWDX-4B, Mini-MWDX-4C, and Mini-MWDX-4D. The letter suffix refers to the frequency range. Figures 1A through 1F and 2 show the units' circuitry. Table 1 illustrates the relationship of letter suffixes, inductor values, frequency ranges, and S1 switch positions.

FIGURE 1A

(APPLIES TO MWDX-4 AND MINI-MWDX-4)

INPUT TUNERS

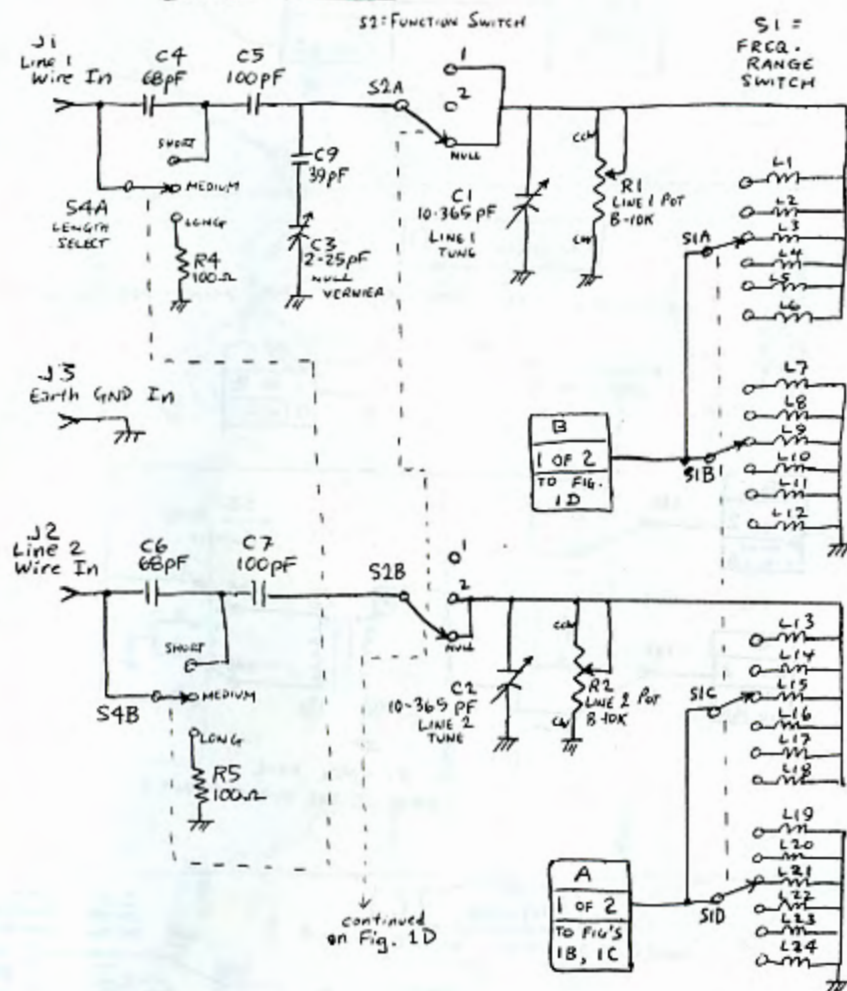


FIGURE 1B

(APPLIES TO MWDX-4 SERIES ONLY)

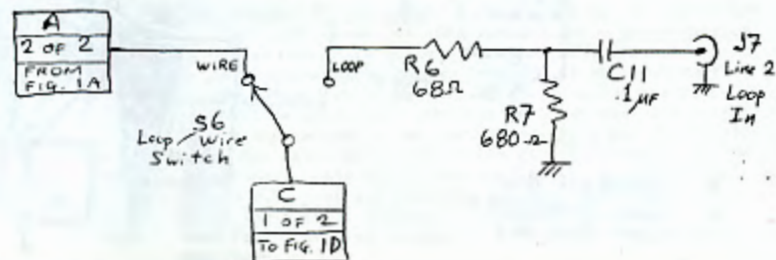


FIGURE 1C

(APPLIES TO MINI-MWDX-4)



FIGURE 1D

(APPLIES TO MWDX-4 AND MINI-MWDX-4)

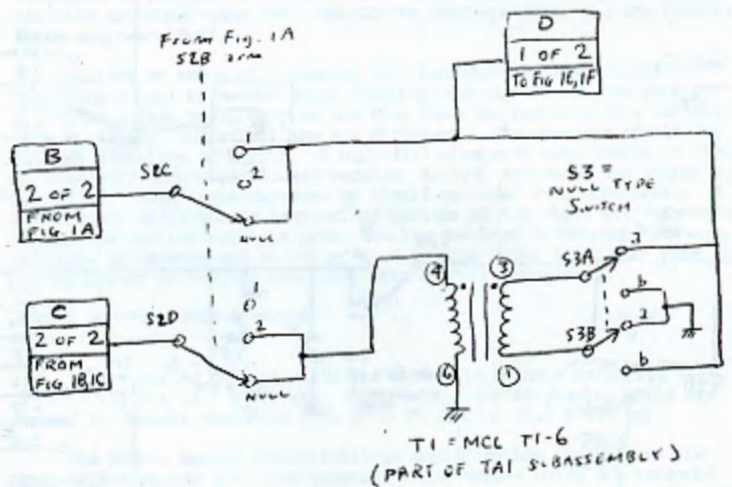
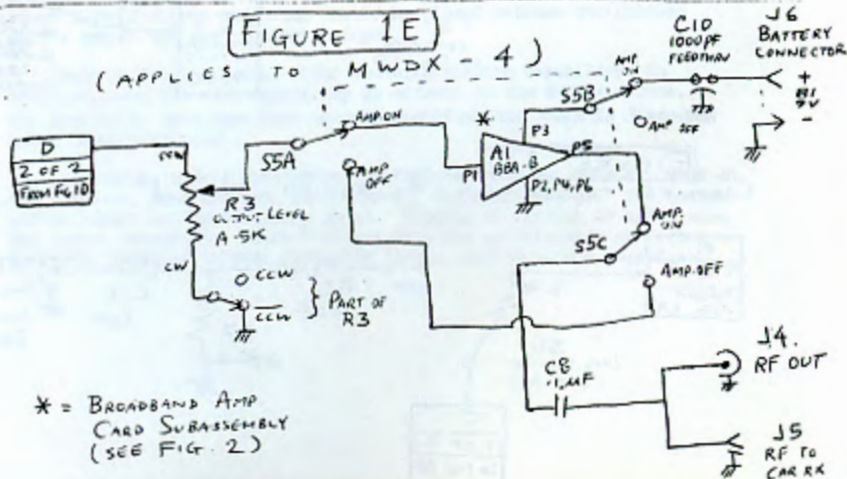
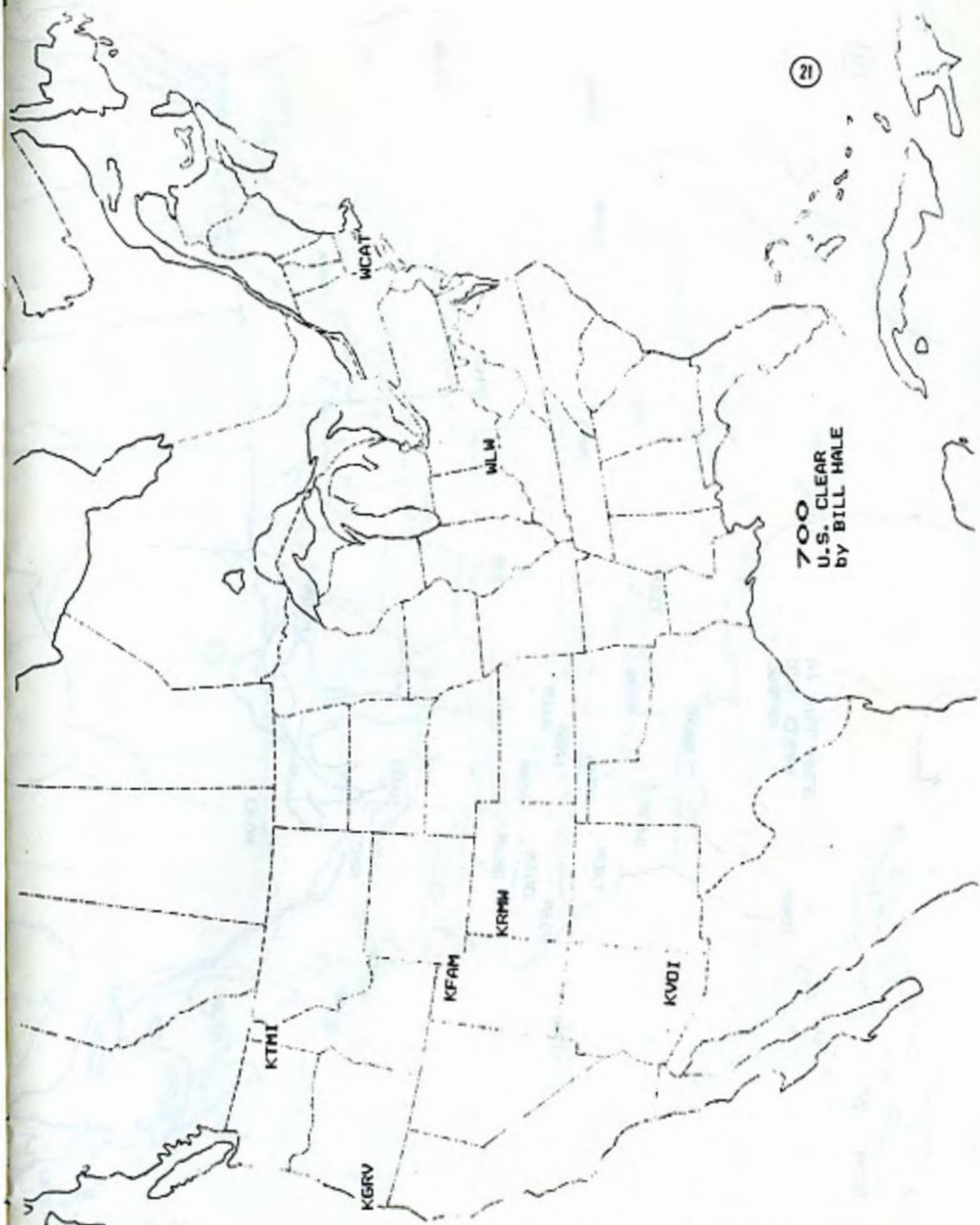


FIGURE 1E

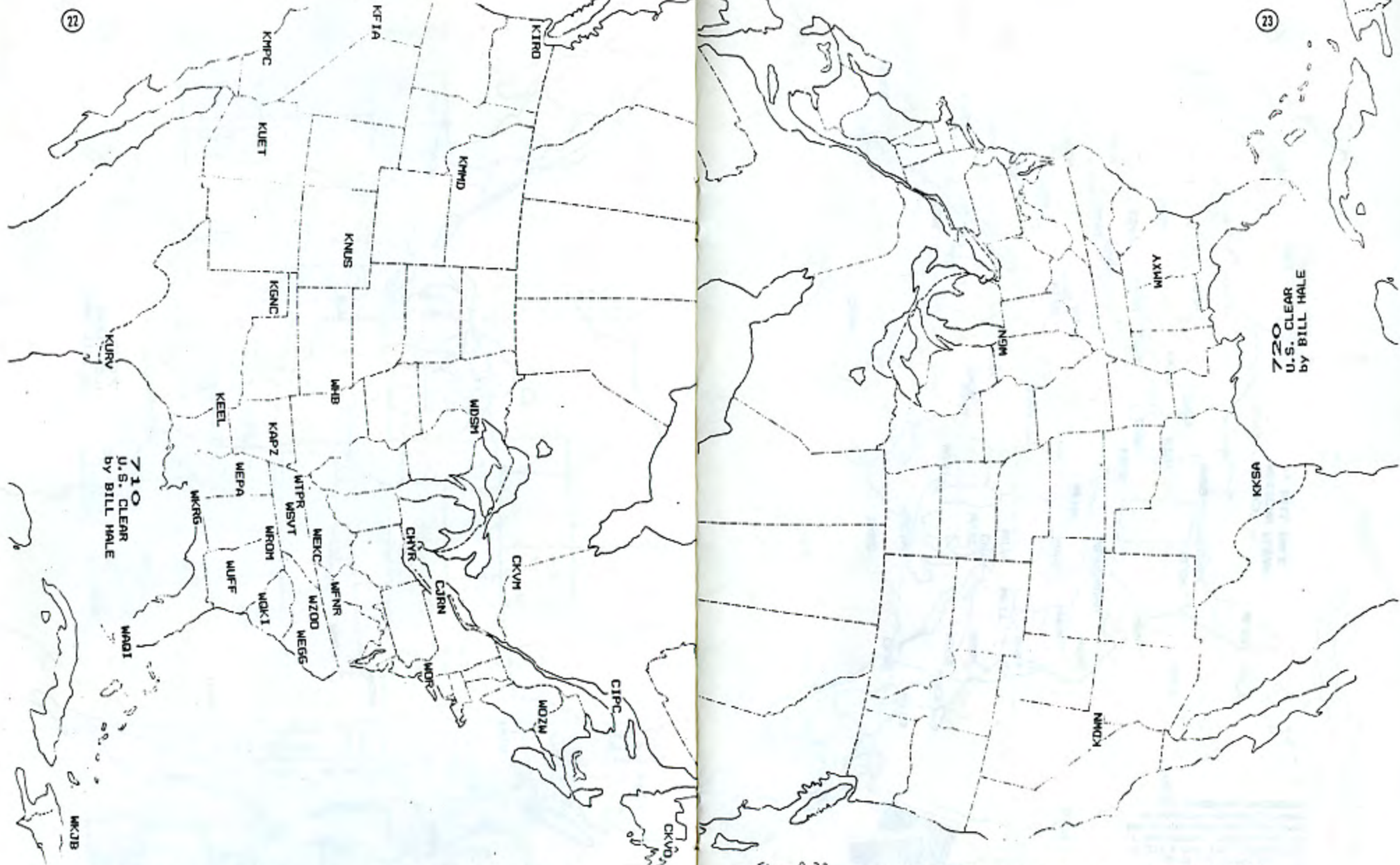
(APPLIES TO MWDX-4)



* = BROADBAND AMP CARD SUBASSEMBLY (SEE FIG. 2)



STATION PENNANTS OF THE WORLD: A few months ago we introduced the first installment of this publication - South America. It was an immediate success! Due to the increased demand, we have ordered more copies from the printer. Since this is the "Season to be Merry", we are reducing the price on the South American book (Volumes SA-1 and SA-2) to only \$5.00!! We are now releasing two new books - Asia and the Pacific Islands. The Asia publication sells for \$3.00 while the Pacific Island book costs \$2.00. You can buy all 3 publications for \$10.00 U.S. postpaid in North America. Overseas please add \$2.00 for airmail postage....Seasons Greetings! Send your orders to San Barto, 47 Prospect Pl., Bristol, CT. USA 06010.



WNYC-AM Regaining Night B'casts? Clearing Way For New Frequency

WNYC-AM, which received a court order last year to cut back its programming to daylight hours, appears to have eliminated its competition for a new spot on the AM dial. The change would allow it to broadcast into the night and significantly increase its audience.

Last week WNYC-AM finalized negotiations with two companies which had been competing for the same 820 frequency, Marshfield Broadcasting of Marshfield, Mass., and Mid Shore Broadcasting, located in Weymouth, Mass.

If an operational law judge at the

FCC gives WNYC-AM a seal of approval, WNYC would pay Mid Shore \$40,000 in two payments and Marshfield \$35,000.

The latter transaction is contingent on: a) WNYC obtaining a grant to cover the cost of transmission equipment and its installation, and b) there cannot be any appeals attempting to block the FCC's licensing to WNYC.

While there are other applicants for the frequency, WNYC was able to negotiate with them for changes

To
page
23

Fig. P. 22 in operation patterns and power requirements so their signals would not interfere with each other.

WNYC is seeking \$800,000 to \$1,000,000 in city capital funds for the new equipment and the station expects its extended reach to give it access to some 3,000,000 listeners. It averaged 200,000 per week this past summer, according to an WNYC source.

If the FCC approves its plan, WNYC is hoping to finalize negotiations with WMCA-AM New York to locate its AM transmission site,

at WMCA's Kearny, N.J., facility. WNYC hopes to be transmitting from New Jersey by the end of next year.

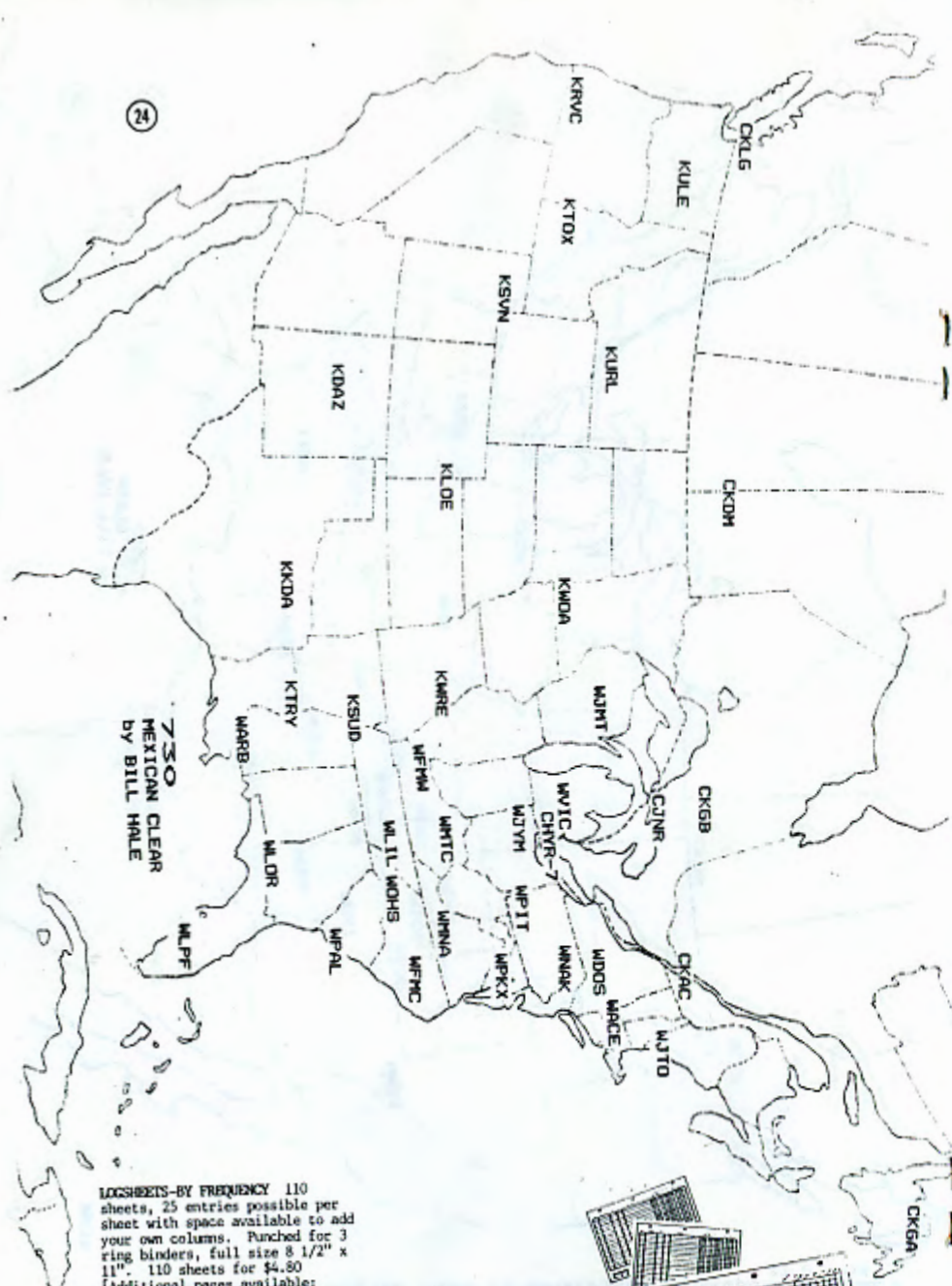
The frequency change will up WNYC-AM's power from 1 kw. to 10 kw. at night and 5 kw. during the day.

WNYC-AM discontinued its nighttime broadcasts in June following a federal appeals court decision on a suit between the station and WCCO-AM Minneapolis.

The two stations had been bat-

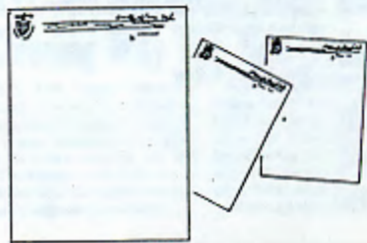
ting it out in court since 1954, with WCCO arguing that WNYC-AM's nighttime signal interfered with its clear-channel broadcasts.

Via Peter Kemp

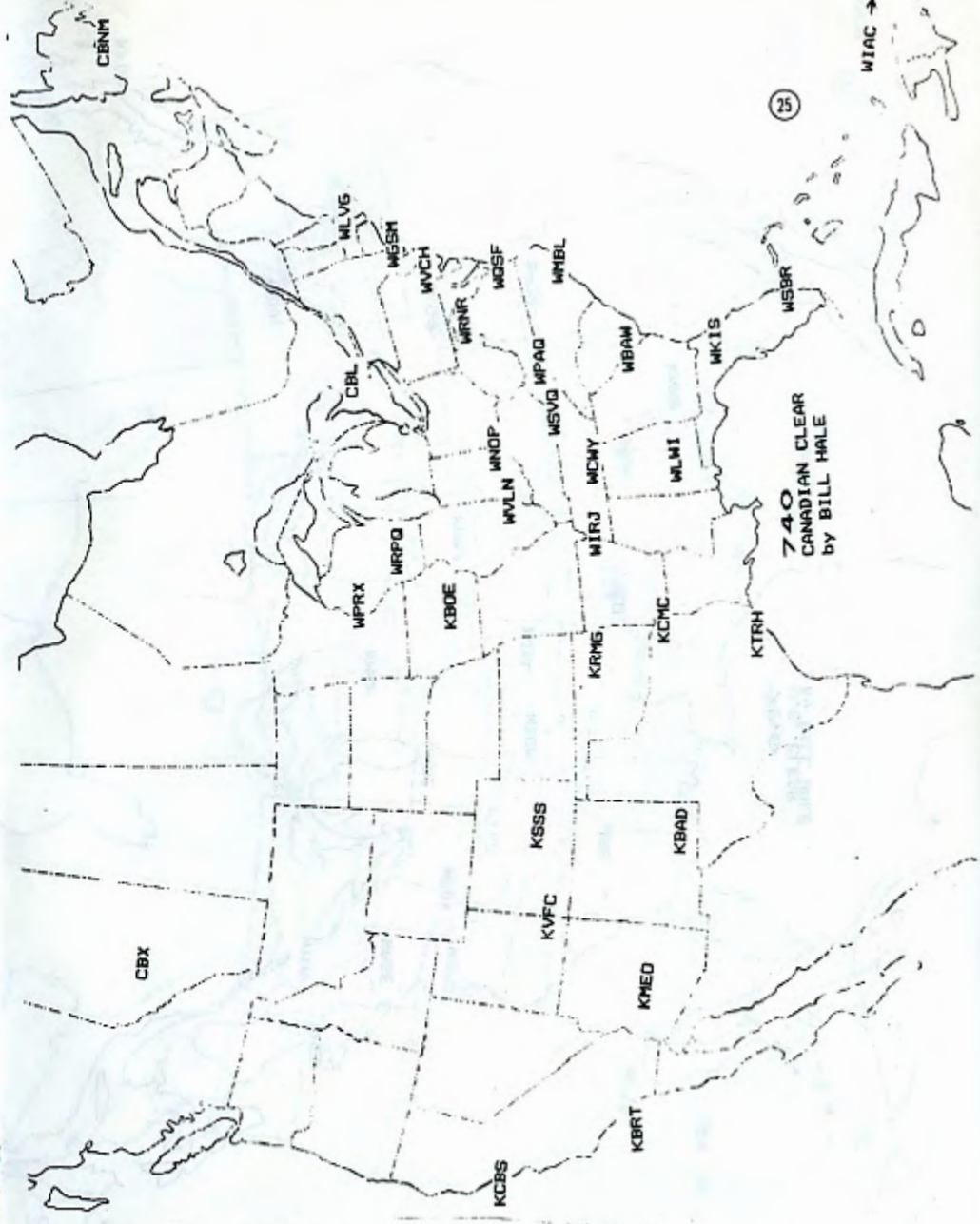


730
MEXICAN CLEAR
BY BILL HALE

LOGSHEETS-BY FREQUENCY 110 sheets, 25 entries possible per sheet with space available to add your own columns. Punched for 3 ring binders, full size 8 1/2" x 11". 110 sheets for \$4.80 [Additional pages available: 25 sheets for \$1.20]



STATIONARY NIC stationery with NRC logo and header in black ink. 100 sheets for \$4.80 For Members Only



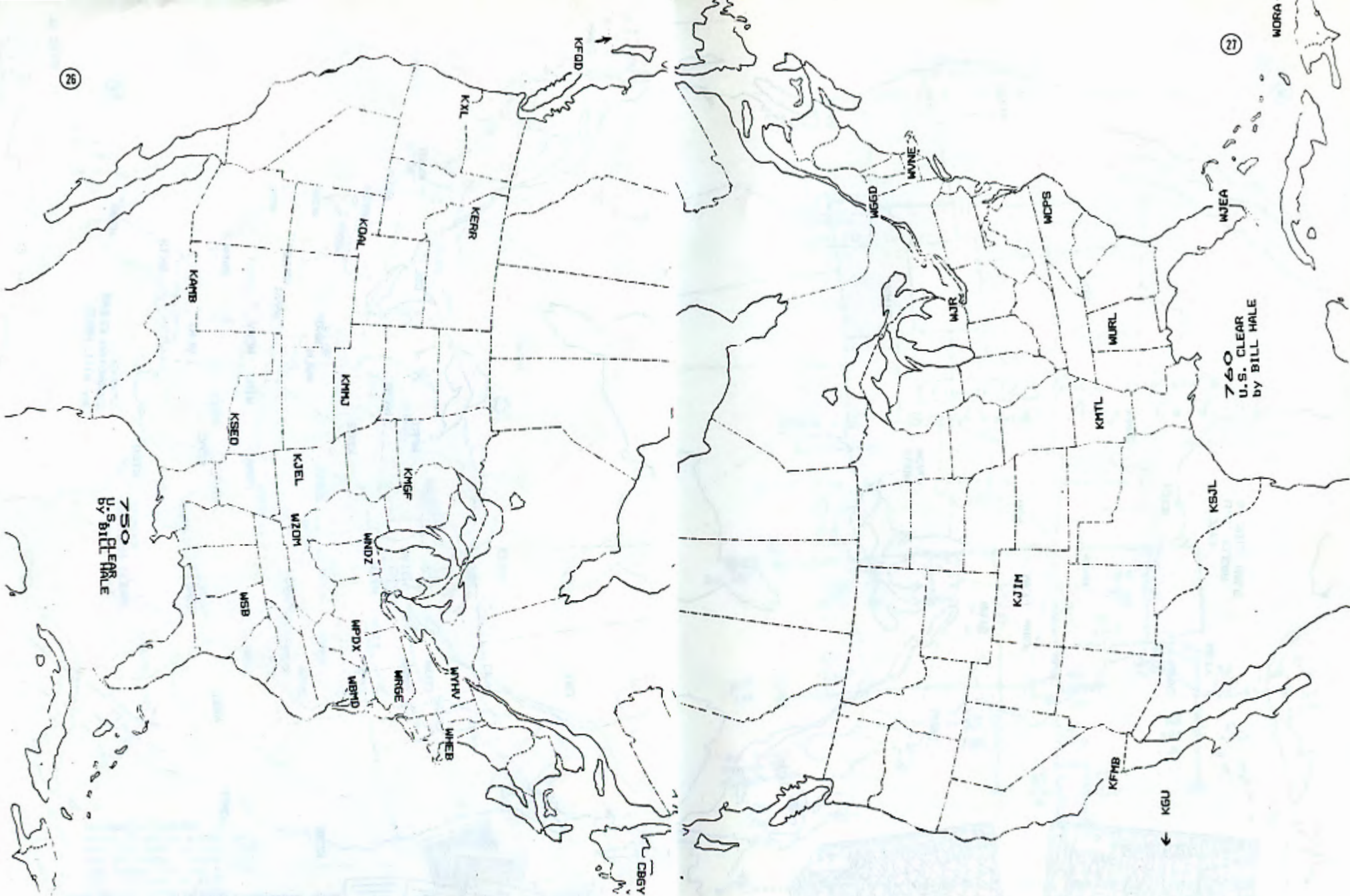
740
CANADIAN CLEAR
BY BILL HALE



GUIDE BROADCASTER'S GUIDE TO DX. A tri-fold guide for use with reception reports explaining DXing, how the NRC was formed and the importance of QSLs to DXers. \$1 for 20.

SS GUIDE Spanish version of the above Broadcaster's Guide. \$1 for 20.

FF GUIDE French version of the above Broadcaster's Guide. \$1 for 20.



MUG 9 Ounce Milk White Glass Coffee Mug with NBC Emblem printed in Black on both sides. It's Oven-proof. Makes a Great Gift for a fellow DX'er or for yourself!!! \$5.50 U.S. Addresses; \$6.25 Canadian Addresses; Other Countries please inquire first.

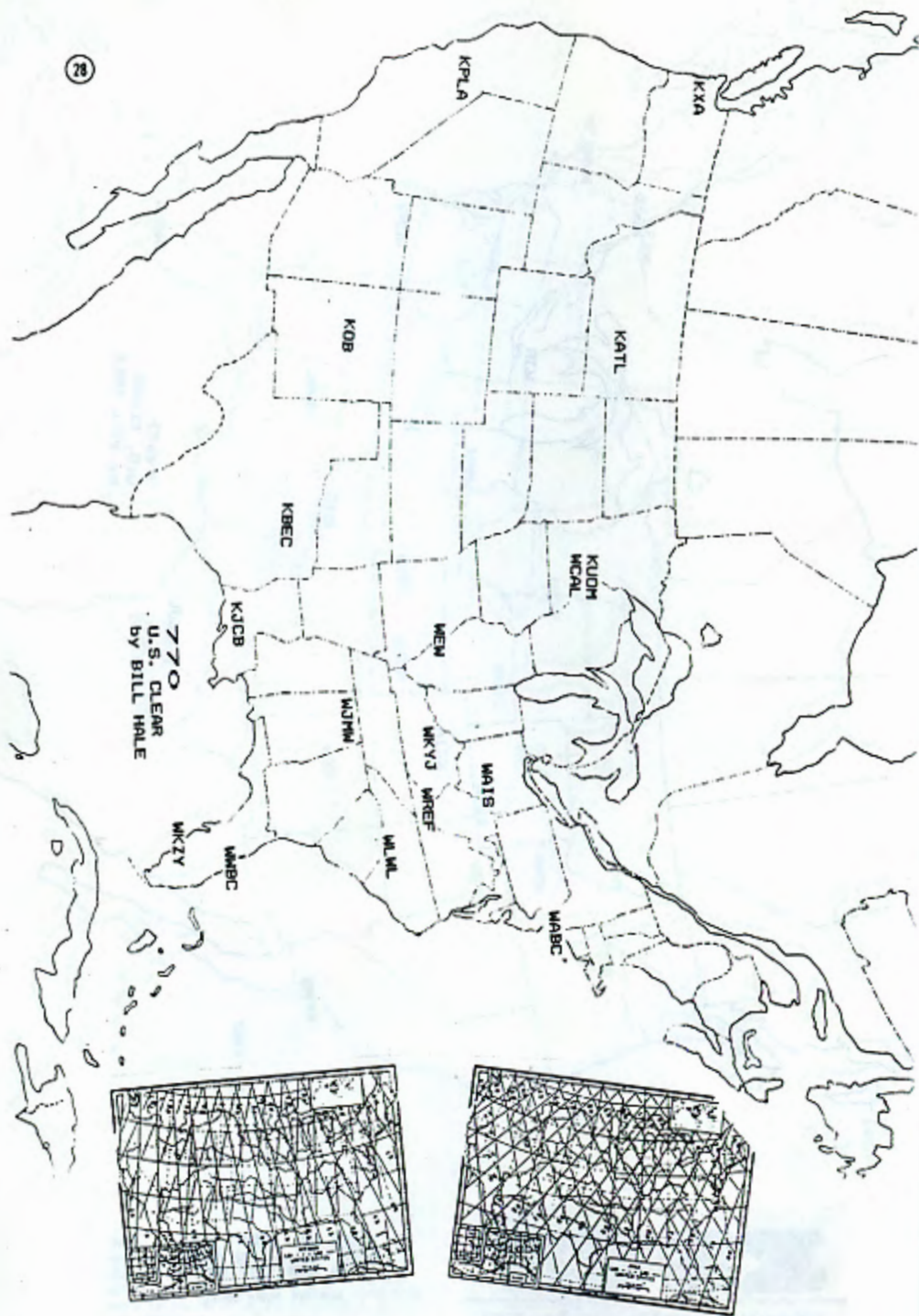


EDUR

Highway 15 North, Hutchinson, Minnesota 55350

KLGA AM
FM

ALGONA, IOWA 50511



SUNRISE/SUNSET MAPS. A set of 12 maps (8 1/2" x 11") with instruction sheet showing the monthly average sunrise/sunset times for the United States. An invaluable aid to the sunrise or sunset DXer.

\$1.00

FIGURE 1 F
(APPLIES TO MINI-MWDX-4)

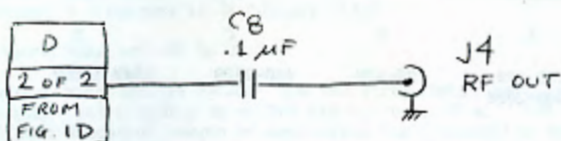
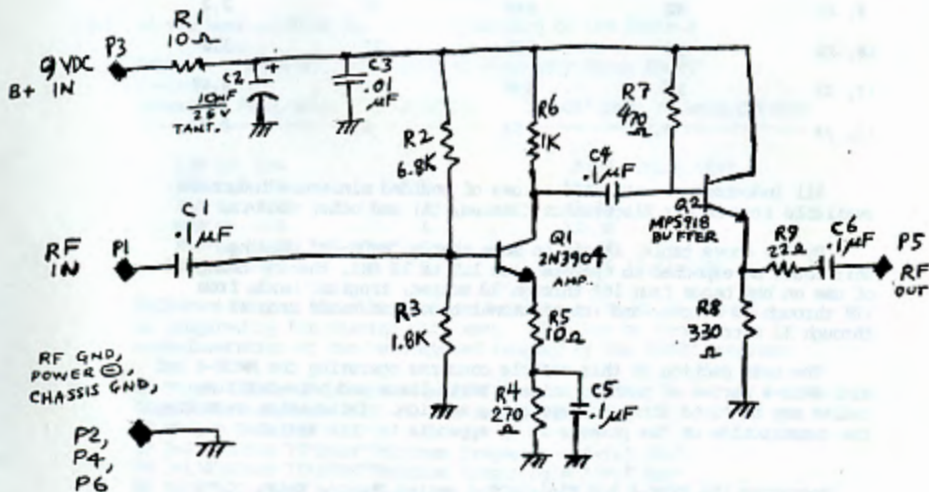


FIGURE 2 (APPLIES TO MWDX-4)
BBA-B Broadband Amp. Card

Schematic
REV: 20 JUL 1964
(SEE FIG. 6 FOR ASSEMBLY DRAWING)



COMPONENT DESIGNATIONS ON BBA-B CARD ARE SEPARATE ENTITIES FROM MAIN PHASING UNIT COMPONENT DESIGNATIONS.

GAIN \approx 20 dB (dependent on Z_{in} , Z_{out})
0.1 TO 30 MHz

TABLE 1

Inductors to be used on S1 (Frequency Range Switch)

Unit Suffix:	A	B	C	D
Freq. Range, kHz (approx.):	140-300, 400-2000	100-600	440-2300	1500-10000
Inductor L #'s	← INDUCTANCES in uH →			
1, 13	4700	15000	560	47
2, 14	2200	6000	330	22
3, 15	390	3300	100	10
4, 16	180	1500	100	4.7
5, 17	82	600	56	2.2
6, 18	39	330	33	1.0
7, 19	1000	3300	120	10
8, 20	470	1500	60	4.7
9, 21	82	600	39	2.2
10, 22	39	330	22	1.0
11, 23	18	150	12	0.47
12, 24	8.2	60	6.0	0.22

All inductors are standard values of moulded miniature inductors available from Mouser Electronics (Santee, CA) and other vendors.

By the above table, it can be seen that a "MWDX-4D" phasing unit could be expected to operate from 1.5 to 10 MHz, thereby being of use on ham bands from 160 through 30 metres, tropical bands from 120 through 60 metres, and international broadcast bands from 49 through 31 metres.

The next section of this article concerns operating the MWDX-4 and Mini-MWDX-4 series of phasing units. Parts lists and hole-drilling tables may be found after the operating section. Information regarding the construction of the phasers is an appendix to this article.

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. */

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. <= 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 CCW 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

Operating Freq.(kHz)	S1 position	"Clock" pos. of knob pointer
140 to 180	1	9:30 (fully CCW)
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 CCW (pointer at 8:00 / max. level).
- 3.2 Set S2 (Function Switch) to Line 1 (11:00 / fully CCW) 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 CCW (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 CCW (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 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-TF-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 - RRC 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	S6	Wire/Loop switch - shaft	1.875	0.625	0.25
27	S6	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

TABLE 3 MWDX-4 hole list (continued)

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	Cl8	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

TABLE 4 Mini-MWDX-4 Hole List (continued)

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 = AL (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 56781
 MCL = Mini-Circuits Lab. - 2625 E. 14th St. - Brooklyn, NY 11235
 MOU = Mouser Electronics - 11433 Woodside Ave. - Santee, CA 92071
 NEW = Newark Electronics - (many locations)
 RS = Radio Shack - (many locations)

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

Component Designation	Description	Vendor	Stock #
BOX			
\$ -	chassis box (5"X4"X3")	MOU	537-TF-779
* -	chassis box (7"X5"X3")	MOU	537-TF-782

SUBASSEMBLIES

* AL broadband amp. subass'y [see Table 7]
 TAL phase-reversing xfmr. card [see Table 6]

CONTROLS

C1	10-365 pF var. capacitor	MOU	524-AL-227
C2	10-365 pF var. capacitor	MOU	524-AL-227
C3	2-25 pF var. capacitor	MOU	538-189-0569-1
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	10WR046
S2	4-pole, 3-pos. switch	MOU	10WR043
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

JACKS - CONNECTORS

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	16RJ107
* J6	battery holder (Keystone 1290)	MOU	534-1290
* J7	BNC jack	RS	278-105

TABLE 5 Main MWDX-4 / Mini-MWDX-4 Parts List (continued)

ELECTRICAL COMPONENTS

* 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	19F2061
* 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

KNOBS

—	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-TM2-1/100	4
T1	1:1 RF transformer	MCL	TL-6	1
W	bus wire	RS	278-1341	approx. 6"

Table 7 = A1 (BBA-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-TM2-1/100	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'

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"

APPENDIX

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

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

2. Chassis-Drilling

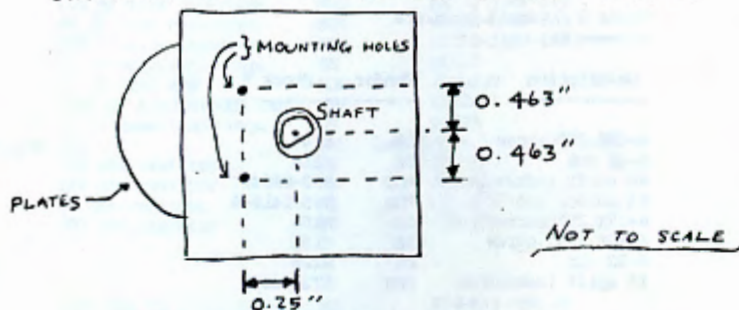
- Ensure that hole list is adjusted (if necessary) if you have substituted components different from those on the parts lists.
- Use an accurate draftsman's steel ruler and a scribe / awl to draw 1"-spaced X & Y coordinate grid lines on the top, the left side, and the right side of the chassis box to be used. Coordinate conventions are defined in the hole lists.
- Mark each hole locus with scribe. Dig the scribe into the metal enough that a small drill bit (e. g. .113") will not slip.
- Drill each hole initially with a small drill bit: e. g. .113".
- 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

- 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) TAI subassembly: Assemble T1 transformer & hardware onto 0.6" x 1.2" vectorboard as shown in Figures 4, 5A, and 5B.

Figure 4

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

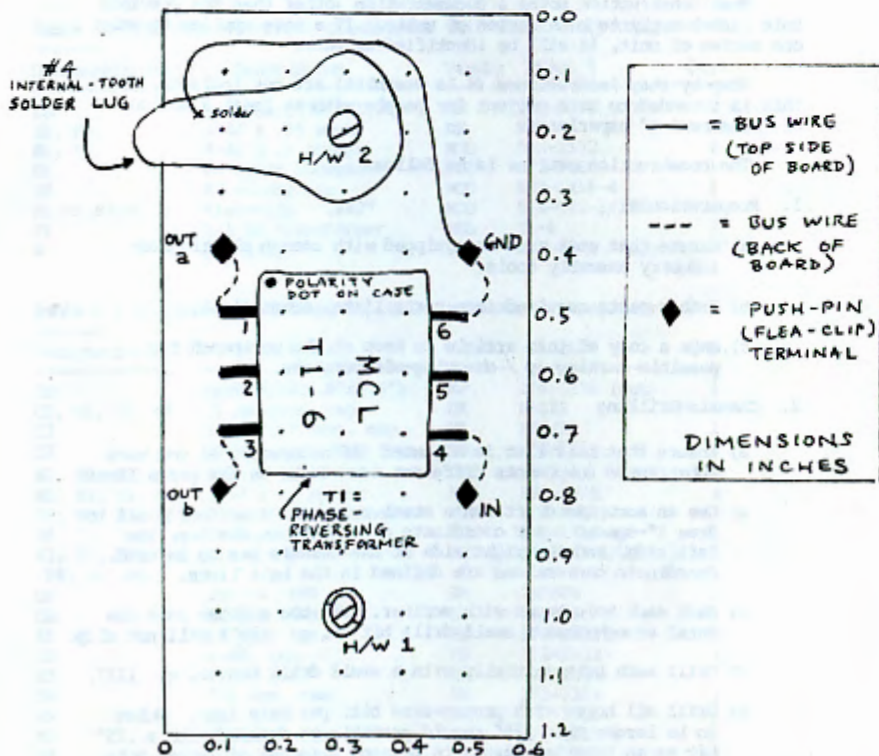


Figure 5A

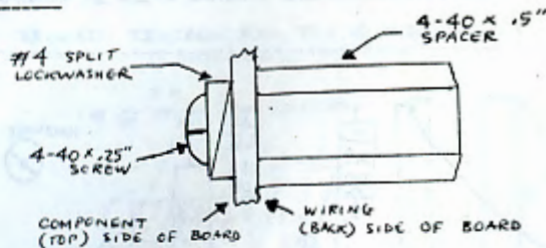
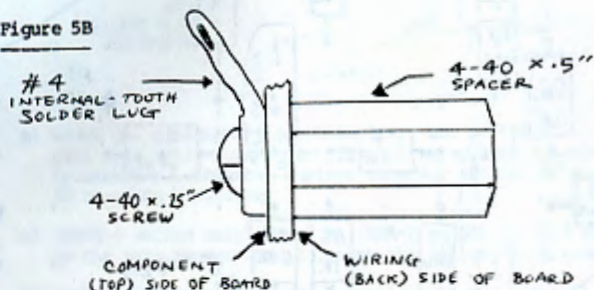


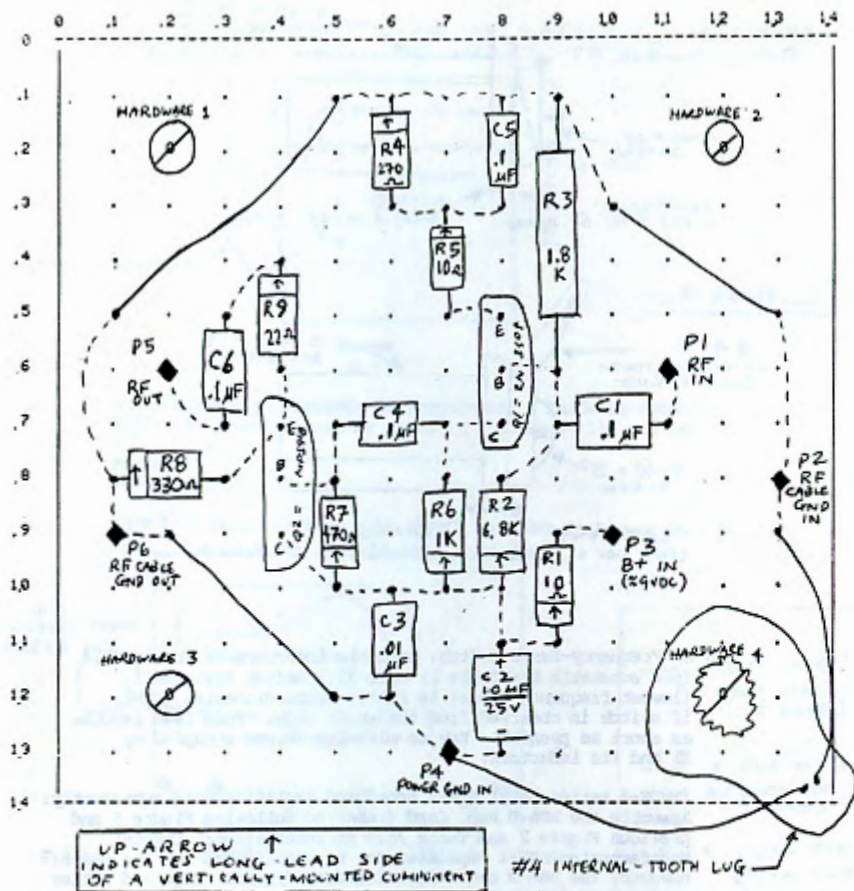
Figure 5B



- 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) [MWDK-4 series only] BBA-B Broadband Amplifier Card subassembly: Assemble the BBA-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 BBA-B; however, the BBA-B has somewhat better dynamic range and better performance into low-impedance outputs than the BAX-1 has. BBA-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.

AM-84
KWPN RADIO

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



VECTORBOARD / PERFBORARD 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

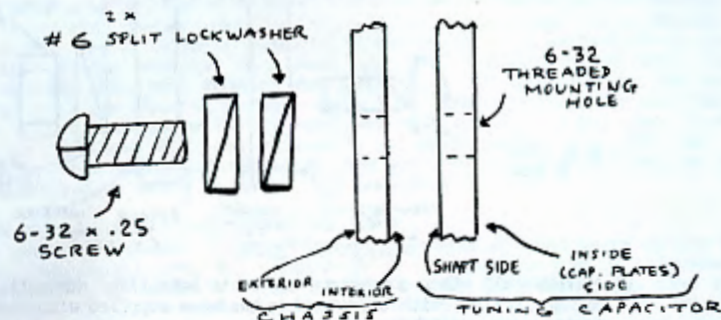
BBA-B CARD COMPONENT DESIGNATIONS ARE A SEPARATE ENTITY FROM THE DESIGNATIONS OF MAIN-ASSEMBLY COMPONENTS.

BBA-B
KMPW RADIO

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

GND H/W - Int. Lug

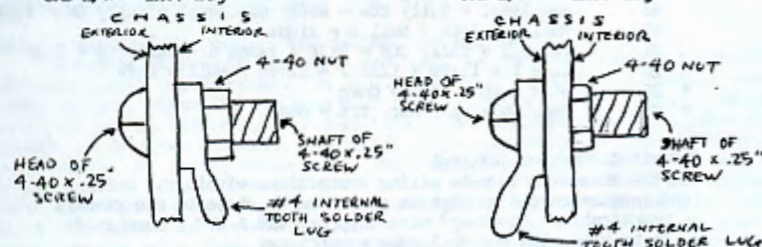
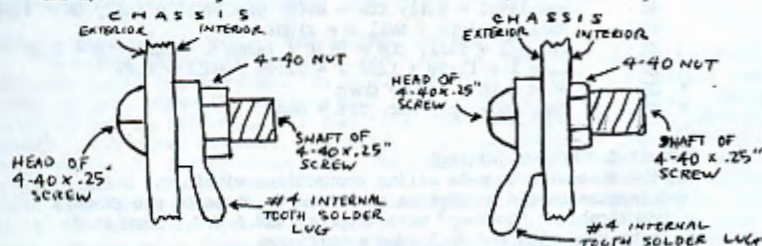


Figure 8B

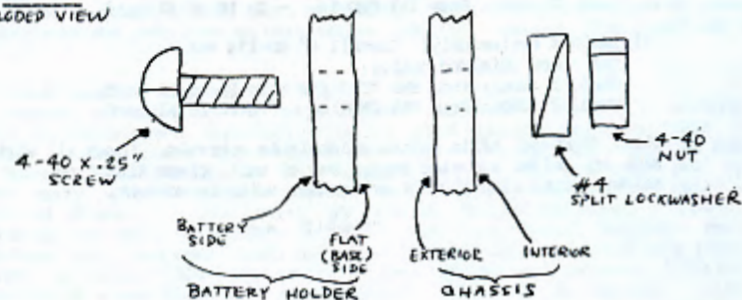
GND H/W - Ext. Lug



- e) [MWDX-4 series only] Install Keystone 1298 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

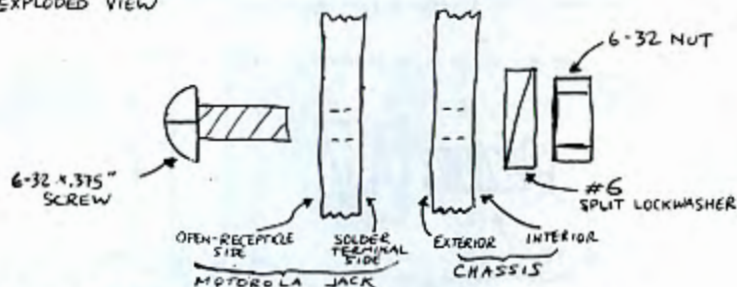
EXPLODED VIEW



- f) [MWDX-4 only] Mount Motorola jack (J5) in accordance with Figure 18 and hole list (2 mounting locations).

Figure 18

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 CCW = 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 Al card
Cond. 2 (GND): From TAL GND lug - To P6 of Al 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 Al card
Cond. 2 (GND): From TAL GND lug - To P2 of Al 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 *

Paul Swearingen

P.O. Box 4812, Panorama City, CA 91412

The opinions expressed in this column are those of the individual writer and do not necessarily reflect those of the Editors, Publishers, or the National Radio Club, Inc., or its subsidiaries.
Times are local per Muse.

Greetings! I'm typing this during a grizzly day in IA; at the same time the midsection of the nation is gripped by the first major snowstorm of the nation ... a perfect day to spend in front of a radio. Joining Musings this week are two Canadian DX'ers with their contributions in keeping with the theme. Don't forget ... #13 (deadline Dec. 20) is to include your comments about how those of you who speak more than one language use them in DX'ing ... #14 (Dec. 27) will inform us how you keep warm while DX'ing ... #15 (Jan. 3) will include your tales about the ones which did (or didn't) get away ... #16 (Jan. 10) will be devoted to Musings from the ladies and married couples who both DX ... and #17 will be for DX'ers who use "unusual" radios and/or antennas. And now, on with it ...

Dave Whatmough - 284 Main St. W. - Hamilton, ONT L8P 1J8

I guess it's been a while since I appeared in these pages so time for another Musing. New loggings for 1985, #11 - (although 7 of them are just call changes) - WMER-1440, WFLW-1590, WPXY-1280, WSTR-1580, WN2T-1580, WWS-1570, WRMR-850. The other four - WLN2-830 (which became a daytime regular until CHAM-820) s/on in August), CFYZ-530 the new 50-watter with airport info from Toronto Airport; CJMT-1420 which has been noted several nights recently along with WEK, and of course CHAM-820 which now pretty well buries everything from 780 to 860. Veries received from 9 stations thus far this year: WBKC-1560, WLN2-830, WNCB-1370, WCXI-1130, CKAN-1480, CJSB-540, WOSU-820, WPXY-1280, and WBCR-1230. Verie total now 981. I had hoped to find several new ones this season in the 1260 to 1300 range after CHAM moved off 1280 but nothing new has surfaced, except during the day I hear 6 stations where I formerly heard one. CKEY-590 is about ready to go 50 kw. from their new site at Grimsby - in fact, they might be on by the time you read this. No sign yet of CPGO-1440's move to 1200. When I was in Ottawa in August, the CPGO-1200 bumper stickers were on cars all around Ottawa, and they were announcing the move to 1200 would take place in October. I found out a week later they hadn't even been issued a building permit at that point to start building the new transmitter site. Only other news from this area, the FM station I work part-time at, CING-107.9 Burlington is applying for a move to 102.9 (the frequency vacated by CJSH-FM Hamilton in 1955). So far 2 other stations applying for this frequency as well. That's about it for now. 73's.

Andy Rugg, VE2AQP - 669 de Gaspé #218 - Nuns Island, QUE H3E 1J1

Activity in this DX Gen slackened off in the last month. I worked a lot of overtime and only logged two new ones. On 10-23, WWSG-1170 topped the channel from 7:33 to 7:43 am. Then on 11-9, WCCS-1160 overrode WJJD from 6:02 to 6:08 am. Also, there were some interesting re-logs on 1470 kHz. For some time I had observed that local CKO-1470 has some "weak spots" in downtown Montreal. Recently, I did something about it and bird-dogged two neighborhoods where it nearly disappears. The prime location is near my office, around Bleury and de Maisonneuve. The secondary location is just west of the CBC Building on Dorchester Blvd. In the prime spot on 10-26, WTKO dominated the 1470 channel on the car radio for most of the interlude between 6:50 to 7:03 pm. They were quite intrigued by my reception report. My old verie dates from 1961, before the local went NSP. Then on 11-17 around 1:00 am, there was a three-way battle, and I had to use the TRF to null out CKO. The weakest station was an unID "W", whose jingle was just too weak to make out. Then CHOW prevailed for about 5 minutes and was reported. In the secondary location on 11-10 I noted both caw and oldies formats under CKO on the car radio between 1:00 and 1:30 am. At about 1:20 I heard "Tri-state" mentioned twice in an ad or PSA. I don't know who that could be, perhaps Toledo. For once, veries were plentiful. New ones were WCHP-760, CKMW-790, CPJR-830, WNEK-1150, WJCC-1170, WJJP-1180, WANK-1360, and WWSR-1420. I also re-verified CFRA-580 and CJAD-800 for daytime reception in the Abitibi region. WTKO-1470 also was re-verified, as was the frequency change for WRDX-1200. WNEK and WTKO returned my postage, making it three stations who have done so this season. Totals now are 1634 logged and 1551 verified. 73.

Bill Hale - 9823 North Meadow - Converse, TX 78109

Can't remember my last Muse, so that's a good indication it's time for another. I enjoy reading all the other Muses, especially from the newer members, getting their fresh outlook on things. Some notes about the AM radio scene here in the greater San Antonio area, and south Texas ... KOKO-860 is now all oldies, ID'ing as "Your One and Oldies Station". They carry a Saturday Night Oldies Show from L. A., via satellite (what's not these days?). And ad of Nov. 1, they carry NBC news at :54 past the hour ... KRNN-930 is the new "news-talk-sports" entry (ex-KLIS) with ABC-I, CNN, and United Stations news and features. 0600-0900 (CLT) is a news block; 0900-1200 is local talk with Alan Dale (formerly of WOAI); 1200-1300 is news; 1300-1500 is talk from ABC (Michael Jackson); 1500-1600 is local talk; 1600-1900 is a news block with sports call-in the last 30 minutes. In the evenings they carry (taped) Dr. Toni Grant (yuk) from ABC and overnight it's Ray Briem, so I'm looking forward to hearing the 2nd edition of the DX special. I missed the first as it

was on before KNNN made its debut. Weekends they carry at least two college football games on Saturday and pick up the Mutual NFL doubleheader on Sunday. The 1st game is usually the Houston Oilers. They are promoting college bkb now and plan to do a lot of those from the SWC and others. In other news, WQAI now has Larry King ... KFHM-1150 has tested its new 10 kW xmr on 1160 while the 1150 was on. That means during the day illegal! ... KRYX is constructing a new 3-tower array about 10 miles south of their present location (20 miles NNW of downtown) ... KTSA has built a dandy new studio/transmitter facility just in front of their old building on Eisenhower Road. I imagine when they put in that site 40 years ago it was w-way out in the country. But no more. It's right in the middle of the urban sprawl. Actually, Eisenhower Road goes right between the middle 2 of their 4 towers with the coax overhead ... KWED-1580 Seguin is on U1 with 1000/253. Their long-range plans include another tower (or two) to get on with 1000/1000. But that's still in the "gleam-in-the-eye" stage ... KSPL-1470 San Marcos ("Sparkle") (formerly KONY) is now U2 250/250 with a small lobe to the SE at night protecting Abilene. At 40 miles they are audible here in the NE San Antonio suburbs fairly well. Thanks for all the contributions to the GYDNA column. One more and it'll be put to bed for another season. Hope the location maps are acceptable, as they take a lot of work. By the way, they are NOT daytime maps as listed in the Volume 52 Index, but include all stations on the frequency (even projected) that are in the Domestic log. That's all for now, so 73.

WNZK on the Air

John H. Rose II, NJ8Q - 26015 Thomas - Warren, MI 48091

"Southeast Michigan and the nation's newest AM radio station, WNZK-690, Westland, Michigan." "The best of two worlds" and "The best the world has to offer", croons the golden-throated announcer. I was alerted to the station by the "AM Switch" column. "If you have any comments, criticisms, or would like to purchase advertising, our address is P. O. Box 12369, Detroit 48212 (the physical location of the P. O. is actually in Hamtramck, an enclave of Detroit) (313) 365-0700." As I listened, the switch was made "to the remote studio in Hamtramck". Gotta be polka time, right? After all, there were more Poles in Hamtramck and environs than anywhere in the world outside of Warsaw. As late as the last census there were 800,000 of them!! What came out was the music of Yugoslavia which is vaguely reminiscent of Mideast music. That would make sense because Detroit's west side and near-west suburbs have the largest population of Arabic origin outside of the Mideast. Except that Hamtramck is on (in?) the East side!! (I suspect they have only one studio and want to disguise that they are not actually in Westland.) So I called the station and talked to the wife of one of the founders and producer of the Yugoslavian hour. WNZK has 500 watts and uses a 3-tower array to create an essentially omni signal except with a very sharp null to the southeast to protect CBF Montreal's signal to the east side of Windsor, ONT. (That's right, this is the only place on the continent where Canada is south of the U. S. A.). Their signal comes in here much better than WPON-1460 1000 watts, and she was glad to hear that the engineers' predictions were right. She and I reminisced a bit. Once upon a time there was a station called WMZK, "The station of the nations" at 97.9 and another called WJLB at 1400, both with the same owner. In one of those rare (in those days) switches, the calls and programming were switched, and then WMZK was sold and became WQBH with Black programming. This close-knit group of programmers was off the air. Most formed a consortium and bought WPON for themselves about 3 years ago. This producer decided to get himself a station and came up with the 690 spot, money, and programming to create the new "Station of the Nations". Radio politics are interesting. Their license is for 24 hours, but they are not prepared for it yet so are currently daytime and will do so for "probably quite a while yet." The programming is what I call Muzak from around the world. If you can imagine Barry Manilow, Barbara Streisand, Tom Jones, etc., singing in Yugoslavia, Irish, German, Spanish (there is a section of Detroit so Mexican that the restaurant waiters don't speak English, spooky), Russian, etc., you've got this station. Can the Metro area support 2 full-time ethnic AM stations, WPON and WNZK, one part-timer, WCAR-1090, plus weekend programming on TV, Ch. 62 plus a low-powered TV stations (1000 watts omni) rebroadcasting Spanish Independent Network from Mexico via satellite, Ch. 66? Stay tuned.

Don Kaskey - 465 Burnett St., #1 - San Francisco, CA 94131

A couple of frequency changes this week. KDXU-St. George, UT switched over to 890 on 11-18. 1st heard here on 11-20 about 10:45 pm PST just beating out WLS. 11-21 at SSS found KDXU in like gangbusters, tho. They are 10,000/10,000 U2. Then on 11-21 in the morning found KNCO Grass Valley had switched over to 830 from 1250. Their signal is fair to good daytimes. Per station schedule is 0600-0000 PST. 5000/5000 U2, mixes with WOOD nights here. Format is mixed bag. Then, KXTC-790 Clovis, CA is back on after a lengthy absence. Big Band format, in decently daytimes but w/KABC nights. New KQTL in Sahuarita, AZ has popped in from time to time when they are on 10 kW days on 1210 but unheard as yet on their 1 kW night power. 1210 is badly bothered by someone off frequency. Suspect KASY altho KRSV is a possibility. Can be very loud and runs all night long. Received a note from Charlie Taylor up at Whidbey Island, WA, in the Unreported Station List. He reports regular listening from KQIN-820, KISD-1110, and KGHO-1490 as well as KCVL-1240 Colville heard last March 31 ... Thanks, Charlie, that should reduce the list nicely. That's all from here. 73

Don ...

Robert Rush - 50 Pequot Road - Southampton, MA 01073

Greetings, DX'ers everywhere! It's been awhile since I graced these pages, so a reintroduction is in order. I'm 23 years old and work at a natural foods supermarket. AM DX'ing has been done off and on since the summer of 1975. Through the years, many radios have been used in the shack, including an ICOM R70 and a Realistic TRF. Currently, a GE Superadio II and Select-A-Tenna are used in conjunction for domestic and international DX'ing. What are my station totals? According to the logbook, I have around 600 stations. What are my favorite catches? CKTA and KPI are my favorite loggings - both heard on a Realistic TRF. Even with my busy schedule, I have made time to twist the dials. Recent loggings include the following: Portugal-720, CHAM-820, CFJR-830, WJSS-1180, WAGE-1200, CJRM-1420, CKRB-1460, CHRJ-1460, and CJRS-1510. Most of these loggings were made at local sunset. Hopefully, the coming winter months will be as productive on the AM broadcast band. With that, it is time for me to sign off. 73's and good DX to everyone!

Material Needed on KLIF-1190, CHYR-710/730, and CKLW-800

Tony Fitzherbert - 356 Jackman Ave. - Fairfield, CT 06432

Hi. I have not Mused for a while, so hope to make up for that now. Church, family, and soccer activities (I coach youth soccer in Fairfield) have negated some DX activities, but I have sat at the dials some sunsets, and veries have been forthcoming. Veries are back from WIOA-900, b/s, WROW-590, v/q, heard when Hurricane Gloria put local WICL-600 off the air, WTHE-1520, v/1, heard when Gloria knocked WJUZ-1530 out, a v/1 from WVRS-1220, ex-WEZG. I must thank NRC'er Dennis Jackson for the WVFR verie (one of seven issued, he said) and the WREF-850 verie - WVFR was never used commercially, but the station was WVFR during tests. Also, a nice v/1 for WMBL-740, and my report plus a b/s from WCCS-1160; WCCS is almost regular here. Cordial v/1's are in from WRIB-1220, for 156-watt PSSA reception, WCHP-760, and WAGE-1200 for 500-watt PSA reception. Of interest, after the first of the year, WAGE will be 5000/1000 watts, U2. And the WCCS CE indicated that he is installing a 5 kW XR, so there goes 1160 here!! Station Profiles - I am working on three of them from my Toledo-Detroit trip, plus a blockbuster for a major NY city station, assisted by someone with whom I ride the train to work. The station has sent packages of stuff via messenger to my midtown office. But, I need information on three stations for spring profiles!! Who has info on CHYR/CHYR-7, the only station on the continent that changes frequencies at sunset and sunrise, plus CKLW-800? I have information, newspaper clippings on both, but would like some early info on CHYR and some contemporary info on CKLW. Also, am still looking for anything anyone may have on KLIF-1190, particularly early KLIF, or technical data on the 16-tower transmitter operation, 4 day, 12 night. Also, as KLIF popularized the Top 40 format, both the evolution of the format and the technical data would make a great profile. Wally Wawro sent up a good bit of material - station is quite interesting, but I wonder if anyone has any old material, or technical data about the night 5 kW xr, whose site is immense - far more spread out than that of WCZY-1500. All for now - good DX to all, and get your formats into the format column. 73's.

Paul Swearingen - Almost There, CA

I think I can promise that I will be living in a new domicile by the time you read this. I cut a deal, finally, with an electronics specialist (who knows what DX'ing is, at least) to split rent at his house in the far west end of the San Fernando Valley, in Canoga Park. The area is quiet, both QRM-wise and aurally, and only 12 miles from the ocean. I'm planning to be able to DX again, once I get moved and set up, and to get involved in some recording projects I've been planning for some time. Perhaps in January, after the holiday rush, I can begin to cut down on the 13-hour days at work and concentrate on other things. 73.

10-THE CAMBRIDGE NEWS

WEDNESDAY, NOVEMBER 27, 1985

Zip + 4 Saves Dollars



Cambridge resident Sue Knitter was Postmaster Craig Lewis' first "Zip + 4" customer this week. (See story below)