



DX NEWS

*the magazine of the
National Radio Club*

— SINCE 1933 —

VOLUME 51 ISSUE 19 FEBRUARY 20, 1984

Get out your screwdrivers, pliers, soldering iron & otherness, cause we've got two projects inside, courtesy of Mark Connelly, for you to build. Also, since last issue was thin, even though it had 24 pages in it, we here decided to give you a fat one to make up for last week...hope you enjoy it!

ERRATA In DNX #17, I kinda goofed. I gave credit to the wrong person for the info on the DXpedition to be held March 24 thru 26 at the 29 Palms Beverage Site. Credit goes to Greg Hardison (sorry Greg, I had Mike on my mind). Greg mentions that Larry Boyer from New Zealand will be out there plus he'll be traveling around the U.S. (Have a good stay here Larry -HQ)

APRIL FOOLS ISSUE material should be in our hands here no later than MARCH 24th. So, dig out those funny items and get them to us real soon, there isn't much time left!!

To those asking how to get a membership roster, just send us a couple of stamps to coverage return postage to you. Please specify if you want it alphabetically by last name or by state, or if you want only those within the surrounding states around you, or whatever. To those spreading false rumors about the secret non-available membership list that isn't given out to other clubs, or to members, but sold for \$10 to ad agencies....we say 'bunk'!!!! (what worries us, is some of you believe these people!....enuf said, now its back to licking stamps and filling sand bags,hi)

Martens Loop Those of you looking for a source for this antenna, we have been informed that Dajay Imports 450 S. Lafayette Park Place, Suite 115, Los Angeles, CA 90057, (213)-487-3387. The antenna will sell for \$95, which includes shipping. First orders are now out to those that ordered them.

NRC NIGHT PATTERN BOOK UPDATER 34 Maps, each contain new stns not shown on the current maps, can be inserted as a change page or you can redraw them onto your original book pages. Maps are same scale as set presently used. Patterns are drawn sharp and are as accurate as can be found anywhere!! US\$3.50 this price includes shipping !!! Order from the Publication Center. And please allow 4 to 6 weeks for delivery.

CPC TESTS (TIMES ARE EASTERN LOCAL TIME)

Feb 20 WHND-560 Monroe,MI 0230-0330, Big Band and March Music. Write to:
Monday Frederick Vobbe, Radio Station WHND, 5305 Vineyard Drive, Monroe, MI 48161. Also According to Fred, "NO SASE is required." Arranged by Frederick Vobbe & Frank.

Feb 26 WLNT-1140 Loudon TN 0000-0100 1 kw ND Test will consist of country
Sunday music w/voice IDs between selections. Periods of 1000 Hz tone will also be broadcast. PREPAID CALLS ONLY to: 615-458-4621. Reports to: Howard Oberholtzer, Jr. CE, Radio Station WLNT, P.O.Box 465, Loudon, TN 37774. Arranged for the NRC by Tom Connatser (Thanks Tom,HQ)

LOOK INSIDE:

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AM SWITCH

JERRY STARR
C/O WSRD RADIO
401 N. BLAINE AVENUE
YOUNGSTOWN, OHIO 44505

On January 20, 1984 the FCC's new regulations concerning call letters went into effect. Under the new system it is possible for a station to apply for a new call and get it approved in less than a week. Therefore we are changing the way we list calls here in AM Switch. There will no longer be separate categories for Applications and Grants. All calls will be listed as being GRANTED. The method of getting new calls has been so simplified that we can expect to see lots of actions, some capricious, in this category. To get a new call a station has only to send a letter to the FCC telling them the new calls they intend to use and the date they expect to begin using them. The FCC simply cross-checks to make sure that call is not already granted. If the call is available, a telegram is sent to the station authorizing the new call and the station may begin using it immediately. There is no waiting period, no filing fee, no forms to fill out. A station could change calls every week if it wanted to. So, without further ado, here's the first batch.

NEW CALL LETTERS

Old call:	New call:	Old call:	New call:
690 KTCR MN Minneapolis	KTCJ	1300 WHLT IN Huntington	WCER
810 WDDW IL Johnson City	WDDO	1390 WNLT MN Duluth	KBXT
850 WIVK TN Knoxville	WHIG	1400 KSLY CA San Luis Obispo	KUNA
970 WOZN FL Jacksonville	WVOJ	KKBZ CA Santa Paula	KAAP
1110 KPIP CA Roseville	KRCX	WERD FL Jacksonville	WZAZ
WELX OH Xenia	WMMX	1440 KITA AR Little Rock	KOKY
1150 KPRZ CA Los Angeles	KUSA	1540 WPRZ SC Pickens	WTBI
KISO TX El Paso	KKMJ	1580 KLUV LA Haynesville	KLVU
1180 KWSO CA Wasco	KERI	1590 KCLU MO Rolla	KMOZ
1230 WTBC AL Tuscaloosa	WIGL	WRTR WI Two Rivers	WTRW
*New NH Berlin	WNXH		

APPLICATIONS FOR NEW STATIONS

600 KY Pafntsville: 500 D1
720 GA Hogansville: 10000D1
ND Lisbon: 500 D1
770 MA Walpole: 250 D1
830 SC St. Andrews: 10000/1000 U4
890 TN Frayser: 250 D1
970 HA Waimea: 5000/5000 U1
1020 AK Eagle River: 10000/2500 U1
1450 WI Hurlley: 1000/250 U1
1470 WA Mt. Vernon: 500 D1

GRANTS FOR NEW STATIONS

750 ND Pembina: 10000/1000 U1
780 MS Ridgeland: 5000 D1
870 WI Madison: 1000/1000 U4
890 CA Citrus Heights: 50000/1000 U4
1030 CA Folsom: 50000/1000 U1
1180 KY Florence: 1000 D3
1350 MO Washington: 500 D3

APPLICATIONS FROM EXISTING FACILITIES

1120 WMSW PR Hatillo: night power to 5000 DA
1140 WRNA NC China Grove: 1000 D1 on 1030 kHz
1220 WLBI LA Denham Springs: 10000/1000 U2 on 1210 kHz
1320 WUNO PR San Juan: night power to 5000
1330 KENU WA Enumclaw: add 500 watts night, become U4
1360 WMNE WI Menomonie: to 870 kHz 2500/1000 U2
1530 KWOK OK Wagoner: 1000 D1
1540 WZZX AL Lineville: to 780 kHz 5000 D1
WARD PA Pittston: to 1550 kHz 5000/500 U4
1570 KBJT AR Fordyce: power to 1000
1600 KCGS AR Marshall: to 960 kHz, reduce power to 2500 D1

GRANTS TO EXISTING FACILITIES

860 KWHO UT Salt Lake City: power to 50000
930 WEKO PR Cabo Rojo: power to 2500 nights
1170 WDTB MI Diamondale: move to 1180 kHz
1430 WIVE VA Ashland: power to 5000 D3
1450 KFLS OR Klamath Falls: move XR
1460 WMBA PA Ambridge: adds 500 watts night, becomes U4
KWAZ TX Lubbock: 1000/500 U2
1540 WCLP GA Camilla: to 1400 kHz 1000/250 U1
1570 WFBZ WI Minocqua: power to 5000

U.S.-Canada Ink New AM Pact

Extended daytime hours and quadrupled nighttime power for Class 4 stations are among the terms of a new AM agreement signed in Ottawa recently by the United States and Canada.

The new daytime hours went into effect in December, but formal signing of the pact clears the way for the FCC to grant 1kw of nighttime power to Class 4's, now limited to 250 watts at night. A rulemaking for the higher power is already underway.

Most of the negotiations were taken up in resolving incompatibilities among 600 applications for new fulltime AMs on the 25 American and seven Canadian clear channels. Those disputes have been settled, but both countries have agreed to continue a freeze for new fulltime stations on the channels for another six months.

From *ARR* J.S.

OTHERNESS

- 550 WDUN GA Gainesville: this is the station all the services have been listing as applying for 5000/2500 U2 on 1240 kHz, obviously they haven't been able to figure out the switch between WGGG and WDUN, etc. This corrects the tentative application listed here a few weeks ago.
- 1510 WMIB FL Marco Island: application for fulltime on 1480 returned by FCC
- 1530 *New AL Hartselle: application for new station DISMISSED by FCC

FOR YOUR INFORMATION: The latest FCC records show the following figures for AM Stations: Stations licensed: 4660, Stations with outstanding CPs (new stations only): 224, Applications pending for new stations: 493. Note that the outstanding CPs includes a number of new stations that are already in operation that have not yet received their regular license. Some stations operate for months on their CP before the regular license is issued.

All for now, more if it happens,

Jerry Starr & Buffalo K. Foonman
Jerry Starr & Buffalo K. Foonman

AM 1110
wvnh

125 MAIN STREET, BOX 1110
SALEM, NEW HAMPSHIRE 03079

GREAT CIRCLE DISTANCES AND HEADINGS - A COMPUTER PROGRAM

Barry S. Finkel

I own a Casio FX-702P programmable calculator, which is programmed in BASIC. A while ago I decided that it would be handy to be able to calculate the distance and heading between my home and a station's transmitter; so I wrote the program that is listed below. I calculated the co-ordinates of my home using a United States Geological Survey 7 1/2 minute quadrangle topographic map. I find the co-ordinates of the city that I am receiving (or want to receive) using an atlas, FAA airplane map, or USGS quadrangle. (The FAA and USGS maps sometimes pinpoint transmitter locations).

My antenna, a McKay Dymek DA-5, has been modified with two pieces of cardboard so that I can tell the direction (angle) in which the antenna is pointing (0°=N, 90°=E, 180°=S, and 270°=W). Pointing my antenna at a station produces a null; pointing 90° away produces a peak. The program, after calculating the null and peak angles, transforms these angles so that they fall into the north semicircle (270° - 0° - 180°).

The program should be easily translatable into other dialects of BASIC. The algorithm was taken from a Hewlett-Packard Applications Book. The right-hand column documents the individual variables used in the program; the final results are stored in the variables D, N, and P (Distance, Null angle, and Peak angle). Co-ordinates are input in integer degrees and minutes; if I happen to have co-ordinates in seconds, then I convert the seconds to fractions of minutes. Statement 140 converts the distance from nautical miles into statute miles; statement 170 sets integer mode for output. The subroutine at statement 1000 performs the angle transformations - the input is in Y, and the output is in Z.

```

10 A=DEG(41,42,21)
20 B=DEG(87,40,46)
30 INP "LAT(DEG)=" , X , "LAT(MIN)=" , Y
40 C=DEG(X,Y,0)
50 INP "LONG(DEG)=" , X , "LONG(MIN)=" , Y
60 D=DEG(X,Y,0)
70 E=B-D
80 G=60*ACS((SIN A*SIN C)+(COS A*COS C*COS E))
90 Z=G/60
100 H=ACS((SIN C-(COS Z*SIN A))/(SIN Z*COS A))
110 IF SIN E < 0; H=360-H
120 Z=H+90
130 I=Z-(360*INT(Z/360))
140 D=G*1852/1609.344
150 Y=H: GSB 1000: N=Z
160 Y=I: GSB 1000: P=Z
170 SET PD
180 PRT "D=" ; D ; " N=" ; N ; " P=" ; P
190 GOTO 30

```

A: Chicago Latitude
B: Chicago Longitude

C: City Latitude

D: City Longitude
E: Difference in Longitudes
G: Distance in Nautical Miles

H: Null Angle (untransformed)

I: Peak Angle (untransformed)

X: Temporary Variable
Y: Temporary Variable
Z: Temporary Variable

```

1000 Z=Y
1010 IF Y < 90; RET
1020 IF Y > 270; RET
1030 Z=Y+180
1040 Z=Z-(360*INT(Z/360))
1050 RET

```

DOMESTIC DX DIGEST

DAVE SCHMIDT
42 CHELSEY RD.
CASTLE HILLS
NEW CASTLE, DE 19720

Here is the HRC column which is almost as exciting as the state songs from Vermont as sung by David Hartman! When sending your contributions in, please type or neatly write, one side of the paper, EST, skip a line or two between items and all that jazz. Here it be:



WMBM
Rhythm of the City

DX TESTS:

1580 WGBB *Heard w/poor signal 0123-0200 w/big band music, IDs. (TC-TN)
WZKY *ZZZZZZ. (TC-TN)
*0200 ID snuck thru pause in WSRF and WLIM ET. (DS-DE)

FREQ. CHECKS:

3rd Mon - KRDD-1320 anc'd f/c ending 0220 1/16. (WH-CO)
WCHE-1520 beep tone weak u/WKBS 0037 1/16, no ID's. (TC-TN)

SPECIAL:

530 KCB638 MD ROCKVILLE - 1/19 2040 tentative TIS, road conditions by MD State Police, fair u/National Airport TIS. (WPT-DC)
790 WRUM ME RUMFORD - 12/19 0312 noted w/what sounded to be reg. sked. including ads and all! Relaying PM? (ERC-MA)
710 CHYR ON LEAMINGTON - 12/31 1st noted after sunset not on 730, but here w/regular 10 kw power. Noted back on 730 1/2, guess the CRCC was on vacation that weekend. (JP-MI) Lessons from the FCC!
850 WHIG TN KNOXVILLE - 1/30 1700-1745 xint w/ABC news (Direction), CW music, s/off w/no mention of WIVK 107.7, first day on new calls, ex-WIVK. (TC-TN)
860 WBGR MD BALTIMORE - 1/27 1700 noted w/s/off, weak. Ex-WAYE. (MT-MD)
1150 KSAL KS SALINA - Sked., 24 hours, NSP. (GH-KS)
1210 KASY WA AUBURN - 1/24 now here from 1220, noted 0240-0300 s/off, pop oldies and comedy cuts, anc'd as soon to be 24 hours, power 2500/1000 U3 or U4 now. (DKK-CA)
1390 WRSC PA STATE COLLEGE - Per 12/22 reception, is now 2500/1000 24 hours a day. (FS-CT)
1540 KNGL KS MCPHERSON - Noted w/new calls, ex-KNEK. (GH-KS)

MIDDAY - MIDNITE:

570 WSYR NY SYRACUSE - 1/27 2359 good w/Talknet, promo for news, ID as "Newsradio 57". (JP-MI)
750 CBGY NF BONA VISTA - 12/27 1615-1655, 12/23 1628-1650 nicely atop in WHEB null w/CBC Talk show. (ERC-MA)
790 WETB TN JOHNSON CITY - 2/4 1806 very good w/rock music, birthday wishes, and ID. PSSA power? (DS-DE)
860 WDMG GA DOUGLAS - 1/19 1820 good w/pop music followed by brief religious program and ID. (GL-MS)
900 WJWL DE GEORGETOWN - 1/26 1308 fair o/u WFLN w/CW music, ID. (WPT-MD)
WFLN PA PHILADELPHIA - 1/26 1308 fair o/u WJWL w/classical music. (WPT-MD)
Yeah, that's who it is....but what happened to WLMG? (DS)
910 WALT MS MERIDIAN - 1/22 1424 w/pop music, ID. (GL-MS)
KGLC OK MIAMI - 1/26 2133 good, ID as "Super Country", weather then local basketball game. (JP-MI)
920 CKNX ON WINGHAM - 1/24 1633 surfaced o/WHJJ w/CW music, news. (PS-CT)
940 WCPC MS HOUSTON - 1/21 1251 good w/ID, weather. (LED-AL)
960 WSBT IN SOUTH BEND - 1/27 2345 w/end of "The World Tomorrow" then ID, MYL/EZL type music, o/u WPIR. (JP-MI)
980 KVLV NV FALLON - 1/24 1935-1940 solid atop w/pop/CW music, many ads. (DKK)
1070 CBA NB MONCTON - 1/21 1701 fair w/CBC news. (WPT-DC)
1080 KRLL TX DALLAS - 1/21 1830 good w/ID, weather, no WAPI-1070 splash, no sign of KAAY-1090. (LED-AL)
1150 KAGO OR KAMATH FALLS - 1/18 1941 w/ads, oldies/rock. (DKK-CA)
1170 WAMB TN DONELSON - 1/27 1723 u/WVVA w/MYL, ads, ID. (PS-CT)
1240 UNID 1/16 2008 fair w/MS state basketball. (GL-MS) It was likely a station in MS, does that help? (DS)
WARP AL JASPER - 1/21 1425 good w/CW music, ID, u/WCRT. (LED-AL)
1250 WEMP WI MILWAUKEE - 12/26 1532 w/Christmas Wish, ID, CBS football, early skip this PM. (JP-MI)
1280 WQUE LA NEW ORLEANS - 1/16 1934 good w/Top 40 music, ID's as "13 C" and upcoming "Jam-Off" promo. (GL-MS)
WNPT AL TUSCALOOSA - 1/21 1500 good w/news, weather, ID, pop music. (LED)
1290 WJBR DE WILMINGTON - 2/4 1754 noted w/standards on 150 watt PSSA, fair w/some WFBG/jumble, 3 miles away! (DS-DE)

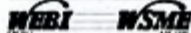
1300 WQBK NY RENSSELAER - 1/27 1634 fair u/WPBR w/time check, ID during news. (WPT-MD)
WIBR LA BATON ROUGE - 1/16 2001 good w/ID's on both ends of rundown of areas served. (GL-MS) Or run over? (DS)
1320 WDBR NH DERRY - 12/18 1500-1600 doing well o/u regular WARA. (ERC-MA)
1350 WYLS AL YORK - 1/21 1232-1240 good w/CW music, ABC sports, Alanet news. (LED-AL)
1430 WNWQ FL PANAMA CITY - 1/16 1955 fair u/KELI w/CW music, ID. (GL-MS)
KELI OK TULSA - 1/16 1956 o/u WNWQ w/"14K" ID's, disco music. (GL-MS)
WIVE VA ASHLAND - 1/23 1300 fair w/gospel program, ID, Mutual news, weather report. Noted while eating my baloney sandwich! (WPT-MD) Now we know what your full of! (DS)
1550 WAAY AL HUNTSVILLE - 1/21 1600 good u/WRSB w/ID, pop music. (LED-AL)
WMOO AL MOBILE - 1/21 1815 good w/s/off, no WAAY under. (LED-AL)
1560 WTAI FL MELBOURNE - 1/19 1744 fair u/WXR w/mention of Melbourne, partial ID. Positive ID on tentative of 2/28/79. (WPT-DC)
1590 WGCL MS JACKSON - 1/23 1937-1941 poor w/pop music w/KYOK/others. (GL-MS)

MIDNITE - MIDDAY:

560 WGAN ME PORTLAND - 1/10 0158 ID, News, Larry King show. (FW-PA)
570 KRQX TX DALLAS - 2/1 0018-0020 good w/rock oldies, "K-Rocks" ID. (TC-TN)
630 KIDD ID BOISE - 1/31 0318 w/ID, local ads. (FW-PA)
*WPRO RI PROVIDENCE - 1/30 0448-0502 noted w/ET using TT on day pattern, switched back to nite pattern before returning to reg. sked. (BC)
660 CFPR AB CALGARY - 1/24 0325 pounding in w/ID, xint conditions to north this AM. (DKK-CA)....1/15, 1/28 0200 noted w/Top 40 music, ID, xint signal. (WH-CO)
690 WVOK AL BIRMINGHAM - 1/1 1025 southern Gospel music show, local ad, ID, equal w/CFPR-680. (JP-MI)
770 *WABC NY NEW YORK - 1/30 0305 noted on TT this AM, Spanish under. (DS-DE)
810 WSJC MS MAGEE - 1/19 1128 good w/religious music u/WSHO-800. (GL-MS)
830 *WCCO MN MINNEAPOLIS - 1/15 0110 noted off this AM, OC at times. (JP-MI)
860 KVVA AZ PHOENIX - 1/30 0230 w/clear "Radio Viva" ID, Spanish talk and music, long/deep fades til 0301, clear English ID by female. (DS)
880 *WCBS NY NEW YORK - 1/22 noted totally off this AM, nothing else noted as the Cuban was off also, tried to land one of the new western fulltimers here. (ERC-MA)....1/29 0100 various TT noted on this Sunday AM. (DS-DE)
960 KMA IA SHENANDOAH - 1/28 0620 o/WFIR w/pro Farmers report, ad, ID. (JP)
980 *WPHG VA BRISTOL - 1/30 0312 loud w/Larry King, ID, evidently goes on day pattern for monthly f/c, gone 0315. (DS-DE)
990 WNYR NY ROCHESTER - 1/16 and every AM since, pounding in every AM, must now be on new power level. (ERC-MA) Hey Jerry, confirmable? (DS)
WYAT LA NEW ORLEANS - 1/19 1136 good w/ID, Sinatra song. (GL-MS)
1000 *KOMO WA SEATTLE - 1/30 0400 OC, TT, clear ID at top of hour, noted w/no sign of Latins. (JP-MI)
1060 *UNID 1/9 0137-0204 someone here w/ID for WMJX Boston, Magic 103.7 FM, this has me mystified! (ERC-MA) Where is BIG GEORGE KELLEY these days? (DS)
1150 *WDEL DE WILMINGTON - 1/30 0100-0135 ET w/Tone, music, OC and IDs. (CS-PA)
KSPN WA SEATTLE - 1/26 0242 w/ID thru din in KPRZ null, EZL vocals, in/ou for next 15 minutes. (DKK-CA)
1190 *KEZY CA ANAHEIM - 1/24 0305-0315+ blowing KEY away on ST w/day pattern, hard rock music, jingle/ID and OC. (DKK-CA)
1210 *WCAU PA PHILADELPHIA - 1/30 0210 noted w/various TT, PoP this AM. (DS-DE)
KREW WA SUNNYSIDE - 1/23 0007 noted w/Spanish program, ID, CBS news then s/off. (WH-CO)
1220 CKDA BC VICTORIA - 1/25 0343 o/u CJOC w/talk and ads then into rock music, good conditions to north. (DKK-CA)
1230 *UNID 12/15 0106-0116+ someone here w/PoP, fairly good signal. (ERC)
WJOY VT BURLINGTON - 12/30 0129 w/ID, evidently AN. (ERC-MA)
WBOK LA NEW ORLEANS - 1/19 1118 xint w/black gospel music. (GL-MS)
1240 WTAM MS GULFPORT - 1/19 1119 good w/ID, B/Sol music. (GL-MS)
1260 CIHI NB FREDERICTON - 2/3 0115 fair w/WDC w/rock music, ID's and female anc'r, not often heard this season. (DS-DE)
1270 *WXYZ MI DETROIT - 1/15 0120 noted off this AM, OC noted on hour. (JP-MI)
WHFB IL ROCK ISLAND - 1/15 0121 good w/WXYZ off w/CW music, ID. (JP-MI)
1410 CKSL ON LONDON - 1/15 0308 weak u/WING w/ID, rock music. (JP-MI)
1440 WRRQ OH WARREN - 1/29 0230-0250 good w/female anc'r, rock music, and sports scores. (NZ-NE)
WRBE MS LUCEDALE - 1/17 0823 fair w/WHYY/KMLB w/promo for CW show. (GL-MS)
1450 CFJR ON BROCKVILLE - 1/7 w/ID, news. (FW-PA)....12/20 0145 noted atop w/ID and slogan "Information Radio". (ERC-MA)
1470 CKO PQ MONTREAL - 1/25 0109 noted atop this Wed. AM w/usual all news format in English, not often heard here. (ERC-MA)



WBBX 1380



THE VOICE OF YORK COUNTY

⑥
 1480 CKAN ON NEWMARKET - 1/29 0115-0135 spotty but atop at times w/automated sounding CW music, little talk. (DS-DE)
 1520 *WKBW NY BUFFALO - 1/6 noted totally off this AM (Friday), no sign of Toledo, one very weak w/rock sounding music, UNID. (ERC-MA)
 1550 CBE ON WINDSOR - 2/1 0005-0007 good w/end of CBC news, weather then later w/classical music. (TC-TN)
 1560 WSDL LA SLIDELL - 1/19 1122 good w/Swap Shop program. (GL-MS)
 1570 CHLO ON ST. THOMAS - 2/1 0030-0034 fair w/XERP w/rock music, no listing for this guy, where? (TC-TN) Figures, it's listed as CKIS in the log, remember when he was on 680? (DS)
 1580 WSRF FL FORT LAUDERDALE - 1/30 0331 ads, Surf 16 ID's, fair but faded at times to CBJ and etc. (JP-MI)
 *WJIM NY PATCOGUE - 1/30 0200-0215 ET w/rock oldies, Big band music, several ID's, fair signal at best. (NZ-NE)
 1590 *UNID 12/16 0038-0116 tones noted on/off here, fairly strong at times, u/WQWQ til their s/off then equal w/WASY, this Friday AM time is roughly the old time for the WERA-NJ i/c, they? (ERC-MA)
 2/1 0007 someone very weak here w/Gatlinburg Information Radio, this TIS has been noted on 530 in the past but not tonite, what gives? (TC-TN) United Way does.... (DS)

RANDUMBS:

JIM PAIGE, Detroit, MI writes that after checking 1530 for WDEY-Lapeer, MI, they are indeed on the air but very directional north, ID's given as "103 FM, 1530 AM", barely audible in Detroit. Station is on, not off as earlier reported.

And Jim also reports the address given by WYAT a few issues back as 1639 Chateau Blvd., New Orleans was no good, PO returned report as no such address but this was noted given on their s/off! Help?

The DX season hasn't ended yet, keep those reports coming, we can use the help....we can't have this column as thin as IDXD-hi!

THANKS:

MT-MD/Mike Tuggle, Bel Air, MD/Lyonodyne Xtal, LW
 PG-CT/Paul Stephan, Old Greenwich, CT/R70, Radio West Loop, LW
 NZ-NE/Neil Zank, Lincoln, NE/HQ180A, RF2600
 FM-PA/Frank Wheeler, Erie, PA/Halcrafters S40B, Steward Loop
 WPT-MD/Bill Townshend, Wash. DC (at work MD)/TRF, ICF55W
 WPT-DC/Bill Townshend, Washington, DC (Home)/TRF, ICF55W
 TC-TN/Tom Conatser, Sevierville, TN/ Superadio
 JP-MI/Jim Paige, East Detroit, MI/Channel Master Portable, DX160, LW
 ERC-MA/Ernest Cooper, Provincetown, MA/HQ180, LW, Loop, Superadio
 WH-CO/Wayne Heinen, Aurora, CO/R390A, R3B4, Mw1, LW
 BC-RI/Bruce Conti, W Warwick, RI/DX400, SM2
 GS-PA/Charles Slezak, Oxford, PA/WDEL Transmitter Room!
 DKK-CA/Don Kaskey, San Francisco, CA/HQ140X, SM2
 GH-KS/Gary Houdek, Munden, KS
 GL-MS/Greg Ledbetter, Purvis & Picayune, MS
 LED-AL/Greg Ledbetter, Birmingham, AL
 DS-DE/Not who you think!/HQ180A, SM2, Superadio, Short LW!

And thanks to MK and ERC for the logo's! More next time! 73's - Good DX!
 Including some BEACON's from Robert Kramer!

New Call Sign Rules Trigger Flood Of Changes

In the ten days since the FCC's loosened call letter rules took effect (1-30), the Commission has been deluged with requests for name changes. Apparently many stations were just waiting for new procedures, in which new calls are assigned as quickly as one day after they're requested.

New calls were assigned to 44 stations this week, about three times the previous average. While none of the call signs appears to suggest obscenities or ethnic slurs, at least one set was previously off limits. KPRZ/Los Angeles was renamed KUSA. The station had been seeking those letters for some time, but ran afoul of the now-defunct requirement that "suitable clearance" be obtained to use letters that spell the name of a government agency or US President. Can KFBI, WCIA and WJFK be far behind? Other calls assigned this week include WLTW/New York (formerly WKHK), WVOJ/Jacksonville (WOZN),



P.O. BOX 7
 PITTSBURG, KAN. 66762

KLOK-FM/San Francisco (KGO-FM), KTCJ/Minneapolis (KTCR), KLZZ/San Diego (KPRI), and KLUV/Dallas (KLVU).

Meanwhile, in a petition for partial reconsideration, NAB has asked the FCC to resume its role in resolving call letter disputes, a job now left to local courts. NAB buttressed its case with a study, "Call Letter Confusion and Its Ratings Impact," prepared by the firm Hiber, Hart & Patrick.

WV PA Jerry Starr

3 applying for AM radio frequency near St. Paul

Associated Press
 Washington, D.C.

The Federal Communications Commission said Tuesday it has ordered hearings to compare the qualifications of three applicants for the right to use the AM frequency of 1100 kilohertz near St. Paul.

One applicant, Newport Broadcasting, wants to shift its KMAP-AM in South St. Paul from 1370 kilohertz to 1100 kilohertz to increase its range. The station is off the air because of transmitter and antenna difficulties.

The other applicants want to build new stations. They are Benito Juarez Sandoval, who wants to build in Newport, Minn., and the Frontier Radio Corp., which wants to use the frequency for a new station in nearby Madison Lake, Minn.

John Sampson

**INTERNATIONAL
 DX DIGEST**

①
 CHUCK HUTTON
 1035 LATHAM ROAD
 DECATUR, GA 30033
 (404) 633-1198
 BEFORE 2300 ELT

Times are GMT. For ELT subtract 5 hours. Deadlines are usually Monday

Test...test...test... typewriter looks better now I think Mike. Now to get a new ribbon. (Thanks Chuck -HQ)

550 VENEZUELA YVKE 0901 1/27 local level with nice ID at tune-in; "desde Caracas, capital de la republica de Venezuela, transmite Mundial con 10,000 vatios de potencia musical" and "nuestra musica nacional por YVKE Mundial". (Reinstein) I guess that ID is good enough....CH
 585 SPAIN Madrid 2341 1/19 SS talk by man and woman fair. (Hakiel)
 590 COLOMBIA HJCH 0650 1/27, belated to 0657, partial ID by man heard: "por Dios,, el camino..en Radio Sutatenza". Religious talk at 0700. Rather weak signal. (Reinstein)
 620 COLOMBIA 0909 1/27 per donnelly log in #15, oddly enough had 3 time tones at 0909 followed by ID "Radio Ciudad de Cartagena..de la costa". Presume this is not the Cali stn since Cali is nowhere near the coast. (Reinstein)
 666 PORTUGAL Lisboa 1/22 0039 with alternating male and female anners in PP and brief musical excerpts. Good signal. (Herkimer)
 666 USSR Lithuania Vilnius 1/18 0509 male via phone, the female w/AM type talk (Lithuanian listed). (Vernon)
 681 SPAIN Sevilla 0056 1/19 old pop tune "Down Mexico Way", SS talk, good. (Hakiel)
 693 ENGLAND Droitwich 0439 1/15 EZL mx, EE talk poor-fair. (Hakiel)
 720 JAMAICA HJR 0930 1/27 weak level with morning religious program, heavy Caribbean accented preacher. (Reinstein)
 730 SPAIN Barcelona RNE 1/18 0217 with lush SS belated and man annor. (Herkimer)
 765 SENEGAL Dakar 1/22 0054 heard briefly at good level with flutes, drums, and man in vernacular. Antenn s/d off at 0103. (Herkimer)
 2212 1/14 man in vernacular isng, xint. (Hakiel)
 765 USSR Medvezhyorsk 1/18 0406 male and female anners // 230, 801, Program One good. (Vernon)
 774 SPAIN synchro 0258 1/1a SS pop mx, SS talk, good. (Hakiel)
 803 PORTUGAL Miramar 1/19 2343 with PP songs and woman annor, faded by 0000. (Herkimer) 2324 1/13 flamenco mx, PP talk, good. (Hakiel)
 810 SCOTLAND Westerglen etc. 1/18 0559 female with mention of different wavelengths during s/on. (Vernon)
 810t USSR Estonian SSR Voru 1/18 0231 believe to be the one w/USRN anthem, same time as 1035 etc., did not check for Estonian anthem later. (Vernon)
 810t USSR Vladivostok 1/15 1011 male w/CC talk then female w/same, poor. (Vernon)
 825 PANAMA NUNBO 1055 1/26 fair signal at tune-in w/cumbia style pop mx. Man on with time check for 5:57 and mention of "Panameno". Lost under local powerline QRN by 1100. (Reinstein) Quit DX'ing from under the line! CH
 870 ARGENTINA Buenos Aires 0605 1/25 lovely guitar solo, fair. (Hakiel)
 873 USSR Mezen 1/18 0340 1 kHz TT for 5 seconds then silence for 5, this repeated often, noted w/female annor, 0400, no anthem type s/on, // 1125 probably Program Three. (Vernon)
 891 ALGERIA Algiers 2140 1/19 AA vocals by man, xint. (Hakiel)
 900t SAUDI ABAHIA Al Qasrayyat 1/20 0301 male w/AA wailing. (Vernon)
 900 UNID 11/15 probably Aims Ata again, male w/CC talk, good, not // 810 though. (Vernon)
 909 ENGLAND BBC synchro 0102 1/15 EE talk, fair. (Hakiel)
 936t MOROCCO Agadir 1/18 0415 male AA wailing, never noted before. (Vernon)
 936 USSR Ukrainian SSR Lvov 1/20 0255 noted w/many verses of the Ukrainian anthem, USSR anthem noted 0301 // 999, 1059, 1143. (Vernon)
 945 FRANCE Toulouse 2226 1/19 PF talk, fair. (Hakiel)
 945 USSR Latvian SSR Riga 1/18 0254 male singer // 1000, 1026 Program Two, noted w/Keyak IS 0259. (Vernon)
 954 TURKEY R. Trabzon 1/15 0259 Turkish anthem in progress, 0300 tone (sounded like a bang on a pan), female annor, xint sig, also on tape. (Vernon)
 963t BULGARIA Dragomen 1/18 0104r light orchestral mx and light classical, no talk noted till 0130 then female annor, This is usual horizon type pgm. (Vernon) Wonder what the Vertic program sounds like??? CH

963 FINLAND Turku 1/10 0621 female with rapid talk (unusual that, HI),
topping Caroline briefly. (Vernon)

963 NORTH SEA N. Caroline 1/10 0600 Caroline theme s/on, ID then rr
1/20, 0600 male with s/on, only ID mentioned and 6'o'clock news,
0601 rr mx, spots at 0627 and 0721 for "Caroline 319" book, photos
of ship and DJ's from Seagull Sales, BSN box 66, London WC1, cost
4 pounds, is a private publication, nothing to do with Caroline
organization. Snip apparently off 24 hours sked. I have ordered
things advertised on the previous Caroline through box numbers
and things take a very long time to arrive. Am still waiting on a
long sleeved sweater for three years. (Vernon)

1000 COLOMBIA HJAJ Q140 1/29 Cartagena w/big signal. Ad for "Cerveza
Aguila" (Eagle Beer) and beisbol. Seemed // 1040 Barranquilla with
beisbol too. (Reinstein)

1000 USSR Petropavlovsk 11/15 1/59 PS IS, 1000 Kremlin bells, USSR an-
them, poor signal, 11/10 PS IS noted at 1429 w/JORN, maybe another
TP Soviet here now? (Vernon)

1010 VIETNAM Hanoi 1/17 1508 female w/GC talk, topping a weak QM, music
then 1500 female again, our great mechanist translated this bit,
she (the snor) mentioned Hanoi calling the Chinese (or similar),
then talked about an island formerly part of Vietnam, now part of
China; all in Mandarin Chinese. Xint signal with slight het. (Vernon)

1017 CHINA unk CPBS1 1/10 1500 pips, female then male w/Potentia ID.
(Vernon)

1017 TUNEX TMT1 Istenbul 1/10 0233 AA type singing // 091, xint. (Vernon)

1020 VENEZUELA YVMX 1055 1/30 fair level with "Musica Venezolana". Men-
tions of Mercedes in mercedo ads. (Reinstein)

1020 AUSTRIA ORF Graz-Dobl 1/10 0457 male w/GC ID then two IS, this
combo repeated often. (Vernon)

1026t CHINA Yingkou LPS (nearest listed) 1/10 1512 Chinese Opera type
play and mx, fair-poor signal. (Vernon)

1026t USSR Novosibirsk 11/15 1/59 PS IS noted very weak, same as 1000
but nothing else, only this listed. (Vernon)

1035 USSR Estonian SSR Tallinn 1/10 0335 female w/talk o/piano mx, exer-
cise. (Vernon)

1040 VENEZUELA YVLS 1057 1/30 LV de Carabobo heard with "Noti-Rumbos"
and usual Rumbos doorbells // 4/80. Fair level but mixing in/out
with Barranquilla. (Reinstein)

1044 EAST GERMANY DDR1 burg 1/10 0456 female w/talk o/piano mx, another
exercise program. (Vernon)

1062 PORTUGAL norte Azurara Q421 1/14 disco mx, FF talk, good. (Hakiel)

1062 TUNEX TMT1 diyerbakir 1/20 IS noted 0157, anthem noted 0159, b
pips then male snor, good signal. (Vernon)

1089 USSR Krasnodar 1/20 noted w/USRR anthem 0200 also at 0300!! At 0210
female with talk o/exercise pgm. (Vernon)

1098 USSR Vologda 1/10 0359 Mayak IS noted, nothing else, listed power
would seem a bit low I think. (Vernon) Well, it's either believe
you or believe the Russians.....can I give you an answer next week?

1100 COLOMBIA R. Reloj 0155 1/30 fair o/WWE with lots of cumbies. Men
w/ID "escucha Radio Reloj". (Reinstein)

1107 USSR Arkhangelsk 1/10 0256 tone at 1 KHz for 5 seconds, then 5
second silence repeated often, noted at 0351 w/female snor, forgot
to re-check at 0300 but that time would seem to be their s/on. (BV)

1125 USSR Leningrad 1/10 0356 1 KHz TT for 4 seconds, 4 seconds silence,
repeated often, 0400 female with talk // 013, probably Program
Three. (Vernon)

1152 ROMANIA Cluj 1/10 0357 noted w/their anthem, also on 1053. (Vernon)

1160 DOMINICAN REPUBLIC HIBG 0125 1/30 nightly stop R. Haysno and a
rumble of stations. Almost non-stop merengue and pops. TC/ID over
the music at 0135 "9:35 hora de radiolandia". (Reinstein)

1179 ROMANIA Baceu 1/10 0353 band mx, 0355 medieval type mx IS then faded.
This probably part of s/on, not 24 hours, 1053 is not 24 hours as
listed either. (Vernon) Now we have to figure out whether to be-
lieve you or the WWF. Can I give you that answer in two weeks?

1206 FRANCE Bordeaux 2226 1/19 FF talk by man, good. (Hakiel)

1215 USSR Estonian SSR Tartu etc. 1/10 0227 Estonian IS // 1035, 1332,
1512 all good-xint. (Vernon)

1233 CZECHOSLOVAKIA Praha etc. 1/20 0144, female singers, xint sig //
1521. (Vernon)

1242 USSR Ukrainian SSR Kiev 1/20 chorus type mx // 1377, 1404, never
noted before. (Vernon)

1278 USSR Gorkiy etc. 1/20 0118 female singer, Mayak IS, noted 0129
poor signal. (Vernon)

1314 NORWAY Kvotsoy 0010 1/15 EE question and answer program, local-
like, ID's as "Radio Norway", how nice it is to listen to a TA in
EN!! Seems like they are in EE 0000-0030 UTC Mondays, xint. (Hakiel)

1314 SPAIN N. Centro, Madrid 1/20 0305 male w/talk o/hand mx, many R.
Centro ID's. (Vernon)

1395 ALBANIA Lushnje 2307 1/15 Slav talk by woman, good. (Hakiel)

1440 JAPAN JUMP Sepporo 1/14 1/14 JJ mx mixing w/AA Saudi Arabia wait-
ing, both xint. (Vernon)

1440 LUXEMBOURG marnen 1/10 0245 snor Bob Stewart mentioned all time
T-50 played earlier (1/15) on Lux's 50th birthday. (Vernon)

1449 USSR unk 1/20 0200 USSR anthem sneaks w/Aalinin except for almost
ever present signal here. (Vernon)

1467 MONACO Monte Carlo 1/10 2227 with conclusion of "Back to the Bible"
produced by the Good news broadcasting Corporation, very strong
signal. (Hakiel) 2233 1/10 religious pgm in aa, fair. (Hakiel)

1467 UNITED ARAB EMIRATES Dubai 1/19 1537 male AA type waiting, fair.
(Vernon)

1494 USSR Moldavian SSR komrat/beitsy 1/17 0312 female singer w/EE
Leningrad // 1407. (Vernon)

1503 POLAND Stargard Szczecinski 0445 1/15 Polish talk by man, poor.
(Hakiel)

1521 SAUDI ARABIA Duhna 0375 1/15 AA onsets w/flute background, good.
(Hakiel)

1557 FRANCE nice 0621 1/15 FF talk, fair-good. (Hakiel)

1575 THAILAND VOA Ben Pachi 1/9 1520 Yankee Doodle IS noted 1531 male
vis phone w/Palestinian mx, then studio male with talk of earth-
quake in Indonesia, then item about Marcos, fair signal w/GC QM.
(Vernon)

1593 WEST GERMANY Langenberg 0334 1/15 pop mx, GC talk, good. (Hakiel)

And the stuff this time came from:

George Hakiel-W. Islip, NY	R/A, R70, LW, loops, phasing unit
Jim Herkimer-Caledonia, NY	R390A, Bohac altz
Steve Reinstein-Miramar, FLA	R70, R2200, 190' LW
Brian Vernon-Else, Yukon	PRG7000, R/A, 6 Beverages (3 useful)

And that be all.....



MARCH 1940
RADIO STATION KGKL
San Antonio, Texas

NOTES ON A 50 KW STATION BY Joseph Chambers
Technical Supervisor, Broadcasting Division, Crosley
Radio Corp.

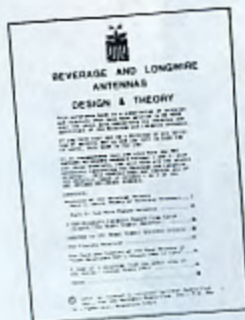
This installment summarizes some of the outstanding features of WLV's transmitter.

1. The normal carrier delivered to the antenna is 500,000 watts.
2. 100 per cent modulation is obtained.
3. This means that 2,000,000 watts is radiated at peaks of modulation.
4. An average of 1800 kva of power is required.
5. The frequency characteristic of the entire transmitter is flat (within 2 db) from 30 to 10,000 cycles.
6. The total audio frequency harmonics do not exceed ten percent up to ninety-five percent modulation.
7. The radio harmonic radiation is so low that any point in the harmonics will not be greater than 1/100 of one percent fundamental.
8. Rectifier filaments which require 30 minutes to heat up are turned on by a time clock. A spare tube is kept hot at all times.
9. The starting control system will start the entire transmitter automatically in proper sequence and with proper time delays, if desired, or individual control of any part of the sequence is obtained by switches on the studio console.
10. In case of momentary failures, such as arc-overs or tube flash which can be cleared by removal of the power, the transmitter is automatically restarted in about 1/5th of a second.
11. In case of failures requiring attention, the unit containing the failure is automatically isolated and the transmitter automatically restarted in about one second and continues to operate on slightly reduced power.
12. 22,500 cubic feet of air per minute is circulated for cooling various parts of the transmitter.
13. 500 gallons of distilled water and 700 gallons of city water are circulated each minute for tube cooling. A spray pond 75 feet square is used for cooling the city water.
14. A .58 wave vertical radiator, 830 feet high, is used as the antenna.

Certainly quite a technical for FIFTY YEARS AGO.....

NEW!!

JUST RELEASED !!



52 PAGED PAGES

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THIS MANUAL IS A COMPILATION OF NUMEROUS ARTICLES ON THE SUBJECT OF DESIGN AND THEORY OF THE BEVERAGE AND LONGWIRE ANTENNAS WHICH HAVE APPEARED THROUGH THE YEARS IN DX NEWS. NOW THEY ARE AVAILABLE ALL UNDER ONE COVER, IF ORDERED SEPARATELY AS REPRINTS, YOU WOULD SPEND THREE TIMES AS MUCH !!

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64 PAGED PAGES

By Mark Connelly - W1LION DX LABS - 10 Jan 84

There's been a renaissance in serious DXing in the '80s - truly fantastic catches by Neil Kazaross, George Hakiel, Brian Vernon, Bill Bailey, Pat Martin, and others frequently evoke memories of the late '60s Nelson era touted by some as the 'golden age of DXing'. Actually the current DX reported is of BETTER quality when you consider the increased domestic station & man-made noise QRM problems besetting us today.

Phased Beverages or phased longwires are an important part of many top notch foreign-DX listening posts. As mentioned in previous discussions of phasing, it is not always a direct substitute for a good loop; simultaneously, a good loop is not always a substitute for phased wires. The serious modern MW DXer calls upon both methods of 'pest' nulling frequently and soon recognizes which method will work better for a given kind of DX at his QTH.

A few years back, an article describing the construction and use of the 'MWDX-1' passive phasing unit was published. Several people have built variations of this unit and have generally had good luck with it.

Interest in phasing units has remained high, especially in light of the recent Kaz-lead African/northeastern Brazilian DX 'stampede'. Recent experimentation with phasers having dual active-tuner inputs has shown that aerials as short as 2 ft/ 0.6m (e.g. car whips) may be phased to produce nulls of unwanted stations, reducing QRM to both weaker co-channel stations & to adjacent channel stations.

Q-Spoiling: Key to Phase null Stability

Testing of both active and passive phasing systems has been done at my West Yarmouth (Cape Cod), MA. foreign-DX monitoring station/antenna lab. Also, Neil Kazaross has helped me greatly by testing phasing units at his superb DX QTH in Ogunquit Beach, Maine - the first permanently - occupied Atlantic seashore Beverage - equipped installation in many, many years. (As we should all know, salt water on desired paths coupled with poor-ground blockage on undesired paths can be as valuable to a knowledgeable low-angle [e.g. foreign] and groundwave DXer as the best receiver money can buy.)

Both Neil and I have established that steadiness of nulls is superior on phasers using dual passive-series-tuner (PST) inputs than on those using initial-design active-parallel-tuner (APT) inputs.

The reason for this turns out to be primarily a matter of tuner circuit Q [selectivity]. The APT-type input, unless deliberately Q-spoiled, is so sharply tuned that null stability, even on groundwave stations, is inferior to that of the older PST-inputs design. A sure sign of excessive Q in a phasing unit's input tuners is that, when a pest - station's carrier is nulled, the sidebands are still strong, producing the 'Donald Duck audio' reminiscent of ham SSB copied on a receiver in the AM mode. A proper phasing system must consist of tuners sufficiently broadband that when a moderate-strength station is phased, its audio and carrier go away together, leaving clean reception of subdominants which, initially, may have been 40 db below the dominant station. Minor touch-up of the vernier null controls should remove all slop from 10 KHz adjacent stations which were originally 60 dB weaker than the now-nulled pest station.

A dual-APT-input type phaser (= active phaser) can be Q-spoiled to enhance null stability; this can be accomplished by installing a 0 to 100K pot in parallel with each APT's tuning capacitor. The same technique can be used to Q-spoil loops - an important consideration for stable loop vs. wire or loop vs. loop phasing arrangements. Some have assumed that the transistors in loop amps, & active wire tuners lacked phase/gain stability, hence causing unstable nulls. This is less likely to be the problem than the inherently high Q of such circuits.

Future articles are planned to deal with improved shortwave phasing using Q-spoilable active input tuners. Also under design: a dual Passive Parallel Tuner [PPT] longwire phaser of comparable performance of the MWDX-2 and having as benefits simpler operation and easier construction.

The PST-type input tuner design works well as Q is spoiled by adjustment of the series pot between the aerial's impedance and the impedance of the associated passive series input tuner. Of course, anytime the Q of a tuned circuit is degraded, system sensitivity decreases and the likelihood of spurs from off-channel stations increases. For the first reason, the use of an amplifier after the phaser is recommended: this is especially true when wires less than 328 ft/ 100 m are being used during low-signal conditions [e.g. daytime or auroral night-time]. For the second reason (spurs), a high-Q tuner should be inserted between the phasing unit output and the receiver input. In the first case, a broadband amplifier (cascaded MWA-120's for instance) could be used and in the second case a passive-parallel-tuner could be employed, but the most elegant solution to both the low signal and spur/low Q problems is the use of the APT-2 (Active Parallel Tuner with regeneration capability). Construction and use of the APT-2 tuner (including use as a tunable output amp. for phasing units and loops) was described in a recent DX NEWS article.

Neil Kazaross has reported good results by following his dual-PST-input passive phasing unit with the APT-2. The regeneration feature of the APT-2 is occasionally employed to enhance reception of the weaker Trans-Atlantic 'splits' after phasing has removed the bulk of the adjacent channel domestic-station interference.

MWDX-2: AN IMPROVED PASSIVE PHASER

As most DXers who want to use phasing will be using aerials of length greater than 82 ft / 25 m and because most have stated that a single-box design is more convenient, if less flexible, than the modular (3-box) approach, a unit equipped with dual PST-type input tuners will be the subject of this article. This unit, the MWDX-2, offers substantial design improvements over the old MWDX-1.

Complete step-by-step construction details, of the sort offered with MWDX-1 and APT-2, take up much valuable space and are boring to many readers. Such documentation for MWDX-2 will be limited to bare essentials: schematic with itemization of critical parts, hole list, and details of the 'floating' variable-capacitors and RF transformers subassemblies. Data supplied should be sufficient for the experienced 'homebrewer'. The author will supply more detailed information upon request as well as components at cost plus shipping to those who want to build the MWDX-2. The unit should be producible for about \$100 if some of the parts are acquired at ham-radio 'flea markets' rather than at commercial suppliers such as Radio Shack, Mouser, & Etco.

Experimentation with several toroidal core materials has shown that the Amidon FT-82-77 core provides good performance at reasonable cost (90 cents per core). The FT-82-61 cores used in previous designs exhibited some signal loss at frequencies below 880 KHz. The Miller F-87-1 cores work well, but are expensive (now \$5.99 at Mouser). The next round of experimentation here will involve evaluation of pre-made phase-reverser and balun transformers produced by Mini-Circuits Labs, Vari-L, and several other firms. Suffice it to say, if well-performing, reasonably-priced, pre-fabricated RF transformers are found, you'll read about it shortly. Winding transformer toroids and mounting them on vectorboards is one of the more tedious aspects of phasing-unit construction.

Figures 1 through 4 are the schematics for the MWDX-2 one-box dual-PST-inputs type phasing unit. Note the Frequency Range switch charts accompanying Figures 2 and 3. Table 1 lists holes to be drilled in the chassis box. For required tools, construction tips, etc. those outlined in the recent APT-2 construction article should prove to be of assistance.

Figure 5 gives information which should be useful in fabricating the floating (ungrounded) C1 and C2 tuning capacitor card subassemblies.

Figure 6 is the T1 Phase Reverser Card subassembly drawing and Figure 7 is the drawing for the T2 Balun Card.

FROM SAN LUIS OBISPO, CA. TELEGRAM-JOURNAL JAN 31, 1984

Peterson ... on ... the move

Fred Peterson, KSLY radio's news fixture for the past 14 years, will now be heard on KUNA.

But the 63-year-old newscaster isn't going anywhere. It's the station that's moving.

Sister stations KSLY and KUNA are trading places.

Starting Wednesday, AM listeners familiar with KSLY's "contemporary hits" style will find it at 96 on the FM dial.

And FM-96's former tenant, KUNA, will switch its "beautiful music" to AM-1400, KSLY's home.

KSLY's "Peterson ... and the news," however, will stay on the AM dial, becoming KUNA's news program.

News on KSLY will be the

responsibility of Annette Zumba, said general manager Guy Paul Hackman, with Peterson doing special projects for the FM station.

Owned by Dudley White of Santa Ynez, the two radio stations are trading places in order to expand KSLY's audience, Hackman said.

The FM spot covers the area from Paso Robles to Lompoc, Hackman said. The AM station can sometimes be heard in Paso Robles and the South County in the daytime, but doesn't reach Santa Maria, he said.

Though all of KSLY's disc jockeys are moving to the FM dial, Peterson is remaining in AM.

That's not a demotion, Hackman said.

"He relates much better with the 35-plus audience," which is what KUNA is after, Hackman said.

"We needed someone younger (for KSLY); more in tune with the youth market."

A 34-year veteran of the radio business, Peterson came to KSLY in May 1968.

"You've got to go along with progress; you can't remain stagnant," Peterson said of his assignment to KUNA.

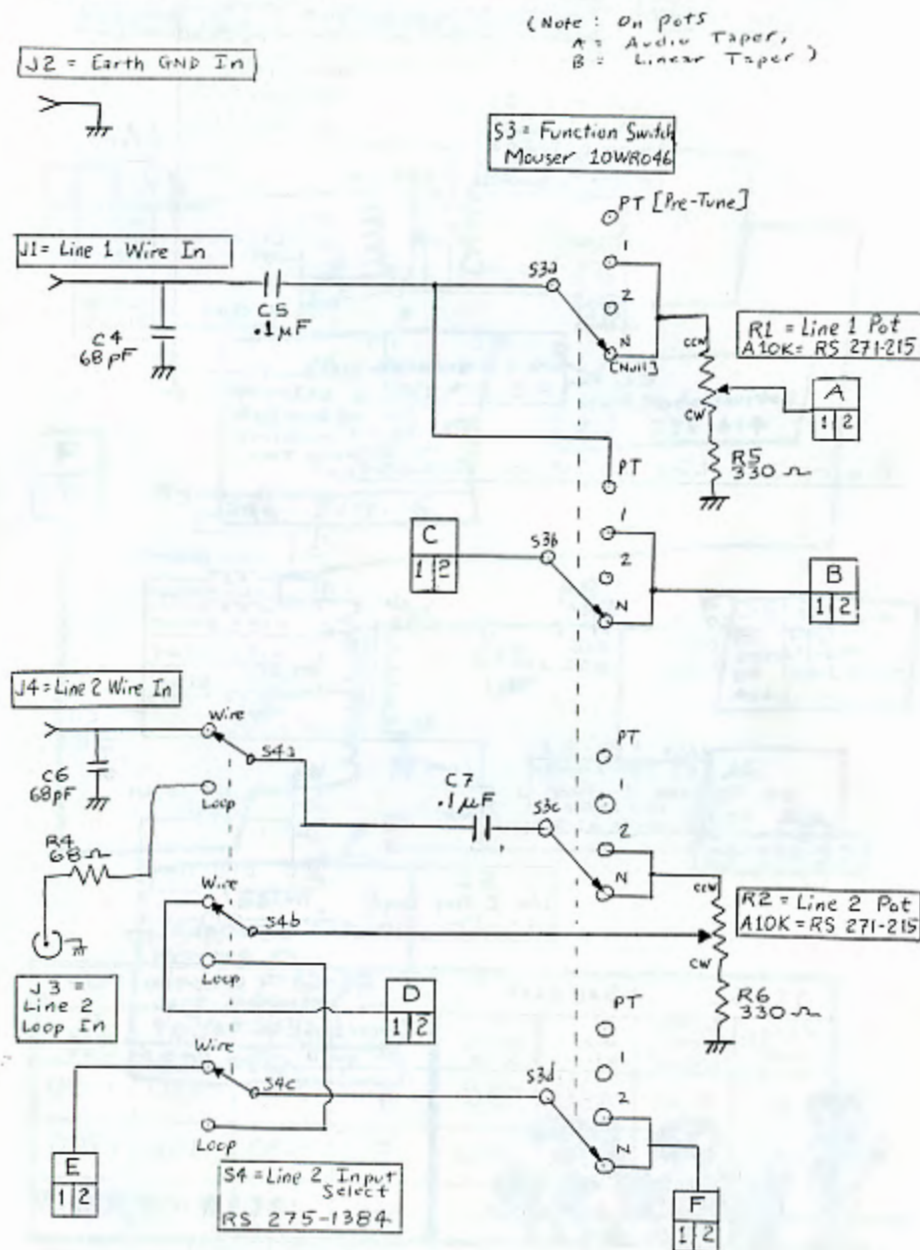
"The trend is to FM and they want to weed out the old and bring in the new."

ALSO: KATY 1340 IN SAN LUIS OBISPO, CA., HAS BEEN SILENT SINCE ABOUT JULY 1983 DUE TO FINANCIAL DIFFICULTIES

FROM: HERMAN FLEW

1-Box Passive Phasing Unit for Wire Aerials of Length $\geq 25m / 82 ft.$

Figure 1: Schematic, Input Switching



MWDX - 2
Phasing Unit

Figure 2 : Line 1 Wire Tuner

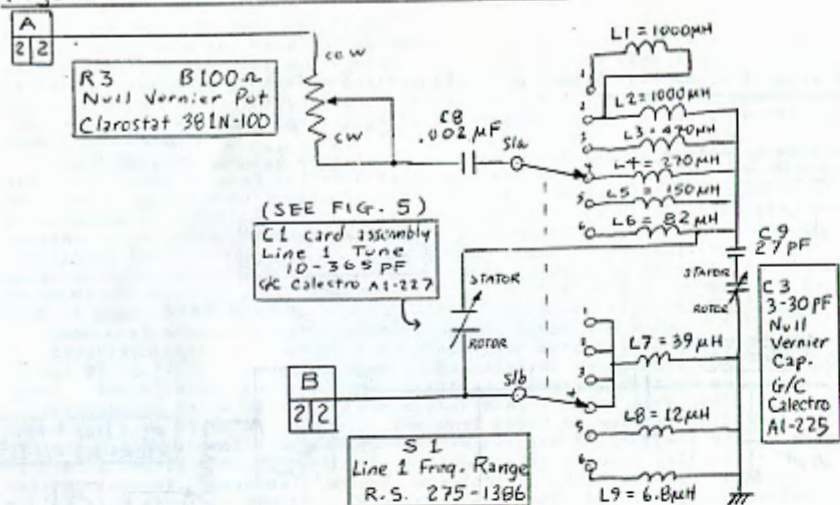
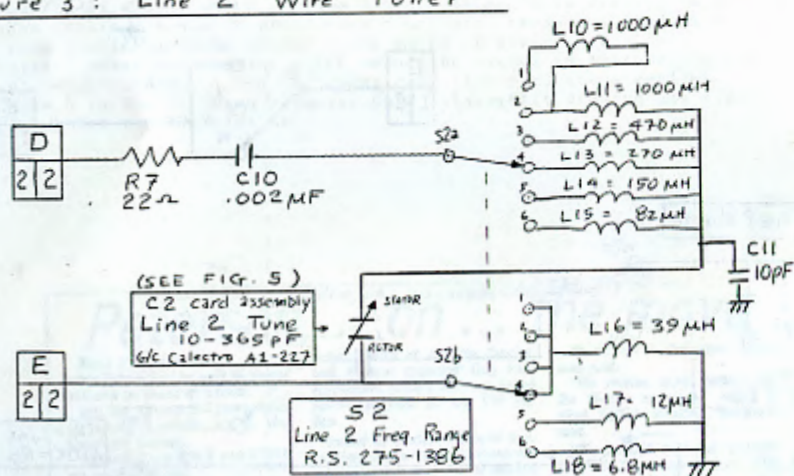


Figure 3 : Line 2 Wire Tuner



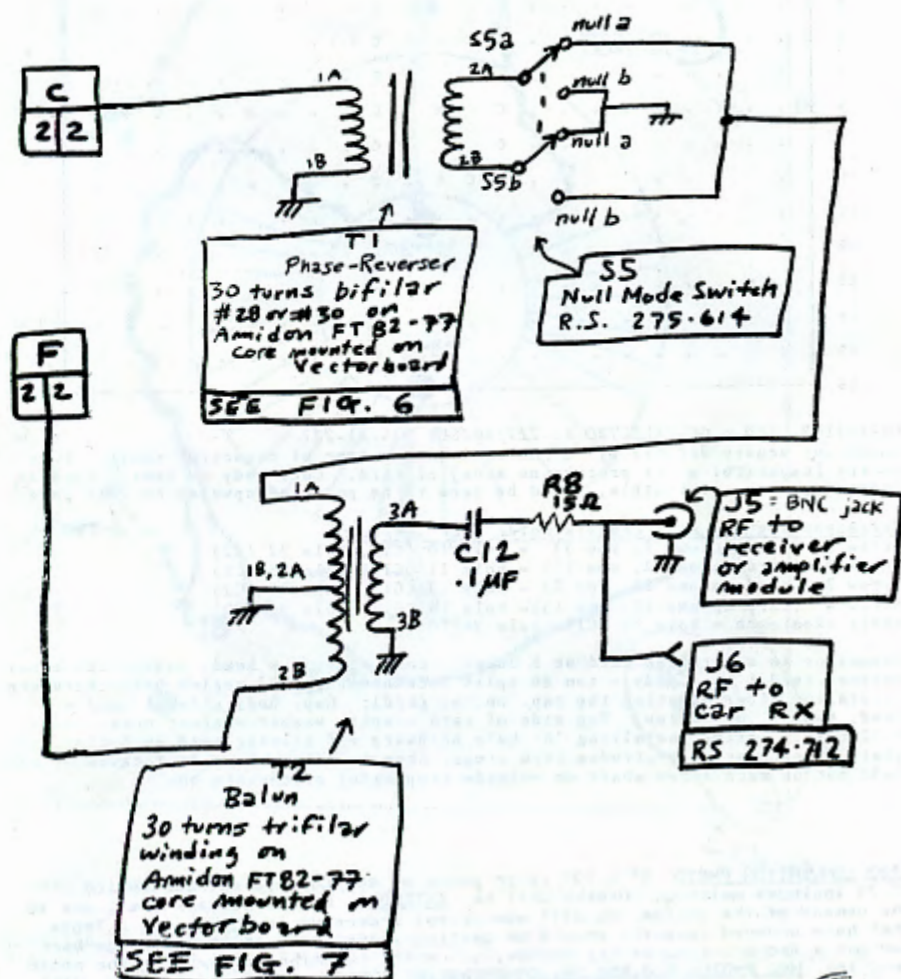
S1, S2 "Ballpark" Settings [30m/100ft. wires]							
Range	Switch Pointer "O'clock"	F min. KHZ	F max. KHZ	Range #	Switch Pointer "O'clock"	F min. KHZ	F max. KHZ
1	9:30	450	530	4	12:30	950	1100
2	10:30	530	700	5	1:30	1100	1700
3	11:30	700	950	6	2:30	1700	2400

Inductors are Mouser 43LR series, or equivalent

MWDX - 2

Phasing Unit

Figure 4 : Phaser Output



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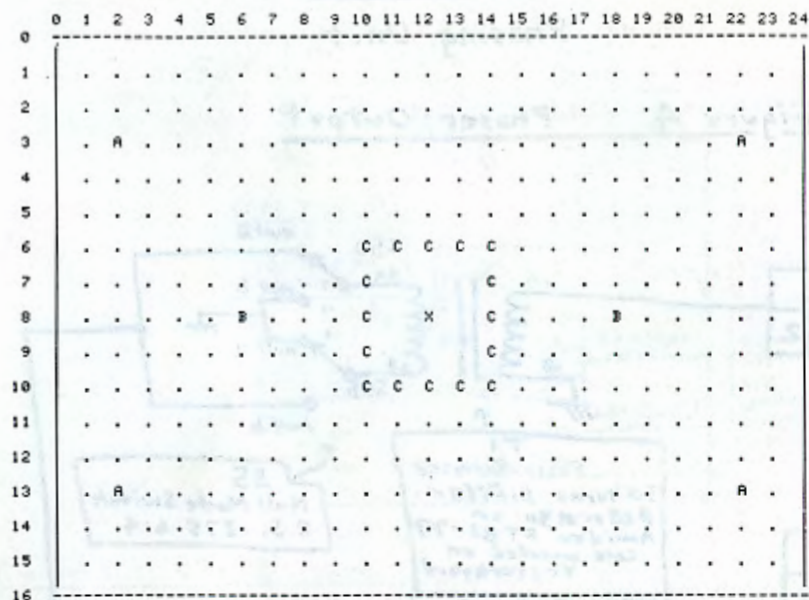
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FIGURE 5 C1 & C2 Floating Variable Capacitor Cards [A1-227 air cap.]

Hole Diameters: A = .14 (#28), B = .221 (#2), C = .113 (#33)

[Dimensions in inches x 10; card size = 1.6 inch by 2.4 inch]



CAPACITOR USED = GC-CALECTRO A1-227/MOUSER 524-A1-227

Punch out square defined by 'C' holes. X is center of capacitor shaft. This is top [capacitor shaft protrusion side] of card. Cap. body is behind card as viewed; plates, if visible, would be seen to be pointing upwards on this page.

Corresponding top side chassis holes (per Table 1)

Screw 1 (card column 2, row 3) = hole 10 (C1), hole 32 (C2)
 Screw 2 (card column 2, row 13) = hole 11 (C1), hole 33 (C2)
 Screw 3 (card column 22, row 3) = hole 13 (C1), hole 35 (C2)
 Screw 4 (card column 22, row 13) = hole 14 (C1), hole 36 (C2)
 shaft clearance = hole 12 (C1), hole 34 (C2)

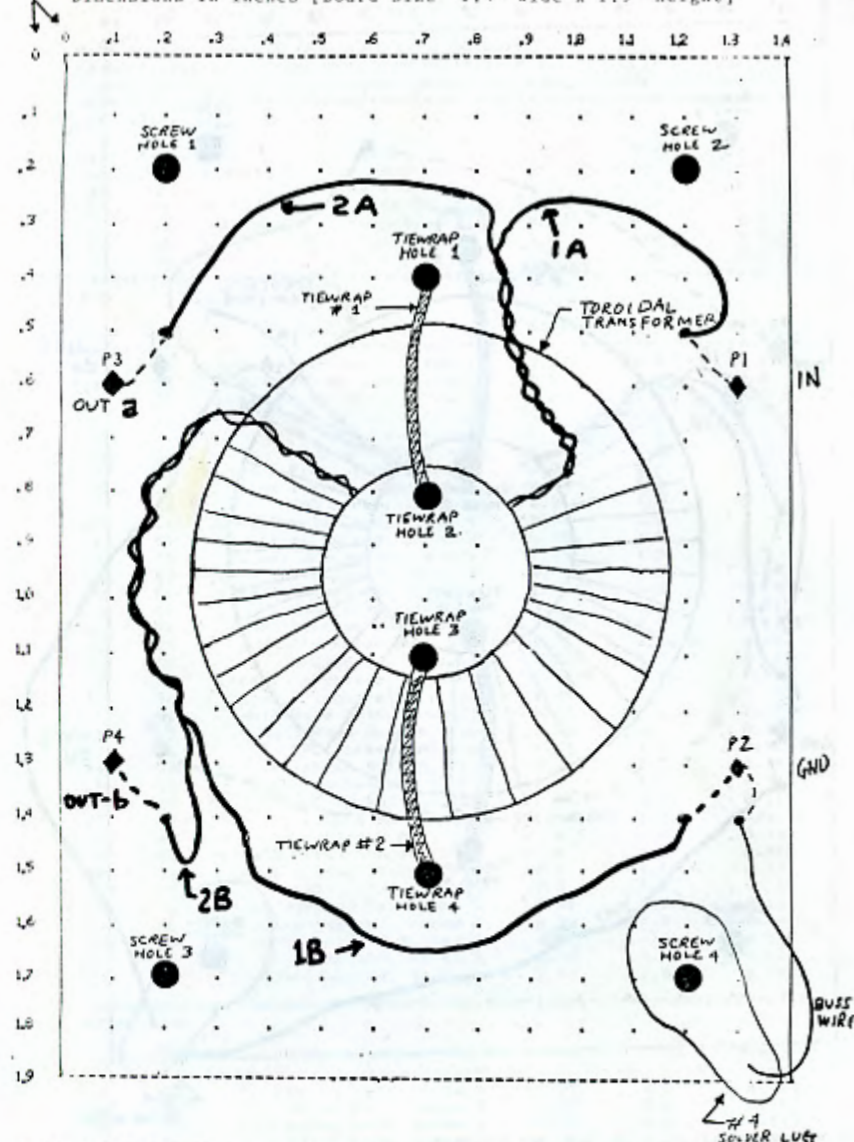
Capacitor is mounted to card at B holes; card topside = head, 6-32 x .25 screw
 Between card & cap. body = two #6 split lockwashers. 'A' series holes hardware (installed after mounting the cap. on the card): Cap. Body side of card = head; 6-32 x .375 screw. Top side of card = split washer against card, two 6-32 nuts. After installing 'A' hole hardware and placing card such that the shaft of each screw protrudes thru proper chassis holes, install lockwasher and 6-32 nut on each screw shaft on outside (top side) of chassis box.

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FIGURE 6 T1 [PHASE - REVERSING TRANSFORMER]

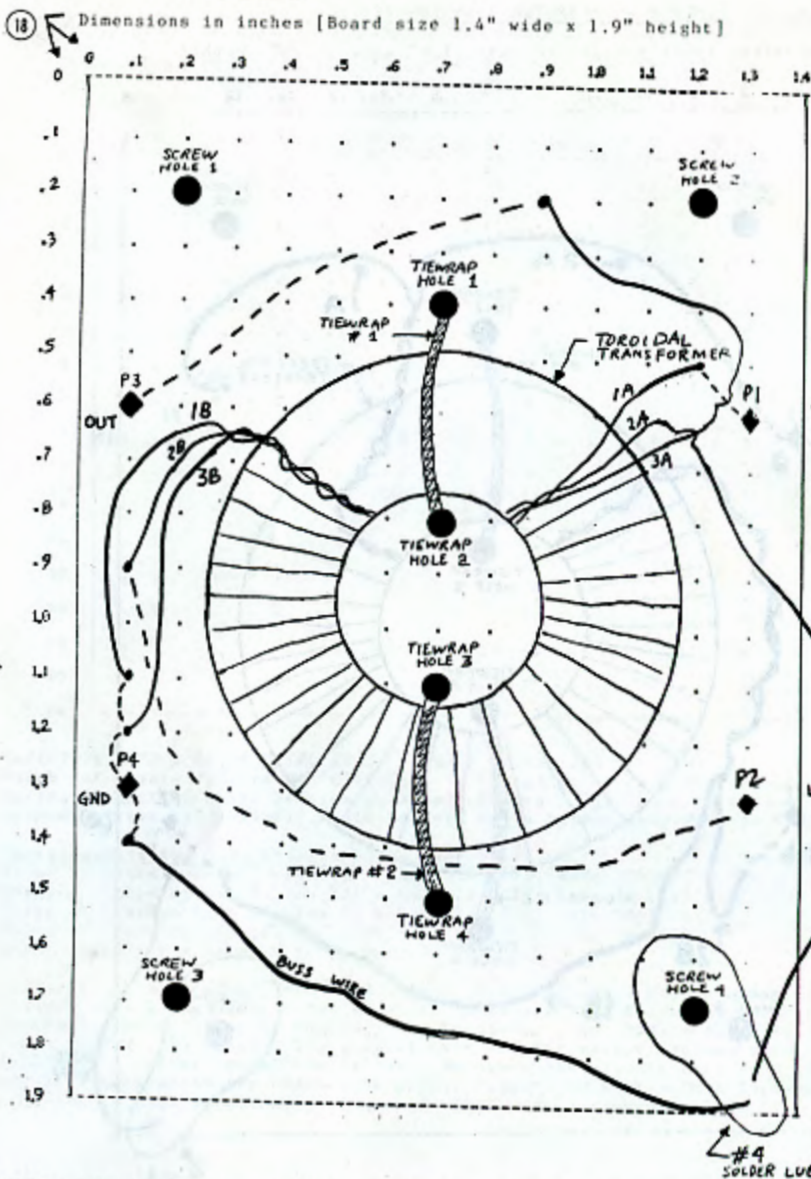
Dimensions in inches [Board size 1.4" wide x 1.9" height]



CORE = MILLER F-87-1 or AMIDON FT-82-77 # of bifilar windings = 25 to 35

Mounting RF Transformer Card Subassemblies

- Stage 1: At card screw hole locations 1, 2, & 3 } install (at each hole) a 4-40 x .25 screw, a split #4 lockwasher, and a 4-40 x .5 hex spacer so that the screw head and the washer are on the transformer side of the card & the spacer [enclosing the screw shaft] is on the backside of the card. At screw hole 4, follow the same procedure, except use a #4 solder lug instead of the lockwasher.
- Stage 2: Mount the card to the inside of the chassis box by installing 4-40 x .25 screw with #4 lockwasher into each appropriate right side chassis hole (per Table 1). Each screw head & washer will be outside the box; screw shafts, inside box, should be mated to open ends of appropriate RF transformer card spacers. Referring to APT-2 Article Figures 6, 12, and 13 may help.



CORE - MILLER F-87-1 or AMIDON FT-82-77 # of trifilar windings = 25 to 35

SEE NOTES AFTER FIGURE 6 ABOUT MOUNTING CARD TO CHASSIS.

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TABLE 1

Hole list for MNDX-2 (passive) phasing unit
 (X=horiz. distance from vert. centreline; - = left of CL, + = right)
 (Y=vertical distance from lower horizontal edge of side observed)

LEFT SIDE

Hole	Comp.	Description	X(in.)	Y(in.)	DIR(in.)
1	J1	Line 1 Wire In	-1.75	1.0	0.3125
2	J2	Earth GND In	-1.0	1.0	0.3125
3	J3	(Line2)ActiveLoop/TunerIn	0.0	0.5	0.375
4	G1	GND screw, int.lug	1.0	1.0	0.113
5	J4	Line 2 Wire In	1.75	1.0	0.3125

TOP

Hole	Comp.	Description	X(in.)	Y(in.)	DIR(in.)
1	C3	NullVernier Cap., screw 1	-3.766	4.5	0.113
2	C3	NullVernier Cap., shaft	-3.5	4.5	0.5
3	C3	NullVernier Cap., screw 2	-3.234	4.5	0.113
4	G2	GND screw, int.lug	-3.0	5.5	0.113
5	R1	Line 1 Pot, shaft	-2.1875	5.0	0.3125
6	R1	Line 1 Pot, tab	-1.875	5.0	0.14
7	S1	Line 1 Freq. Range, shaft	-1.0	4.5	0.375
8	S1	Line 1 Freq. Range, tab	-0.5	4.5	0.14
9	G3	GND screw, int.lug	0.0	4.5	0.113
10	C1	Line1TuneCapCard, screw 1	0.75	5.0	0.14
11	C1	Line1TuneCapCard, screw 2	0.75	4.0	0.14
12	C1	Line1TuneCapCard, shaft	1.75	4.5	0.5
13	C1	Line1TuneCapCard, screw 3	2.75	5.0	0.14
14	C1	Line1TuneCapCard, screw 4	2.75	4.0	0.14
15	G4	GND screw, int.lug	3.0	3.0	0.113
16	R3	NullVernier Pot, shaft	-3.75	2.5	0.3125
17	R3	NullVernier Pot, tab	-3.75	2.1875	0.14
18	G5	GND screw, int.lug	-2.625	3.0	0.113
19	S4	Line 2 InputSelect, shaft	-1.5625	3.0	0.375
20	S4	Line 2 InputSelect, tab	-1.25	3.0	0.14
21	S5	Null Mode Switch, shaft	3.75	3.0	0.25
22	S5	Null Mode Switch, tab	3.75	2.75	0.113
23	G6	GND screw, int.lug	-4.5	1.0	0.113
24	S3	Function Switch, tab	-4.0	1.0	0.14
25	S3	Function Switch, shaft	-3.5	1.0	0.375
26	G7	GND screw, int.lug	-2.75	0.5	0.113
27	R2	Line 2 Pot, shaft	-2.1875	1.0	0.3125
28	R2	Line 2 Pot, tab	-1.875	1.0	0.14
29	S2	Line 2 Freq. Range, shaft	-1.0	1.5	0.375
30	S2	Line 2 Freq. Range, tab	-0.5	1.5	0.14
31	G8	GND screw, int.lug	0.0	1.5	0.113
32	C2	Line2TuneCapCard, screw 1	0.75	2.0	0.14
33	C2	Line2TuneCapCard, screw 2	0.75	1.0	0.14
34	C2	Line2TuneCapCard, shaft	1.75	1.5	0.5
35	C2	Line2TuneCapCard, screw 3	2.75	2.0	0.14
36	C2	Line2TuneCapCard, screw 4	2.75	1.0	0.14

RIGHT SIDE

Hole	Comp.	Description	X(in.)	Y(in.)	DIR(in.)
1	T2	Balun Card, screw 2	-2.25	0.5	0.113
2	T2	Balun Card, screw 4	-2.25	2.0	0.113
3	T2	Balun Card, screw 1	-1.25	0.5	0.113
4	T2	Balun Card, screw 3	-1.25	2.0	0.113
5	J6	RF to car RX, screw 1	-0.394	2.0	0.14
6	J6	RF to car RX, body	0.0	2.0	0.5
7	J6	RF to car RX, screw 2	0.394	2.0	0.14
8	G9	GND screw, int.lug	0.0	1.25	0.113
9	J5	RF Out (BNC)	0.0	0.5	0.375
10	T1	Phase Rev. Card, screw 2	1.25	0.5	0.113
11	T1	Phase Rev. Card, screw 4	1.25	2.0	0.113
12	T1	Phase Rev. Card, screw 1	2.25	0.5	0.113
13	T1	Phase Rev. Card, screw 3	2.25	2.0	0.113

NOTES: C3=GC/Calctro A1-225. Box=Mouser # 537-TF-784 (LMB, 10inX6inX3.5in)
 C1 & C2 are Mouser # 524-A1-227 or GC/Calctro A1-227 mounted on vectorboards to 'float' above chassis ground.

1.6 Null (2 Level greater than 1 Level, or no difference)

If the station to be nulled is stronger with S3 on 2, or if the difference in the Line 1 and Line Levels is insignificant, put S3 on Null and tweak R2 to get a 'dip'. Leave R2 at dip-yielding position, or return to min. R/ fully CCW if no dip occurred.

Note C2 knob position. Tweak C2 for a dip.

Leave C2 at dip-yielding position, or return to previous position if dip didn't occur.

In all probability, some nulling has been achieved; if so, go to step 1.7, Null Finalization.

If no dipping occurred; set S5 to B and re-iterate this step.

1.7 Null Finalization

Obtain as good a null as possible by successive fine adjustments of C1, C2, and also of the previously-tweaked pot (R1 or R2).

Finish nulling by using the two null verniers: C3 and R3. (Play R3, then C3, then R3, then C3, etc.)

2.0 WIRE Vs. LOOP PHASING

A wire may be successfully phased against a loop antenna. Radio Direction finders (RDF's) used on ships and in aircraft have long made use of this principle to resolve the 180-degree 'ambiguity' of conventional figure - 8 pattern loop direction finding. RDF's generally phase a vertical whip against a loop to produce a cardioid (single direction null) pattern. Ron Schatz's 'LSCA' research project has also successfully worked out a scheme to 'uni-directionalize' a loop's null.

The MWDX-2 phasing unit will permit wire vs. active-loop phasing, permitting reception of stations which would have been substantially nulled along with the 'pest' by simple loop-rotation nulling. Such stations could either be on the same (+/- 30 degrees) bearing as the pest station, or on the opposite bearing ((pest bearing + 180 degrees) +/- 30 degrees).

In the MWDX-2 strategy, the loop takes the place of the Line 2 wire tuner when loop vs. wire phasing is to be done.

As mentioned previously in this article, the input tuners used for phasing should be of moderate, rather than high, Q. Most commercial and homebrew MW loops are designed to be high Q as this is what is desirable in normal stand-alone applications. A non-Q-spoiled loop CAN be phased against a wire, but null stability is 'less than spectacular'.

The DXer should modify the loop to be used by installing either a low-value (0 to 500 ohm, or less) pot in series with the loop coil or a large-value (e.g. 0 to 100K) pot across the loophead coil/loop tuning capacitor parallel combination. If you opt for the large-value parallel pot, make sure that it has a switch so that at one position of the pot (usually CCW), the pot can be made to be an open circuit, allowing normal high-Q loop operation. Ensure that the installed Q-pot's shaft is tied to a loop amplifier ground to prevent hand-capacitance detuning problems. A few loops come equipped with Q pots.

A vertical, of 30 meters or greater, phased against a good loop is an excellent low-angle DX antenna configuration for those with limited land and with high available supports. Such a setup, using a 40 meter tall pine as a support for the vertical wire, sometimes surpassed phased Beverages for TA's at local sunset in tests done in Sudbury, MA in 1975 and 1976. Much can also be said for loop vs. Beverage (or longwire) phasing, especially when the wire is oriented for good pickup from a desired-DX target area.

2.1 Preliminary Setup

Power switch on loop to OFF

Connect wire aerial (min. length 25 m) to J1 (Line 1 Wire In)

Connect grounding wire to J2 (Earth GND In)

Connect loop output cable to J3 (Line 2 Loop In)

NO CONNECTION to J4

Connect output cable (to RX or Amplifier) to either RF output jack J5 (BNC) or J6 (Motorola)

C1 (Line 1 Tune) will be adjusted in subsequent steps.

C2 (Line 2 Tune) NOT USED, position irrelevant

Set C3 (Null Vernier Cap.) to center (half-meshed)

Set R1 (Line 1 Pot) to min. R / fully CCW

Set R2 (Line 2 Pot) to min. R / fully CCW

Set R3 (Null Vernier Pot) to min. R / fully CCW

Set S1 (Line 1 Freq. Range) to range called out in Figure 2

S2 (Line 2 Freq. Range) NOT USED, position irrelevant

Set S3 (Function Switch) to 1

1.0 Two Wire Phasing

Use two aeriels with a minimum length of 82 ft/ 25 meters. The wires used should be of similar length if possible (this need is less critical if both wires exceed 656 ft/ 200 m). When wires shorter than 200 meters are used, best phasing tends to occur when the wires are separated by a horizontal angle of 45 degrees minimum. Horizontally perpendicular wires, one running to the northeast for Europe and one running southeast for the Caribbean would comprise a good wire pair for the DXer in the northeastern USA.

Those with vaster expanses of available land, those able to install true Beverage-length aeriels, may have best results with parallel Beverages separated by about 16 ft / 5 m. Terminating one of the Beverages in salt marsh or other good ground, whilst letting the second one 'float' is supposed to be the last word in phased-Beverages setups. Two parallel unterminated Beverages would probably work just about as well in most cases, however. A pair of Beverages 'aimed' at Europe (also catching the more northerly-bearing Africans) and a second pair of Beverages favoring the eastern Caribbean/South America/southerly-bearing Africans is seen as the ultimate antenna farm for east coast US/Canadian international DXers. Add a loop and possibly a vertical and 'high-intensity DXing' should be greatly facilitated.

1.1 Preliminary Setup

Connect one wire to J1 (Line 1 Wire In)

Connect other wire to J4 (Line 2 Wire In)

Connect grounding wire to J2 (Earth GND In)

NO CONNECTION To J3

Connect output cable (to RX or amplifier) to either RF output jack J5 (BNC) or J6 (Motorola)

C1 (Line 1 Tune) will be adjusted in subsequent steps.

C2 (Line 2 Tune) will be adjusted in subsequent steps.

Set C3 (Null Vernier Cap.) to center (half-meshed)

Set R1 (Line 1 Pot) to min. R / fully CCW

Set R2 (Line 2 Pot) to min. R / fully CCW

Set R3 (Null Vernier Pot) to min. R / fully CCW

Set S1 (Line 1 Freq. Range) to range called out in Figure 2

Set S2 (Line 2 Freq. Range) to same range as S1

Set S3 (Function Switch) to 1

Set S4 (Line 2 Input Switch) to Wire

Set S5 (Null Mode Switch) to A

1.2 Line 1 Tune

Adjust C1 for peak signal at frequency of interest. If C1 produces maximum signal when fully open, set S1 one position CW [next lowest inductor] and then peak-tune C1. If C1 produces maximum signal when fully meshed, set S1 one position CCW [next highest inductor] and then peak-tune C1.

1.3 Line 2 Tune

Set S3 to 2

Adjust C2 for peak signal at frequency of interest. If C2 produces maximum signal when fully open, set S2 one position CW [next lowest inductor] and then peak-tune C2. If C2 produces maximum signal when fully meshed, set S2 one position CCW [next highest inductor] and then peak-tune C2.

1.4 Level Comparison

Set R3 to middle of its range. Switch S3 back and forth between 1 and 2. Note whether position 1 or 2 of S3 produces a stronger signal from the dominant station to be nulled.

1.5 Null (Line 1 Level greater than Line 2 Level)

If the station to be nulled is stronger with S3 on 1, put S3 on Null and tweak R1 to get a 'dip' (point at which moving the control either CW or CCW from the dip position increases signal). Leave R1 at dip-yielding position, or return to min. R/ fully CCW if no dip occurred.

Note C1 knob position. Tweak C1 for a dip.

Leave C1 at dip-yielding position, or return to previous position if dip didn't occur.

In all probability, some nulling has been achieved; if so, go to step 1.7, Null Finalization.

Using the MWDX-2 Phasing Unit

Set S4 (Line 2 Input Switch) to Loop
Set S5 (Null Mode Switch) to B

2.2 Line 1 Tune

Adjust C1 for peak signal at frequency of interest. If C1 produces maximum signal when fully open, set S1 one position CW [next lowest inductor] and then peak-tune C1. If C1 produces maximum signal when fully meshed, set S1 one position CCW [next highest inductor] and then peak-tune C1.

2.3 Line 2 (Loop) Tune

Set S3 to 2. Set loop's Q-pot to maximum Q setting. Physically orient loop to favor the general direction of the desired DX station, even if such orientation would also bring in 'pests'.

Turn loop power on.

Adjust the loop's tuning cap. for peak signal at frequency of interest. Note the signal strength (on S-meter if possible). Tweak loop's Q-pot to reduce signal level about 6 to 12 dB.

2.4 Level Comparison

Set R3 to middle of its range.

Switch S3 back and forth between 1 and 2.

Note whether position 1 or 2 of S3 produces a stronger signal from the dominant station to be nulled.

2.5 Null (Line 1 Level greater than Line 2 Level)

If the station to be nulled is stronger with S3 on 1, put S3 on Null and tweak R1 to get a 'dip' (point at which moving the control either CW or CCW from the dip position increases signal). Leave R1 at dip-yielding position, or return to min. R / fully CCW if no dip occurred.

Note C1 knob position. Tweak C1 for a dip.

Leave C1 at dip-yielding position, or return to previous position if dip didn't occur.

In all probability, some nulling has been achieved; if so, go to step 2.7, Null Finalization.

If no dipping occurred; set S5 to A and re-iterate this step.

2.6 Null (2 Level greater than 1 Level, or no difference)

If the station to be nulled is stronger with S3 on 2, or if the difference in the Line 1 and Line 2 levels is insignificant, put S3 on Null and tweak R2 to get a 'dip'. Leave R2 at dip-yielding position, or return to min. R / fully CCW if no dip occurred.

Note loop tuning cap. knob position. Tweak loop cap. for a dip. Leave loop cap. at dip-yielding position, or return it to previous position if dip didn't occur.

In all probability, some nulling has been achieved; if so, go to step 2.7, Null Finalization.

If no dipping occurred; set S5 to A and re-iterate this step.

2.7 Null Finalization

Obtain as good a null as possible by successive fine adjustments of the loop's tuning cap., C1 of MWDX-2, the loop's Q-pot, and also of the MWDX-2 pot previously tweaked (R1 or R2).

Finish nulling by using the two null verniers: C3 and R3. (Play R3, then C3, then R3, then C3, etc.)

3.0 Amplification of MWDX-2 Phasing Unit Output

Often, especially with wires shorter than true Beverages, insufficient wanted-station signal remains after nulling a 'pest'. Several amplification schemes are possible. For tunable amplifiers, MWDX-2 S3 can be initially switched to Pre-Tune (PT); the output amp. is tuned as if it were connected to a wire. After this is done, the amp. can be considered 'invisible' and can be left in the line while phasing proceeds from step 1.1 or 2.1. The same can be done with a broadband amp. having an input pot: with MWDX-2 S3 on PT, the pot is set to get the maximum signal at the frequency-of-interest, consistent with no spurious signals.

Alternately, the amplifier can be installed 'in-line' between phaser and receiver after phasing (by means of a direct MWDX-2 to RX connection) has been completed. Refer to the recent APT-2 article for ideas.

A REVIEW OF THE SONY AM-STEREO RECEIVER

MODEL SRF-A100

By: Albert S. Lobel

Recently my wife gave me one of those new Sony AM-Stereo receivers as a combination birthday and Hannukah present. I had been talking for some time about getting one. Unfortunately she could not make it a total surprise as she had to ask me for the model number so she'd know exactly what to get me.

I got the receiver on December 6, 1983, my birthday. Since that time I had time to use it and can now give my review on this new Sony AM-Stereo Receiver and give my honest opinion of AM-Stereo.

The Sony AM-Stereo receiver is very small and compact. However do not let the small size fool you. This little receiver can really put out a lot of very good sound. Just try connecting it to a larger amplifier via a cord from the plug provided on the receiver; be sure to use a stereo cord. I did just that with mine the day after I got it and was really amazed at how good the sound was. Good quality sound is not the only thing that this receiver can give. It does real good at receiving all types of AM-Stereo broadcasts. The only drawback is that it will not receive the Kahn-Hazeltine system of AM-Stereo in the same manner as it receives all other types of stereo broadcasts. There is a slide switch provided on the left side to which you must place in either position "A" or position "B". Position "A" is used for the Harris, Magnavox, and Motorola systems while position "B" is used for the Kahn-Hazeltine system. The only way to tell if you are not sure which system the particular station is using is by the quality of the AM-Stereo signal. There is no stereo indicator to tell you when you are receiving an AM-Stereo signal. The receiver does have a tuning indicator that shows when the station has been properly tuned in.

You would think that a receiver capable of receiving AM-Stereo would be a poor receiver when it comes to sensitivity and selectivity. This is not so with the Sony AM-Stereo receiver. There are two slide switches provided on the top. One adjusts the bandwidth for normal reception and for stereo reception. The other changes between the normal monaural AM mode, the AM-Stereo mode and FM-Stereo; yes, it also receives FM-Stereo. No FM SCA mode. This DX'er may soon remedy that. A look inside shows that there may be sufficient space to put another small circuit board to decode FM SCA signals. I enjoy hearing those exotic signals the FCC doesn't want you to hear. By putting the bandwidth selector switch in the normal position the receiver becomes more sensitive and selective. It also helps to tune in the station regardless of whether it is AM-Stereo by using the normal bandwidth position with the mode selector set to monaural AM reception. If you want to find if you are tuned to an AM-Stereo station you should set the bandwidth switch to the wide position and the band selector to the AM-Stereo position. If you are tuned to AM-Stereo you should hear a stereo signal when the system you are tuned to corresponds with the position set to the stereo type selector switch on the side.

Other features include a tone control, separate on/off switch, AC-power plug (no AC-power cord is provided but is available from Sony or from your local dealer) and a carry strap which can be used in several positions. The receiver, of course, has two speakers for true stereo by itself or with another external amplifier via the plug provided on the side which can also double as an earphone jack. In fact, it is marked 'ear phone jack'!

The Sony AM-Stereo Receiver (Model SRF-A100) is a good receiver for the DX'er who likes to hear those new AM-Stereo signals. It can also be a good buy as a small compact FM DX receiver.

WDAF - Radio 610 kc

Signal Hill - Kansas City, Missouri 64108

REMINDER: For those of you that write overseas, we remind you that all the clubs within ANARC, of which we are part, have agreed to protest to those countries that continue to practice intentional jamming of international shortwave broadcasts. We ask that you either not report to station in those countries anymore, or if you do, please send along with your correspondence a protest to their continued practice of intentional jamming.

Mark Connelly - W1LION DX Labs - 23 Jan 1984

Recently, an article describing the step-by-step construction and use of the APT-2 (Active Parallel Tuner with Regeneration) appeared in DX NEWS.

Several design enhancements have occurred, giving rise to the subject of this article, the APT-3.

This article is meant to be a companion piece to that on the APT-2. One principal difference between the two tuners is that regeneration adjustment has been made simpler and less 'touchy' on the APT-3. A Q-pot is used instead of the former regen. vernier. A side benefit of the Q-pot is that use of the APT-3 as an input module in a phasing system has been improved. The recent MWDX-2 article discusses the merits of adjustable Q in phaser input-tuner modules.

Regeneration has also been improved by a modification to A1, the Front End Card Subassembly. A buffer stage, using an NPS918 transistor, appears after the regen. feedback loop. Neil Kazarsos had noted that the ease of obtaining regeneration on the APT-2 was somewhat influenced by the impedance characteristics of the receiver used. Different receivers load the APT-2 output differently causing variations in regeneration performance, chiefly in terms of control 'touchiness'. Performance with high-impedance receiver inputs (e.g. car RX) was generally superior to that obtained with low-impedance receiver inputs such as found on some communications receivers and on portable-radio coupling-coil inputs. The buffer stage in A1 of the APT-3 eliminates these performance variations. Of course, even the best buffer can be overloaded by an excessive signal (whether regenerated or not). The inclusion of an input attenuator pot [R1] as the level pot, instead of an output attenuation pot, helps one to apply accurately the most signal possible to the tuner, consistent with no spurs/no overloading.

An RF-source jack has been incorporated so that the output of a loop or the output of a phasing unit may be tuned, amplified, and (if desired) regenerated.

Shutting the APT-3 power off bypasses the input (antenna) to the output (receiver). This feature is necessary especially in mobile applications so FM and non-DX AM can be enjoyed without having to disconnect the tuner.

Construction steps are not included as they are very similar to those supplied with the APT-2 article. If you could build the APT-2, you shouldn't have any difficulty building the APT-3 by using the documentation in this article. An important difference between the two units is that a larger box (5 x 4 x 3 inch) is used for APT-3. This box permits C1 to be a more-durable air-variable capacitor of metal construction (GC/Calelectro A1-227, Mouser 524-A1-227).

If compactness is necessary, stick with the APT-2 design, perhaps borrowing whatever APT-3 features can be accommodated in the small box. The APT-3 offers slight improvements over APT-2; these aren't enough to make existing APT-2's obsolete, however.

Documentation to follow includes: Figure 1 (Main Schematic), Figure 2 (Front End Card Schematic), Figure 3 (Front End Card Roadmap), Tables 1-A and 1-B (Approximate S3 Frequency Range Switch Settings), and Table 2 (Chassis Box Hole List). This documentation, along with the APT-2 article, should serve as guides to construction. Write to me if you need more construction details.

The usage notes are, of course, similar to those for the APT-2. Differences do occur, however, so it's necessary to read this new usage write-up.

Another use, beyond those in the main body of the article, to which the APT-2 and APT-3 may be put is that of spotting oscillator. In this role, the active tuner is set into intentional over-regeneration (oscillation). No antenna connection is made to the tuner's input jacks; rather, the output is connected to a T-adaptor (Pomona 3285). One T-adaptor jack feeds a coaxial cable going to a digital frequency counter, the other jack couples the oscillation signal to the receiver. If the receiver is using a wire antenna, the oscillation signal may be coupled through a small (e.g. 10 pF) capacitor or large resistor (over 10K) from the wire antenna to the T-adaptor jack noted above. If the receiver is getting its signals from a rod antenna or from a loop, connect a short piece of wire (e.g. 1 meter) to the T-adaptor, thereby coupling oscillation signal through the air. Such a setup will allow accurate frequency determination on receivers having dial calibration of insufficient accuracy.

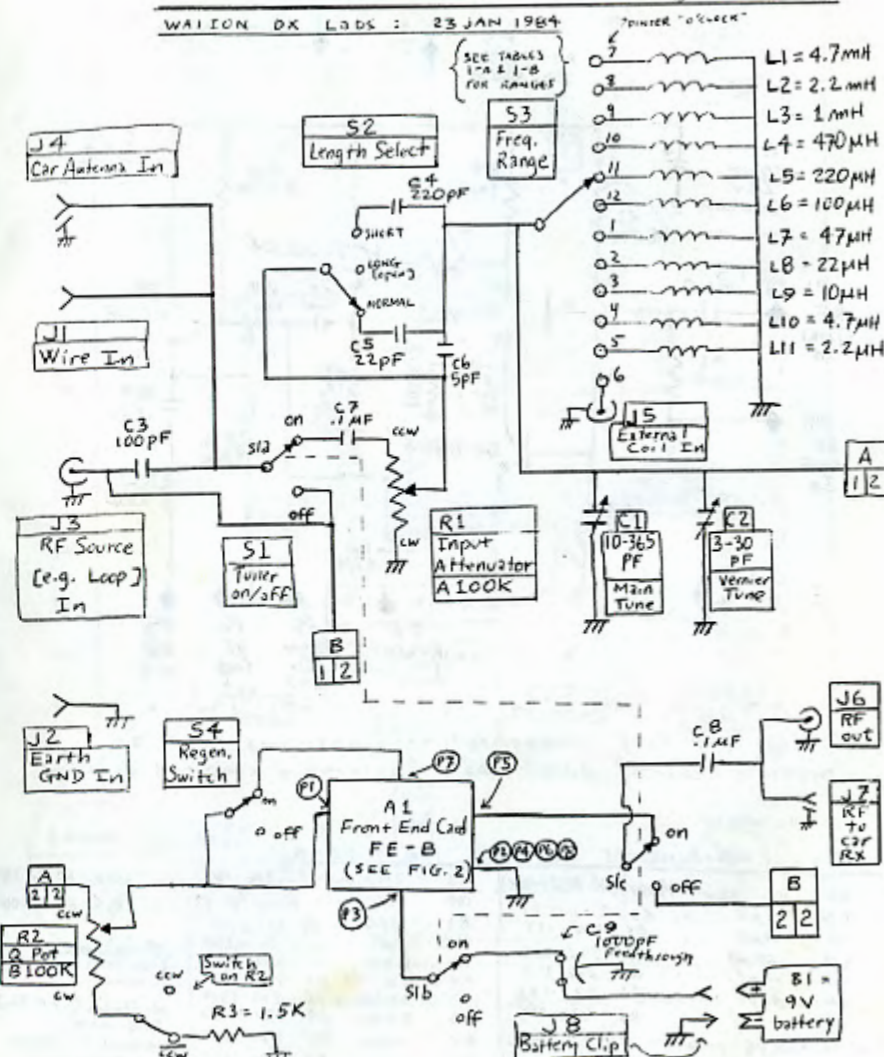
Figure 1

APT-3

Main Schematic

Active Parallel Tuner with Regeneration

W1LION DX LABS: 23 JAN 1984



Fing of the Dabotas
P.O. Box 600
Jamestown, North Dakota
58401

KSJB
SERVING THE TOP
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K-DAWN

Radio 720

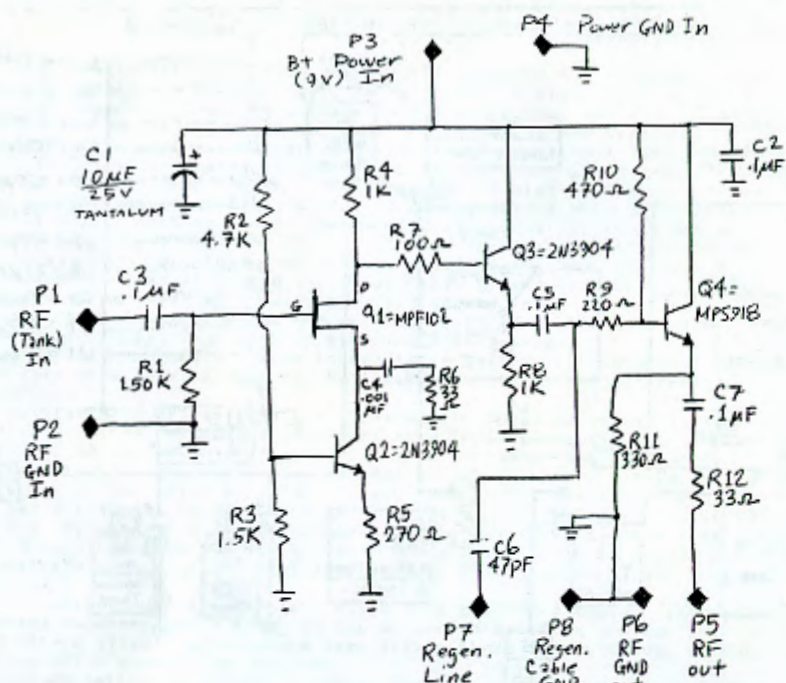
NO. 1 MAIN STREET LAS VEGAS, NEVADA 89101

Figure 2

FE-B

A1 of APT-3

Schematic: Regenerative Front End Card



Front End Card component designations are a separate entity from main assembly component designations.

COMPONENTS REQUIRED FOR FE-B (RS - Radio Shack)

C1	10µF/25V = Mouser 540-DTS25-10µM3	Q3	2N3904 - RS 276-1603	R11	330Ω - RS 271-1715
C2	.1µF - RS 272-111	Q4	MPS918 - Mouser 597-MPS918	R12	33Ω - RS 271-007
C3	.1µF - RS 272-111	R1	150K - RS 271-047	Miscellaneous	
C4	.001µF - RS 272-126	R2	4.7K - RS 271-1330	Case APT-2	
C5	.1µF - RS 272-111	R3	1.5K - RS 271-025	Article J	
C6	.47µF - RS 272-121	R4	1K - RS 271-1321	perfboard (11.4x17.4in)	
C7	.1µF - RS 272-111	R5	270Ω - RS 271-1314	Bus wire	
P1, P2, P3, P4, P5, P6	pinpins - RS 270-1392	R6	33Ω - RS 271-007	(4) 4-40 x 1/2" springs	
Q1	MPF102 - RS 276-2062	R7	100Ω - RS 271-1311	(7) #4 lockwashers	
Q2	2N3904 - RS 276-1603	R8	1K - RS 271-1321	(8) 4-40 x 1/2" screws	
		R9	220Ω - RS 271-1313	(1) #4 solder lug	
		R10	470Ω - RS 271-1317		

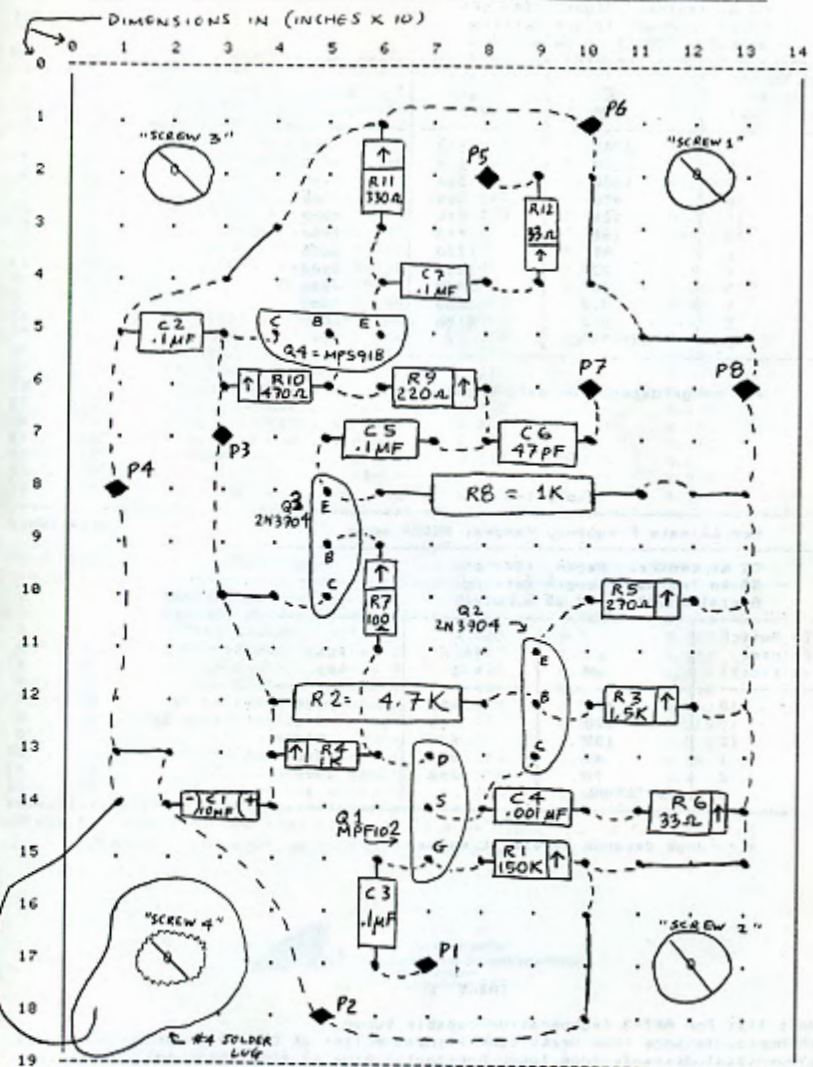
Depend on
WHAS Radio 84

Figure 3

FE-B

A1 of APT-3

Roadmap: Regenerative Front-End Card



RENEWAL **RENEWAL** **RENEWAL** **RENEWAL** **RENEWAL** **RENEWAL**
Is it that time of the year again for you? Trying to weight which magazines to stay with? Uncertain which one gives you more dollar for dollar? If your reading this then your decision should already have been made! Only **DX NEWS** offers you the famous **CUBAN LIST**, only **DX NEWS** offers you **CPC TEST INFORMATION**, only **DX NEWS** keeps you up to the minute with call letter changes with **AM SWITCH**. Do we need to go on? Of course not, your mind is made up. Your going with **DX NEWS**!!!!

Table 1-A

Approximate Frequency Ranges			
C2 at centre, Regen. (S4) off S2 to 'normal' length setting Aerial = 100 ft. / 30 m. wire			
S3 Switch Pointer (o'clock)	L uH	fmin kHz	fmax kHz
7	4700	130	250
8	2200	170	330
9	1000	240	490
10	470	360	700
11	220	510	1030
12	100	740	1450
1	47	1130	2200
2	22	1600	3400
3	10	2450	4900
4	4.7	3500	7000
5	2.2	5100	10000
6	EXTERNAL	*	*

* = range depends on ext. L value

Table 1-B

Approximate Frequency Ranges: REGEN mode			
C2 at centre, Regen. (S4) on. S2 to 'normal' length setting Aerial = 100 ft. / 30 m. wire			
S3 Switch Pointer (o'clock)	L uH	fmin kHz	fmax kHz
10	470	320	450
11	220	440	640
12	100	630	930
1	47	920	1390
2	22	1390	1980
6	EXTERNAL	*	*

* = range depends on ext. L value

TABLE 2 [continued]

APT-3 Hole List

TOP					
Hole	Comp.	Description	X(in.)	Y(in.)	DIR(in.)
1	C1	Main Tuning Cap., screw 1	-1.625	3.125	0.14
2	C1	Main Tuning Cap., shaft	-1.625	2.5625	0.5
3	C1	Main Tuning Cap., screw 2	-1.625	2.0	0.14
4	R1	Input Atten. pot, shaft	-1.875	0.625	0.3125
5	R1	Input Atten. pot, tab	-1.5625	0.625	0.14
6	G2	GND screw, int.lug	-1.25	1.125	0.113
7	S1	On/Off switch, tab	-0.625	0.625	0.113
8	S1	On/Off switch, shaft	-0.875	0.625	0.25
9	S2	Length switch, tab	0.0	0.375	0.113
10	S2	Length switch, shaft	0.0	0.625	0.25
11	G3	GND screw, int.lug	0.0	1.5	0.113
12	R2	0 pot, shaft	0.75	0.625	0.3125
13	R2	0 pot, tab	1.0625	0.625	0.14
14	G4	GND screw, int.lug	1.4375	0.625	0.113
15	S4	Regen. switch, tab	1.875	0.375	0.113
16	S4	Regen. switch, shaft	1.875	0.625	0.25
17	S3	Freq.Range switch, shaft	1.125	1.75	0.375
18	S3	Freq.Range switch, tab	1.625	1.75	0.14
19	C2	Fine Tune cap., screw 1	0.125	3.568	0.113
20	C2	Fine Tune cap., screw 2	0.568	3.125	0.113
21	C2	Fine Tune cap., screw 3	0.125	2.682	0.113
22	C2	Fine Tune cap., shaft	0.125	3.125	0.5
23	J5	Ext. Coil in (BNC)	1.5	3.375	0.375
24	G5	GND screw, int.lug	1.5	2.75	0.113

RIGHT SIDE

Hole	Comp.	Description	X(in.)	Y(in.)	DIR(in.)
1	J8	Battery Holder, screw 1	0.2813	2.5	0.113
2	J8	Battery Holder, screw 2	1.25	1.625	0.113
3	R1	FrontEndCard, screw 1	1.625	0.5	0.113
4	R1	FrontEndCard, screw 2	1.625	2.0	0.113
5	R1	FrontEndCard, screw 3	0.625	0.5	0.113
6	R1	FrontEndCard, screw 4	0.625	2.0	0.113
7	C9	B+ in feedthrough cap.	-1.375	0.5	0.188
8	G6	GND screw, int. & ext.lugs	-0.75	0.5	0.113
9	J6	RF out (BNC)	0.0	0.5	0.375
10	J7	RF to car RX, screw 1	-1.375	1.894	0.14
11	J7	RF to car RX, shaft	-1.375	1.5	0.5
12	J7	RF to car RX, screw 2	-1.375	1.106	0.14

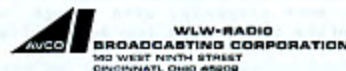
NOTES: C1 is GC/Calestro * R1-227. J8 is Acme type. C2 is Etco * SV408
Box = Mouser # 537-TF-779 (5" x 4" x 3")

TABLE 2

Hole list for APT-3 regeneration-capable tuner
(X=horiz.distance from vert. centreline = left of CL, + = right)
(Y=vertical distance from lower horizontal edge of side observed)

LEFT SIDE

Hole	Comp.	Description	X(in.)	Y(in.)	DIR(in.)
1	J2	GND in	-1.5	0.5	0.3125
2	J1	Wire in	-0.75	0.5	0.3125
3	J3	RF source in (BNC)	0.0	0.5	0.375
4	G1	GND screw, int.lug	0.0	1.125	0.113
5	J4	Car Ant. In, screw 1	1.0	0.5	0.14
6	J4	Car Ant. In, body	1.0	0.894	0.5
7	J4	Car Ant. In, screw 2	1.0	1.288	0.14



From Craig Healy: " At a recent GTG, some of us discussed the possibility of chartering a bus to go to Colorado Springs next Labor Day. I've checked with quite a few bus companies in this area and came up with two good quotes. The better of the two would have us leave RI on the evening of the 29th of August (Tuesday), stop overnight Wednesday in Indianapolis, and arrive in Colorado Springs Friday morning. The return trip would be similar. The round trip price would be about \$130/person if all seats are filled. The bus seats 47. Departure point in RI would be T.F.Green Airport. This has the advantages of accessibility, central location and long term automobile parking. Traffic congestion isn't a problem, either. I need to know how many people are interested in this. I'm not looking for a binding commitment yet. Just gauging interest to see if it's worth pursuing further. Oh yes, the hotel or motel room in Indianapolis is extra." (Craig Healy, 66 Cove St., Pawtucket, RI 02861)

USING THE APT-3

- 1.0 NORMAL TUNING (wire or car whip operation)
- 1.0.0 Initialization
- 1.0.1 [Note - S2 positions: normal=up, long=middle, short=down]
Set S2 to 'long' if wire length exceeds 300 feet in an area with no strong local stations [hereafter defined as 'rural' area] or if antenna is longer than 75 feet in an area with strong local signals [hereafter defined as an 'urban' area].
Set S2 to 'normal' if the antenna is shorter than the 'long' specifications, but longer than 15 feet. Set S2 to 'short' if antenna is 15 feet or shorter. Double all length specs. if operating frequency is lower than 400 KHz.
- 1.0.2 Connect the appropriate antenna to J1 or J4.
- 1.0.3 Set S4 to down (regeneration off).
- 1.0.4 Set C1 and C2 to center (variable capacitors half-meshed).
- 1.0.5 R1 to fully counterclockwise (CCW): (maximum signal level).
- 1.0.6 Set R2 to fully CCW (maximum Q).
- 1.0.7 Connect receiver, with coaxial cable, to J6 or J7. The receiver should be of a shielded (metal case) variety. A transistor portable radio can be used if its rod antenna is kept far enough from the wire aerial to prevent unwanted feedback and instability.
- 1.0.8 S1 (power) to ON (right).
- 1.0.9 S3, the frequency range switch, can be preset by referring to Table 1-A; this, however, is optional: S3 will be accurately set in steps 1.1.1 to 1.1.3.
- 1.1.0 Tuning
- 1.1.1 Run S3 through all of its positions; find the position which yields the maximum DESIRED FREQUENCY signal. (Don't peak on a spur.)
- 1.1.2 Adjust C1 for peak signal. If C1 yields maximum signal at fully open [fully CW], move S3 one step clockwise (CW) (= next lowest value inductor) and then repeak C1. If C1 had yielded maximum signal at fully-meshed [fully CCW], move S3 one step CCW (=next highest inductor) and repeak C1.
- 1.1.3 If, in step 1.1.2, a good peak couldn't be found, or, as the desired signal peaked, an off-channel station's audio simultaneously became clear (e.g. spur or cross-modulation overloading), set S2 to next longer-antenna position (e.g. to long if it had been on normal) and re-iterate steps 1.1.1 and 1.1.2.
- 1.1.4 If spurs/overloading still occur when the desired frequency is peaked and S2 is on long, use R1 to reduce the input level to the point that the desired frequency signals are 'in the clear'.
- 2.0 REGENERATIVE TUNING for higher gain and selectivity
- NOTES: (1) With APT-3 design, regeneration is only used between 320KHz & 1900 KHz. (2) The battery must be 'fresh' (7 volts minimum, loaded) for regeneration to work properly, even though 'normal' tuning can be achieved with batteries running as low as 5 volts.
- 2.0.0 Initialization
- 2.0.1 Tune the antenna 'normally' by performing all Part 1 steps.
- 2.0.2 Set R2 to midrange (= partially reduced Q).
- 2.0.3 Set S4 to up (regeneration on).
- 2.0.4 Observe Table 1-b. Change position of S3, if indicated, so that frequency range inductor selected is optimized for regeneration.
- 2.1.0 Tune/Regenerate
- 2.1.1 Perform step 1.1.2 (C1 peaking). If, at any time, regeneration (squealing) breaks out, move R2 slightly CW until it stops.
- 2.1.2 After C1 has been peaked, gradually turn R2 slightly CCW in SMALL INCREMENTS, while simultaneously re-peaking C1 after each incremental R2 adjustment.
- 2.1.3 When regeneration breaks out, or when selectivity is so tight that received audio becomes 'mushy', carefully play C1 and R2 so that, to the best of your ability, you have a C1-peaked-signal condition at the 'borderline of regeneration', as set by R2. When C1 peaking gets too touchy, use C2 instead.
- 2.1.4 If satisfactory regeneration occurs, there's no need to do subsequent Part 2 steps.
- 2.1.5 If regeneration/oscillation only occurs with R2 fully CCW or if

Using the APT-3

- adjusting regeneration with R2 becomes too touchy, step 2.1.7 should help.
- 2.1.6 If, even with both R1 & R2 fully CCW and C1 peaked, regeneration cannot be established, set S2 to next longer antenna position, set R2 to midrange, and re-iterate procedure from step 2.1.1 onward.
- 2.1.7 With R2 set at the most-CW position producing oscillation, use R1 & C1 to set peaked maximum useful selectivity condition. Use C2 when C1 adjustment becomes excessively touchy. C1 (or C2) must be retweaked anytime R1 is adjusted.
- 3.0 REGENERATING THE OUTPUT OF AN AMPLIFIED LOOP OR THE OUTPUT OF A PHASING UNIT (ACTIVE OR PASSIVE)
- 3.0.0 Active (= built in amp.) Loop
- 3.0.1 Set S1 to off. Connect the loop output to APT-3 J3 (RF Source In).
- 3.0.2 Set S2 to normal length position.
- 3.0.3 Do steps 1.0.3 through 1.0.7.
- 3.0.4 Peak desired frequency in normal manner with loop tuning capacitor.
- 3.0.5 Treat the loop's output as if it were the signal from a wire. Perform steps 1.0.8 through 1.1.4.
- 3.0.6 Once the loop signal has been peaked through the APT-3, the loop position may be adjusted to obtain a 'pest-null' (if desired).
- 3.0.7 Regenerate by executing part 2 procedures, starting at step 2.0.2.
- 3.1.0 Passive Phasing Unit with Pre-Tune Function
- 3.1.1 Make usual antenna and ground connections to phasing unit. Connect the phasing unit's output to J3.
- 3.1.2 Set phasing unit function switch to Pre-Tune. Set APT-3 S2 to short.
- 3.1.3 Perform steps 1.0.3 through 1.1.4.
- 3.1.4 Execute customary phasing unit pest-nulling procedures.
- 3.1.5 Regenerate by performing part 2, starting at step 2.0.2.
- 3.2.0 Phasing Unit without Pre-Tune Function
- 3.2.1 Set S1 to off. Do step 3.1.1.
- 3.2.2 Do steps 1.0.3 through 1.0.7.
- 3.2.3 Execute customary phasing unit pest-nulling procedures.
- 3.2.4 If the phaser is passive, set S2 to short. If the phaser has active Line 1 and 2 tuners, set S2 to normal.
- 3.2.5 Perform steps 1.0.8 through 1.1.4.
- 3.2.6 Regenerate by performing part 2, starting at step 2.0.2.
- 4.0 USE OF APT-3 AS LOOPHEAD TUNER/AMPLIFIER
- NOTES: (1) The term 'loophead', for the purposes of this discussion, refers to the actual pickup coil part of a loop antenna system. (2) Two loopheads will probably be required for complete coverage of the 500 - 1700 KHz MW band. Other heads may be fabricated for LWBC, 160m, etc.
- 4.0.0 Preliminary Setup
- 4.0.1 Fabricated air-core or ferrite loophead(s) to be used. These should be of a single-winding type with connections to be made at each end of the winding.
- 4.0.2 For each head, prepare a piece of RG174 cable of 2 foot maximum length. One end of the cable should be fitted with a BNC plug; the other end should have bared leads (shield and center conductor).
- 4.0.3 On each head, solder the bared center conductor of a prepared cable to one lead of the loophead winding.
- 4.0.4 Solder a short insulated hookup wire jumper from the prepared-cable bared shield to the other lead of the loophead winding.
- 4.0.5 Connect the BNC plug of the cable (whose other end goes to the loophead) to J5, the external coil input jack of the APT-3.
- 4.1.0 Normal Tuning of Loophead
- NOTE: Receiver should preferably be of a shielded type so that unwanted feedback / undesired oscillation may be avoided.
- 4.1.1 Do not connect anything to J1, J3, or J4 of APT-3.
- 4.1.2 If the receiver is being operated on batteries or if a cable greater than 3 feet is to connect J6 or J7 to the receiver, a ground connection to J2 is desirable. The ground chosen may be an earth ground rod or pipe, a mains ground, or a vehicle chassis ground.

- 4.1.3 Set APT-3 controls initially as follows:
 S2 to 'long'
 S3 to EXT. L (6 o'clock pointer position)
 C2 to center (12 o'clock or 6 o'clock)
 R1 to fully CW
 R2 to fully CCW (= maximum Q)
 S4 to down (regeneration off)
 S1 to Power ON (up)
 C1 is to be adjusted in next step
- 4.1.4 Connect receiver to J6 or J7 of APT-3. Tweak C1 to obtain maximum signal at frequency of interest.
- 4.1.5 Position loophead for null of 'pest' and/or peaking of a desired station.
- 4.2.0 Regenerative Tuning of Loophead
- 4.2.1 Perform steps 4.0.1 through 4.1.5 as a prerequisite.
- 4.2.2 Perform these steps in the order indicated: 2.0.2, 2.0.3, 2.1.1, and 2.1.3.
- NOTE: Frequency coverage range with a given loophead may differ in the 'normal-tune' mode from that noted in the 'regenerative-tune' mode. Normal-mode range is generally greater as the parallel capacitance of the regeneration circuit is not switched in.
- 5.0 LOOPHEAD INDIRECT COUPLER
- 5.0.1 The loophead may be placed close to a wire, pipe, or electrical conduit to which a direct connection cannot (and/or should not) be made. One example is the conduit going to the electric meter on the outside of a house. Of course, the loophead, in this application, will not have nulling capability.
- 5.0.2 Position loophead near coupling source.
- 5.0.3 Perform 'normal tuning' steps 4.1.1 through 4.1.4.
- 5.0.4 Move loophead through various placements near the coupling source to maximize signal; then repeak C1.
- 5.0.5 To regenerate after having peaked C1, perform steps 4.2.1 and 4.2.2.

From Page 33

- 1570 KLOV CO Loveland - CWM
 WBUX PA Doylestown - Heard to ID as "The Oldies Station", must have gone to oldies format, to go with their talk shows(TF).
- 1580 KPIK CO Colorado Springs - Religion (WH).
 1600 KXVI TX McKinney - Contemporary Christian (CG).

Well, that is a good column, with a great trip through Metro Denver, and the Dallas - Porth Worth Area! Our contributors this time have been

WH-Wayne Heinen, Aurora, CO.
 CG-Charles George, Dallas, Tx
 JN-Jay Novello, Endwell, NY
 TF-the guy who typed this, in Fairfield, CT.

It would be really helpful to include the city of license with the station...I used the 1982 log to locate cities or towns, and guessed at a few of the towns..so if I am wrong...sorry! Also, if appropriate, do include the network.....thanks, ladies and gentlemen. And, for the rest of the membership, let us hear from you!!



73's
 72

FORMATS

OF THE MONTH CLUB

TONY FITZHERBERT
 356 JACKMAN AVENUE
 FAIRFIELD, CT 06430

Well, this month finds us with a lot of entries in the column which has the impact of an air conditioner sale in February in the Nome Nugget. Thanks are due to Wayne Heinen, who turned his radio on in Colorado, and really gives us an update, and to Charles George, of Dallas, TX, who also contributed. Now, for the silent majority (or mute majority!), if you hear Benny Goodman on 890 in Chicago, or the Cleveland Symphony on 1150 in Wilmington, or Reverend Ike during evening drive on 1060 in Philadelphia, by all means write - 720 interested people would like to know! Here are this time's entries.

- | | | | | | |
|------|------|----|------------------|---|--|
| 540 | KNMX | NM | Las Vegas | - | Spanish, Mexican programming.(WH) |
| | KNOE | LA | Monroe | - | CWM (WH). |
| 550 | KLZ | CO | Denver | - | CWM (WH). |
| 570 | KRQK | TX | Dallas | - | 24 hour contemporary rock (CG). |
| 600 | KIIX | CO | Fort Collins | - | CWM (WH). |
| 630 | KHOW | CO | Denver | - | MOR days, OLD evenings, RKO satellite over night (WH). |
| 660 | KSKY | TX | Dallas | - | Religion (CG). |
| 680 | KWKA | NM | Clovis | - | CWM (WH). |
| 690 | KRMX | CO | Pueblo | - | Spanish, Mexican (WH). |
| | KEYR | NE | Terrytown | - | CWM (WH). |
| 710 | KNUS | CO | Denver | - | Talk, Talknet (WH). |
| 730 | KKDA | TX | Grand Prairie | - | Adult Contemporary (CG) |
| 740 | KSSS | CO | Colorado Springs | - | CWM, NBC (WH). |
| 780 | WBBO | NC | Forest City | - | CWM, per s/off and verie (TF). |
| 780 | WABS | VA | Arlington | - | REL., ID's as "Sunlight 78" (TF). |
| 850 | KOA | CO | Denver | - | News, Talk (WH). |
| 850 | WOZO | NY | Penn Yan | - | Rock, ID's as "85-2" (TF). |
| 870 | KJIM | TX | Port Worth | - | Big Band (CG). |
| 910 | KPOP | CO | Denver | - | Religion (WH). |
| 950 | KIMN | CO | Denver | - | Top 40 (WH). |
| 970 | KPEL | CO | Pueblo | - | Religion (WH). |
| | KSAX | TX | Port Worth | - | Jazz, station is ex-KNOK?? (CG). |
| | KRKS | CO | Denver | - | Religion (WH). |
| 990 | WNYR | NY | Rochester | - | CWM, ID's as "Radio 990", with "Fresh Country Air". (TF) |
| 1000 | KRDZ | CO | Hayden | - | Adult Contemporary, ex KHEE??? (WH). |
| 1010 | KCMP | CO | Brush | - | CWM(WH). |
| 1020 | KBCQ | NM | Roswell | - | Nights - Spanish, Mexican (WH). |
| 1040 | KPCC | TX | Dallas | - | Religion(CG) |
| 1060 | KLMO | CO | Longmont | - | CWM (WH). |
| 1080 | KRLD | TX | Dallas | - | All news (CG). |
| 1090 | KKBB | CO | Denver | - | Big Band, MYL type stuff (WH). |
| 1150 | KRZN | CO | Englewood | - | Oldies (WH). |
| | KVIL | TX | Highland Park | - | Adult Contemporary (CG). |
| 1170 | KSOR | CO | Windsor | - | MYL type format.(WH). |
| 1190 | KADE | CO | Boulder | - | AOR (WH). |
| | KLIP | TX | Dallas | - | 24 hour CWM(CG). |
| 1220 | KBNO | CO | Denver | - | Spanish, Mexican (WH). |
| 1230 | KDZA | CO | Pueblo | - | Top 40(WH) |
| 1240 | KROO | CO | Colorado Springs | - | Adult Contemporary (WH). |
| 1270 | KSSA | TX | Fort Worth | - | Spanish, Mexican (CG). |
| 1280 | KBRQ | CO | Denver | - | CWM, all night from the Country Music NET. |
| 1300 | KVOR | CO | Colorado Springs | - | Talk, News (WH). |
| 1310 | KPKA | CO | Greeley | - | Adult Contemporary (WH). |
| | KAAM | TX | Dallas | - | Oldies (CG). |
| 1340 | KDEN | CO | Denver | - | All News (WH). |
| 1350 | KIDN | CO | Pueblo | - | CWM (WH). |
| 1360 | WKOP | NY | Binghamton | - | Now oldies, has dropped CWM, ID's as "K-Gold" (JN). |
| | KXOL | TX | Port Worth | - | CWM (CG). |
| 1370 | KTNG | CO | Deer Trail | - | CWM (WH). |
| 1390 | KJZZ | CO | Denver | - | Big Band, Jazz, ex KPML????(WH). |
| 1400 | KFTM | CO | Fort Morgan | - | CWM(WH). |
| 1430 | KEZW | CO | Aurora | - | MYL type music (WH). |
| 1440 | KDNT | TX | Denton | - | CWM (CG). |
| 1450 | KYOU | CO | Greeley | - | CWM (WH). |
| 1460 | KSYN | CO | Colorado Springs | - | Top 40 (WH). |
| 1470 | KSIR | CO | Estes Park | - | Adult Contemporary (WH). |
| 1480 | KMEZ | TX | Dallas | - | 24 hour CWM, ex KBOX?? (CG). |
| | KBOL | CO | Boulder | - | Adult Contemporary (WH). |
| 1510 | KDKO | CO | Littleton | - | Black Programming (WH). |
| 1530 | KCMN | CO | Colorado Springs | - | MYL type music (WH). |
| 1550 | KQXI | CO | Arvada | - | Gospel, Religion(WH). |

BANDSCAN

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(314)-895-1436
(1700 TO 2400 ELT)

Welcome to another Bandscan Column. To start things off this month, we have a daytime scan prepared by RICK OVERMANN of Florissant, MO, and el editor. Rick was using a G2 Superadio with no external antenna, and el editor was using a realistic DX-200 and an SM-2. This scan was combined by el editor.

- 540 KMMT, Fort Dodge, IA
- 550 KSD, St. Louis, MO
- 560 KWTO, Springfield, MO
- WIND, Chicago, IL
- 570 WKYX, Paducah, KY
- WNAX, Yankton, SD
- 580 WILL, Urbana, IL
- 590 WRTN, Wood River, IL
- 600 WMT, Cedar Rapids, IA
- WREC, Memphis, TN
- 610 WDAF, Kansas City, MO
- 620 WTMJ, Milwaukee, WI
- 630 KXOK, St. Louis, MO
- 640 WOI, Ames, IA
- WMSO, Collierville, TN
- 650 WSM, Nashville, TN
- 660 KCRO, Omaha, NE
- 670 WMA, Chicago, IL
- 680 KFEX, St. Joseph, MO
- 690 KSTL, St. Louis, MO
- 700 WLN, Cincinnati, OH
- 710 WHB, Kansas City, MO
- 720 WGN, Chicago, IL
- 730 KWRE, Warrenton, MO
- 740 WVLN, Olney, IL
- 750 WSB, Atlanta, GA
- 760 WJR, Detroit, MI
- 770 WEN, St. Louis, MO
- 780 WBBM, Chicago, IL
- 790 WRMS, Beardstown, IL
- WAKY, Louisville, KY
- 800 KREI, Farmington, MO
- WKZI, Casey, IL
- CKLW, Windsor, ON
- 810 KCMO, Kansas City, MO
- WDDW, Johnston City, IL
- 820 WAIT, Chicago, IL
- WSWI, Evansville, IN
- 830 KBOA, Kennett, MO
- 840 WHAS, Louisville, KY
- 850 KFUO, Clayton, MO
- 860 KKOW, Pittsburg, KS
- 870 KRVN, Lexington, NE
- 880 WMDB, Nashville, TN
- 890 WLS, Chicago, IL
- 900 KFAL, Fulton, MO
- 910 KLCN, Blytheville, AR
- WAKO, Lawrenceville, IL
- 920 WGNU, Granite City, IL
- 930 KWOC, Poplar Bluff, MO
- WTAD, Quincy, IL
- 940 WMIX, Mt. Vernon, IL
- 950 KLIK, Jefferson City, MO
- 960 KGR, Cape Girardeau, MO
- WDLN, East Moline, IL
- 970 WMAX, Springfield, IL
- 980 KSGM, Chester, IL
- 990 WCAZ, Carthage, IL
- 1000 WCFI, Chicago, IL
- 1010 KKEN, St. Louis, MO
- 1020 WCIL, Carbondale, IL
- WFEO, Peoria, IL
- 1030 WBDX, White Bluff, TN
- 1040 WHO, Des Moines, IA
- 1050 WDL, Decatur, IL
- KMIS, Fortageville, MO
- 1060 WACL, McLeansboro, IL
- WnFB, Benton Harbor, MI
- 1070 KMKO, Hannibal, MO
- KFWI, Wichita, KS
- WIBC, Indianapolis, IN
- 1080 WFTS, Madison, WI
- KYAO, East Prairie, MO
- WFOK, Pontiac, IL
- KrLD, Dallas, TX
- 1090 WORA, Effingham, IL
- 1100 WWSZ, Cleveland, OH
- 1110 KFAB, Omaha, NE
- 1120 KNOX, St. Louis, MO
- 1140 WVLL, Pekin, IL
- 1150 WGGH, Marion, IL
- KRMS, Osage Beach, MO
- 1160 WJJD, Chicago, IL
- WLBH, Mattoon, IL
- 1170 KJAB, Jackson, MO
- 1180 WLDS, Jacksonville, IL
- 1190 KHAD, Desoto, MO
- 1210 WLLY, Centralia, IL
- 1220 KLPW, Union, MO
- 1230 WNCO, Sparta, IL
- WJBC, Bloomington, IL
- WAKA, Moberly, MO
- 1240 WTAJ, Springfield, IL
- KFWO, Flat River, MO
- KWOB, Jefferson City, MO
- WAB, Harrisburg, IL
- 1250 WKAY, Princeton, IN
- KBTC, Houston, MO
- 1260 WLBV, Belleville, IL
- 1270 WABC, Charleston, IL
- WABF, Rock Island, IL
- 1280 KYRO, Potosi, MO
- WGBF, Avansville, IN
- 1290 WIRD, Peoria, IL
- WCBL, Benton, KY
- 1300 WFA, West Frankfort, IL
- 1310 KOKA, Keokuk, IA
- 1320 KSIV, Clayton, MO
- 1340 KXEO, Mexico, MO
- 1350 WJBD, Salem, IL
- 1360 KSKB, Fort Madison, IA
- 1370 WFR, Lincoln, IL
- 1380 KAK, St. Louis, MO
- 1400 KJCF, Festus, MO
- 1410 WTM, Taylorville, IL
- 1420 WINI, Murphysboro, IL
- 1430 WIL, St. Louis, MO
- 1440 WGGM, Quincy, IL
- 1450 WVS, Springfield, IL
- 1460 KIRL, St. Charles, MO
- 1470 WADD, Peoria, IL
- 1480 WJBN, Jerseyville, IL
- 1490 WESL, East St. Louis, IL
- 1500 WFKB, Vandalia, IL
- 1510 WIND, Highland, IL
- 1520 WNO, Clinton, IL
- 1530 KMFL, Sikeston, MO
- KFCR, Bowling Green, MO

- 1540 WSMI, Litchfield, IL
- 1550 KEWI, Cape Girardeau, MO
- 1560 KTUL, Sullivan, MO
- WFAD, Paducah, KY
- 1570 WOKL, Alton, IL
- 1580 WDA, Du Quoin, IL
- WDA, Pittsfield, IL
- 1590 WALK, Galesburg, IL
- KCLU, Molls, MO
- 1600 KATZ, St. Louis, MO

Next Scan: DON KASKAY, San Francisco, CA (please list equipment) (daytime)

- | | | | | |
|-------------|--------------|--------------|--------------|--------------|
| 540 KVIP-CA | 790 KXJA-CA | 1080 KSCC-CA | 1280 KJOY-CA | 1480 KWAU-CA |
| 560 KSFQ-CA | 810 KGO-CA | 1100 KFAA-CA | 1290 KALA-CA | 1490 KTOB-CA |
| 580 KMJ-CA | 860 KTRB-CA | 1130 KNDU-CA | 1310 KDLA-CA | 1500 KNTI-CA |
| 590 KTHO-CA | 910 KNEW-CA | 1140 KRAK-CA | 1330 KLSB-CA | 1510 KTLN-CA |
| 610 KPRC-CA | 930 KEM-CA | 1150 KFLS-CA | 1340 KOWY-CA | 1520 KAFU-CA |
| 630 KCH-NV | 940 KFaz-CA | 1170 KLOA-CA | 1350 KSNQ-CA | 1530 KFBK-CA |
| KIDD-CA | 960 KABL-CA | 1190 KNSA-CA | 1370 KZZZ-CA | 1540 KAFU-CA |
| 640 KFI-CA | 980 KCTY-CA | 1220 KIBS-CA | 1400 KRI-CA | 1550 KRI-CA |
| 680 KNER-CA | 990 KKIS-CA | 1230 KAG-CA | 1420 KUTN-CA | 1570 KCVN-CA |
| 710 KFLA-CA | 1010 KIL-CA | 1240 KENL-CA | 1430 KNTA-CA | 1580 KLU-CA |
| 740 KCBS-CA | 1050 KOPY-CA | 1260 KRRY-CA | 1450 KEST-CA | 1590 KLIW-CA |
| 780 KRON-NV | 1060 KPAY-CA | 1260 KOIT-CA | 1470 KAOA-CA | 1600 KUSA-CA |
| | | | (ex-KYA) | KUBI-CA |

Next Scan: same contributor, same dull place, unknown equipment (night)

- | | | | | |
|--------------|--------------|--------------|--------------|--------------|
| 540 CBK-SA | 750 YNX-Mic. | 1010 KCRJ-CA | 1150 KAZN-CO | 1400 KAZ-CA |
| XENA-MX | 760 KFMB-CA | CBN-AB | 1160 AGL-UT | 1410 AZAN-CA |
| 560 KSFQ-CA | 770 KOB-NM | KAZG-AZ* | 1170 KLOA-CA | 1420 KSTN-CA |
| 580 KMJ-CA | 780 KRON-NV | 1020 KTNV-CA | 1180 KWSO-CA | 1430 KITA-CA |
| 590 KTHO-CA | 790 KABC-CA | KBC-NM | 1190 KZA-OR | KAN-CA |
| KUGN-OR | 800 XEROK-MX | 1030 KTWQ-WY | 1200 WDAI-TX | 1450 KEST-CA |
| 610 KFRQ-CA | 810 KGO-CA | 1040 WHO-IA | 1210 KULS-UT | 1460 KDN-CA |
| 630 KCH-NV | 830 WCCO-MN | 1050 AEG-MA | KREW-MA | 1470 KAOA-CA |
| KIDD-CA | 840 WHAS-KY | XED-MA | KYU-OK | KAZN-MA |
| 640 KFI-CA | 850 KOA-CO | 1060 KPAY-CA | 1220 AEB-MA | 1480 KWAU-CA |
| 650 WSM-TN | 860 KTRB-CA | 1070 KRA-CA | 1250 KTMG-CA | KYOS-CA |
| 670 KBCI-ID | XEMO-MX | 1080 KHLQ-TX | 1260 KOIT-CA | 1500 KNTI-CA |
| 680 KNER-CA | 870 WWL-LA | KSCC-CA | 1270 KROI-NV | 1510 KGA-MA |
| 690 XETRA-MX | 880 KRVN-NE | 1090 KWIJ-OR | 1280 KJOY-CA | 1520 KONA-CA |
| CSU-BC | 890 WLS-IL | 1100 KFRS-MA | KFRN-CA | KACY-CA |
| 700 WLN-OR | 910 KNEW-CA | 1110 KRA-CA | 1290 KNSL-CA | 1530 KFBK-CA |
| 710 KFLA-CA | 930 KHJ-CA | KFAN-NE | 1310 KDLA-CA | KALB-IA |
| KIRO-WA* | 930 KSEI-ID | 1120 KFNW-OK | 1330 KFAU-CA | 1550 KANL-CA |
| 720 KDMN-NV | 940 KFaz-CA | 1130 KAOA-MO | KUFL-OR | 1560 KFRU-CA |
| 730 CKLG-BC | 960 KABL-CA | 1350 KNDU-CA | 1360 KSNQ-CA | 1570 KZAF-MA |
| 740 KCBS-CA | 980 KFBW-CA | CKWA-BC | 1370 KAFV-CA | 1580 KDAY-CA |
| 750 KXL-OR | KUF1-ID | KWKN-LA | 1370 KZZZ-CA | KLIA-NE |
| WSB-GA | 990 KKIS-CA | 1140 KAAK-CA | 1380 KJCM-CA | 1590 KLIW-CA |
| KERR-MT | 1000 KCMO-WA | 1150 KFRZ-CA | 1390 KCZY-CA | 1600 KUST-CA |

(Don adds: "This is the worst location I've ever had for DX. I have high hills behind me blocking off signals from the west, northwest and north and being in direct line of sight of every tower in the Bay Area. The slop and splatter is ferocious...that accounts for the missed frequencies in the bandscan".)

(If you are looking for a better place to DX, try Los Gatos, CA-el editor)

Next Scan: ROD O'CONNOR, USCGC "Mallow", anchored in Kawaihae harbor, HI (SITEK/KODEN Marine Radio Direction Finder type 511A, omni-directional antenna mounted 50' above water line, set on ship) (day)

- | | |
|---------------------------------------|---------------------------------|
| 550 KMVI, Wailuku, Maui, HI | 970 KPUA, Hilo, Hawaii Isl., HI |
| 590 KSSK, Honolulu, Oahu, HI | 990 KHVN, Honolulu, Oahu, HI |
| 620 KIPA, Hilo, Hawaii Island, HI | 1040 KPOI, Honolulu, Oahu, HI |
| 650 KORL, Honolulu, Oahu, HI | 1080 KZHI, Honolulu, Oahu, HI |
| 690 KKUA, Honolulu, Oahu, HI | 1110 KNAI, Kinei, Maui, HI |
| 720 KUAI, Eleele, Kauai, HI | 1130 KLEI, Kailua, Oahu, HI |
| 760 KGU, Honolulu, Oahu, HI | 1170 KONO, Honolulu, Oahu, HI |
| 790 KKON, Kealekekua, Hawaii Isl., HI | 1210 KZOO, Honolulu, Oahu, HI |
| 830 KIKI, Honolulu, Oahu, HI | 1270 KADI, Honolulu, Oahu, HI |
| 850 KHLO, Hilo, Hawaii Isl., HI | 1350 KIFQ, Lihue, Kauai, HI |
| 870 KAIM, Honolulu, Oahu, HI | 1420 KCCN, Honolulu, Oahu, HI |
| 900 KNUI, Kahului, Maui, HI | 1500 KUMU, Honolulu, Oahu, HI |
| 940 KDEO, Waipahu, Oahu, HI | 1540 KISA, Honolulu, Oahu, HI |

(That's practically every station in Hawaii-el editor)

The opinions expressed in this column are those of the individual members, and do not necessarily reflect those of the editors, publishers or NRC.

The following should have been in last week's column, it is presented to you now. We apologize for any inconvenience. Onward..... -HQ.

B. G. "Bill" Smith - Route 1, Box 33 - Herrin, IL 62948 (pm 1-23; rec'd 1-26)
This is the 3rd year I have belonged to the National Radio Club. I have enjoyed it very much. We have a local radio station here in Herrin that is celebrating its 44th anniversary, having gone on the air in 1948. It was then known as WJPP and has got to be one of the most unusual 250-watt radio stations ever to operate. Every Saturday nite it had two live programs, one from 8-10, from the basement of the then nice, modern studios. This program was known as the "So. Illinois Barn Dance" and consisted of live, local, country, and western musicians, and it was very similar to the "WLS Barn Dance". The other program was from the "White City Ballroom" in downtown Herrin and featured "live big bands". They usually had Jan Garber, "Tiny" Hill, or other bands well-known in the midwest. Their format was much like the WGN remote broadcasts from the Aragon Ballroom. This created a local sensation, and people drove from all over So. Ill. to attend one or both of these broadcasts. The broadcast bands weren't crowded then, and a 250-watt station could be heard much farther than it could be today. Herrin is also a good area for DX'ing, and I have received 660 American AM stations from 36 of the contiguous 48 states, the most recent being KGHL, Billings, MT. I have picked up stations from such diverse areas as WKBW, Buffalo, NY to KFRE, Fresno, CA, and KPNW, Fargo, ND, to KGBT, Harlingen, TX. I have done all of my DX'ing on a Realistic long range TRF circuit No. 12-655, and a GE Superadio, No. 7-2888. 73.

Jim Wallace - 63288 Sand Hill Road - Bellaire, OH 43906 (pm 1-23; rec'd 1-26)
(614) 671-9619 It's been a while since I've contributed to this column, but the good news of the past week has prompted me to write. Despite the four inches of snow and cold temperatures on 1-18, it turned out to be a good day around here. First, it was my wife's birthday. But I received the big present: a new job. By the time you read this, I'll be reporting the news for WWVA, Wheeling. Even though my old station, WOMP in Bellaire, is news/talk, WWVA has the best reputation for news in this market. That, along with excellent facilities, better pay and benefits, good management, and that 50,000-watt signal, makes me view it as a good move up in the news business. An added advantage is that my folks in the Cleveland area will now be able to listen to me. The other good news from 1-18 was that I logged my 900th station from this location. Fittingly, #900 was logged on 900 kilohertz - WLSI, Pikeville, KY. It comes after less than 3 1/2 years of DX'ing from here in eastern Ohio. I logged more than 1,000 stations at each of my previous locations in the Cleveland and Columbus areas. I intend to do the same here, probably within the next year. I am nearing 200 verifications from here also. With one exception, none of them duplicates any of the veries I received in Cleveland and Columbus and I don't count call letter changes as new stations. One of the recent loggings was the WBGB test on 1-15. It turned out to be more than just another test for me. When the announcer, Ken Courtright, mentioned a call from Parma, OH, and then went on to talk about former Cleveland TV movie host, Ghoulardi, I realized he was the same Ken Courtright who had worked in Cleveland radio and TV. I called him and we had a nice chat. I learned that he came close to taking a job at WWVA a couple of years ago. It's a small world. 73 and good DX. (Congrats on the move up, Jim -pls)

Niel Wolfish - 15 Donwoods Grove - Toronto, ON M4N 2X4 (pm 1-23; rec'd 1-27)
Mid-January DX: Monday 1-16: SSS netted me two new ones, WEKG-810 KY at 5:15 pm with local spots and ID, fighting WGY and WMTS. Then it was down to 800, where WCHA-PA was heard at 5:30 pm EST with local nx by a woman. This was finally my first U. S. station heard on 800, with several already logged from Canada, as well as Mexico, Venezuela, and Netherlands Antilles. Wed. 1-18: WWHN-930 NH at 4:57 pm with instrumental mx, ID, and CBS nx, coming right through WBN's null. WVMT-620 VT (finally!) at 5:55 pm. with local nx. When I joined NRC, Ernie Cooper suggested WVMT as my opportunity to log Vermont. WVMT ended up being my 4th station from the state! Thursday 1-19: WEAN-790 RI in at 12:30 am with phone-in program o/CKSO and WTAR as local CKMW was off. Later that day, at 5:30 pm WEKG-810 was relogged with the same commercial for Brown's IGA in Campton. On to MM 1-23: Decided to try some graveyard DX. Gave up at 1:10 am after relogging CJPP-1400 PQ and CFJR-1450 ON. A couple of veries have made it in here: KCCV-1510 MO and KQYX-1560 MO for early December SSS DX, KBYE-898 OK for the DX test and one that isn't quite a verie: WDEV-550 VT sent me 2 CM's and info, but forgot to send a card or letter! This is unfortunate, because I still have to verify Vermont, and WDEV was not an easy logging. I have written back. Currently sitting with 985 heard and 305 verified (538 verified if you add tapes to the total) (Why not? -pls),

with 43/41 states, 10/10 provinces and 24/21 countries. With 15 to go for the elusive 1000 heard, every station seems that much tougher to hear. Hope to hit the milestone some time in March. 73's.

Bill Townshend - 4500 Conn. Ave. NW #901 - Washington, DC 20088 (pm 1-18; rec'd in Riverside ???) (202) 966-8046 By the time this is seen in DXN, the celebration of another world championship for the Redskins may have come and gone. (Your portion of crow is on the way, hill -pls) On Saturday 12-3 Greg Monti hosted a WADKA GTG at his pad in South Arlington, VA. Of the ten visitors, yours truly was the only BCB DX'er. One of the SWL'ers there, Mark Berman, is now getting into BCB DX'ing. He had a pleasant visit at my DX shack a week after the GTG and I got rid of a couple of surplus rigs via sale, including a Belair LW-MW-SW rig I bought in England in 1966 but seldom use but is still in good cx. He was impressed with my DX-160 and Patrolman CB-8 rigs. (Hmmm -pls) Boy, did Old Man Winter and Jack Frost ever descend on us and practically the whole country over the Xmas weekend. Even Florida got stung by the cold jolt with the citrus and vegetable crops shot to (censored! -pls). Their prices are going up like the Pioneer 18 space probe which is now out of the solar system (it went up from Florida in the Spring of 1972). I saw 3-degree F./-16 degree C. on Xmas morning, but it felt like spring ten days later. I might spend the rest of the winter in the Caribbean, hi. (Come on out here, Bill; it's regularly hitting 80 degrees; the trees are in bloom; gardens are getting worked up - you get the picture! -pls) Only 63 days until spring but plenty of time at the dials to pad the logs. I saw the first swimming pool ad in the Sunday paper last week. When spring is really here, I may take my ICF-S5W into the repair shop as there is a loose connection in the audio crt (an intermittent) and the sound is getting a little tinny. I want to have the set ready for the upcoming E-skip/tropo season for FM DX'ing. The set has had almost constant use. I may use my back-up, the trusty 12-655 TRF, which I bought six years ago this spring, coinciding with my entry into the NRC. LXXXIII. (Bill, you're lucky I visited the renters in Riverside last night ... your letter had been languishing there at the old address; the P. O. is not forwarding mail here. Anyone sending Muses to Riverside will really find out about Black Holes, hi! -pls)

Nancy Hardy - 2301 Pacific Ave. - Aberdeen, WA 98520 (pm 1-25; rec'd 1-27)
Since Bill is at his Musings "limit," he's making ME Muse, hi. We're having fun going after stations for the contest. This is the most enthused Bill has been about DX'ing in years, hi. I'll probably not win, but I've gotten so many (about 30) new stations, that I feel I'm a winner. If I wasn't DX'ing for the contest I'm sure I'd be off doing other things! On January 15 we headed out to a nearby Wash. State Park to camp and DX. Within a half hour of setting up (we have a tent-trailer) at 4:24 pm we heard KYAK-650 with c&w mx and ads in good. Went down to 580 and caught 5:00 pm ID from CKXR which was in very strong. CPJC-550 was in with BC nx 5:01-5:10, ad, 5:11 "JC-55" slogan by woman into sports. KLUB-570 heard with "Radio 57, K-L-U-B" ID at 5:21 into instrumental mx. Only other new station for me was CJCL-1430 the next morning, 1-16, fair with ID 3:34 am after "CJCL Sports." Back home again, I heard new KGRV-700 in Winston, OR testing at SSS on 1-21. They had continuous Christian mx 4:30 pm (after KFAM disappeared at power cut) until they signed off 4:50. ID mentioned they had been testing "25,000 watt transmitter." Probably will be on RS soon. Good cx to midwest 1-24 brought CKBI-900 in well with CJVI nulled. ID at 6:15 1/2 pm into Barry Manilow song. Good DX to all! 73/88 (Welcome to Musings again, Nancy. I wish we could get both sides of more "better halves" to Muse! -pls)

Roger Giannini - 1111 Forest Hills Drive - Belleville, IL 62221 (pm 1-23; rec'd 1-27) Remember the HQ-180 purchased at Enfield? Steve Bohac has restored the rx to brand-new condition inside and out with improved audio, O-Multiplier, and a Torretronics frequency counter, 4850 Hollywood Court, Dayton, OH. Can be used with a variety of solid state and tube receivers. If your rx isn't listed write to them and instruction will be provided on how to hook it up. Steve is installing a 2.9 Collins mechanical filter in a Sony 6500W rx and a review will be sent on the selective improvement. PM is nice, too, and I have logged 4 Springfield, IL stations. The promo collecting bug has finally caught up to me besides pennants in the form of sports stickers and keyrings. Besides Decalomania perhaps some NRC'ers know of stickers that I could use in my collection. I am interested in other non-sticker promo collectors such as Neil Dickerson - Box 457 - Sharptown, MD who collects station cigarette lighters. He has around 60 of them. This request is for my series of articles for Decalomania. If anybody has received anything unusual from a station, please let me know about it. I heard an interesting BKB promo on WMBD-1470 Peoria, IL the other night. Announcing as being the voice for Bradley University for 50 years, Wayne Murphy of Nashville, TN had better answer his phone with the "phrase that pays" slogan for WSM for he will be a \$1000 winner. Remember David Sollie from the '82 Louisville convention? He fell in love with a girlfriend that he met at the hotel pool. David told me that she pays the hotel a monthly fee in order to use the pool. David was the member for those of

your on the WHAS tour that caused the xmtr to be silent for 2 or 3 seconds by opening a door that should not have been opened. Terry and I have not heard from him for almost a year. Obviously married life agrees with him. 73's. (Out of the frying pan, into the fire, hi! -pls)

Harry Hayes - 9 Henry St. - Wilkes-Barre, PA 18702 (pm 1-24; rec'd 1-27)

EST The arrival of DX News is always a happy occasion, except when on the cover is a note that three of our own have passed away. Condolences to the families of Kenneth Brown, John Clements, and Larry Brookwell. I kenw John the best, and his passing at his age was a shock. Condolences to you, also, Paul, on the loss of your and our friend. (Thanks, Harry -pls) Now on the bright side, DX continues good into Southern Europe this week. 1-19 featured fair reception of RNE-774 and 855 at 2200 EST. The usual wide variety of mx heard and six time pips on the hour. On 1-21, last night as I write this, cx were slightly better with my being able to parallel the transmissions of 684, 774, and 855. Music range heard: Kim Carnes, Electric Light Orchestra, and classical mx selections. I guess they have to please everybody since this service monopolizes the AM band. Reception peaked at 2045. At 2200 I had an unknown 783 with two clock-like chimes for an IS. More on this in IDXD. It looks as if maybe sunspot quiet is returning! I hope. Last season featured very little DX of the European variety here in Wilkes-Barre. You guys with beverages on the coast might think I'm not looking too hard. While that may have been part of the problem last season, a bigger problem I think are the extensive mountain ranges east of here which I am sure cut down on some signal strength. Last sunspot minimum, circa 1976-77, I was DX'ing exclusively in the Pocono Mts., in the direction of Europe from Wilkes-Barre and TA's literally boomed in on the R-390A and SM-2 that I was using at the time. Now I have those mountains in my way here. I still have the opportunity of DX'ing in the mountains but am hesitant about lugging my HQ-180 around. Other DX: 1-19, 1018 CFP5-1490 Port Elgin, ON with s/off ment. // CP05. 1745 WRXV-1530 Auburn, ME blasting through WCKY. 1-20 2335 KPRC-1616 doing it up again with r&r and talk about U. S.-Soviet relations, a liberal view. Also mention of an SW outlet. More as it happens.

What Can Happen When A Test Is Scheduled

John R. Malicky -995 Shadycrest Rd. -Pittsburgh, PA 15216 (pm 1-25; rec'd 1-28)

Hello, everybody! I don't know where to begin. Should I talk about the weather? (-5 degrees F for a high on 12-24 or -17 degrees F. for a low on 1-21) Nah. How about the Super Bowl featuring the villainous Raiders who crushed the 'Skins, 'Hawks, and Steelers (who went faster than a punctured balloon) Nahl! How about ... DX! Okay, I'll start with present things. Before I start, I am serious in saying I express my sympathy to you, Paul, and hope you will recover. (Thanks, John; life goes on -pls) I did not know H. John Clements, but he was probably a great person. It was also not good to see the passing of the other men, Mr. Brown and Mr. Brookwell. // Now to the present. Arrangement of the WBGB test started when I heard them on 12-4 just barely. Mr. Courtright promptly varied and asked that I schedule a test with the club, at an earliest possible date. I made it up almost 3 weeks ahead of time, but little did I know what could happen and did! First, one of my good friends decides to have a party the same night, then my cousin asked to help him pick up stuff in storage belonging to his girlfriend in Hershey, PA (about a 220-mile drive in an 18-ft. Ryder truck) that same morning! Got this so far? Then, though apologetically, Mike Knitter listed the day as Monday, as it was Sunday, as he did make a mistake. This had me worried that some members might listen on Monday and one member even called to make sure. Finally, Saturday night came. Let's see you try to explain to your friends why you have to leave a party early to go home and listen to the radio! I did and left at 12:30 am, because I thought maybe WBGB might call me and no one would answer! However, the test went well and thank to all who listened or tried. Mr. Courtright even extended it for 7 minutes. I went to sleep about 2:30 am because I had to be up at 5 am to leave for Hershey, but I did. And, as the saying goes, all's well that ends well. // From my last Muse of 11-29 I've heard 41 new stations up to 1,074 and received 29 veries up to 548. This next number may be a little staggering, but I tell you anyway. Since 9-16, I've sent 110 typed reports, 117 with ppc. Return rate not including 12 not sent and 7 ppc is 52 out of 98. Next week I'll highlight them. 73's.

Now....onto this weeks show.....but first a word from our sponsors.....

Articles, Articles, Articles We can always use them!! Got a new radio for christmas or some other new DX device? Then, why not sit down and give us your opinion of it. Don't know how to write up your idea, just follow any one of the previous articles on radio reviews. Still got troubles, then just send your details to HQ and we shall help ya out. Okay? Good, so....sit down and write !!!

Now....onto this week's scheduled show.....

(Deadline for #22 is Feb. 25; for #23, Mar. 3; for the first bi-weekly issue on April 2, Mar. 17. All times should be local; please list your time zone)

Jerry L. Bond - 143 Burwell Road - Rochester, NY 14617 (pm 1-20; rec'd 1-23)

Continuing from where I left off last week, here's more of the DX that has come my way this season. Sept. provided only one new logging after the great SSS session on the 12th and that was WBRW-1170 which made it in at 7:06 pm on 9-18. October started off good with a couple of new MA loggings on the 1st when WCAT-700 was logged at 6:02 pm and then WUHN-1110 plowed through CKJD-1110 at 6:09 pm. On the 5th I logged a new one around sunrise and that was WVIP in famous Mt. Kisco, NY. They were logged at 6:14 am. The next new station to grace the pages of my logbook was WXPX-1300 which was heard on my car radio at 5:50 pm on 10-12. A week later on 10-19 SSS was good again and WNT0-1540 was noted at their 6:46 pm s/off inviting written comments on their programming. Also heard that evening were WSAY-1480 at their 6:47 pm s/off, WBBE-1500 at their 7:01 s/off and WOR1-1550 at their 7:15 pm s/off. Two more new ones were logged on 10-20, and they were WACR-1850 and W1YY-1120 at 6:58 pm. 1950 is a real toughie here with CHUM/WHN both usually good at SSS and often tough to null so WACR was a very pleasant and unexpected surprise. A couple more surprises made it though on 10-22 when WBBB-920 was logged at their 6:44 pm s/off and then WCNN-680 came in at 6:59 pm with pesty CFTR null'd. The last week of October traditionally provides some of the best unusual DX of the early season, and this year was no exception. 10-26 finished with three new loggings, and they were WCPS-760 at 6:32, very strong o/WJR; WCHA-800 at 6:26 pm; and WOBL-1320 at 7:37 pm. Unbelievable as it may seem, WCHA was my first U. S. logging on 800. That makes the U. S. country #4 on 800 for me. The reason for this is pesty CJBQ across Lake Ontario in Belleville, ON. They are like a local here, and all I ever get when I null them is CKLW at sunset. When I null CJBQ I also null most of the possible U. S. daytimers I could hear as they are generally almost all south of here. Oh, well - at least I now have the U. S. logged on all the frequencies on AM. 10-27 provided more good SSS cx and among the stations logged that day were WARE-1250 at 5:47 pm, WCII-1080 at 6:53 pm, WPAG-1050 at 7 pm, and WAMJ-1500 at their 7:31 pm s/off. 10-29 was the best SSS yet, and loggings that day included WOPA-1100 at 5:46 pm, WHNC-890 strong at 5:53 pm, WFLO-870 excellent at 5:56 pm, WBRW-1170 at 6:16, WCKB-780 good at their 6:44 pm s/off, WRWC-1060 at their 6:46 s/off, WKNX-1210 at 6:49 pm, and WHOT-1330 (who? hi -pls) at 7:06 pm. Sunrise DX on the 29th had been good as well as WHAZ-1330, WSVY-1380, WFMD-930, WKVA-920, and newie WYNO-1120 all made it in between 7 and 8 am. Sunrise DX was good on the 30th as well as KPI-640, WHJB-620, WLAP-630, newie WKKE-800, and WLLL-930 all made it in. SSS on the 30th provided one more new one, and that was WFDE-910 at 5:51 pm. Rarely heard WQAM-560 also was noted at 6:40 pm. October closed out with another new logging on 800, and that was WSVS which was heard u/CJRO with an ID at 5:04 pm on the 31st. Also logged on the 31st were a couple of rare ones from Wisconsin - W1SN-1130 and WAUK-1510. That about wraps up the October DX here - I'll summarize the Nov. and Dec. DX next time around. Till then ... 73.

Kiss 1540 Goodbye

Niel Wolfish - 15 Donwoods Grove - Toronto, ON M4N 2X4 (pm 1-23; rec'd 1-27)

A couple of newspaper reports this week had the following piece of wonderful news: "All Night Long: That's CHIN-1540 radio chief John Lombardi's favourite song these days, thanks to a new AM radio agreement between Canada and the U. S. For the past 18 years Johnny's had to stop broadcasting at sundown each day so CHIN's signal wouldn't cause interference with an AM station in Cincinnati. But now he'll be able to broadcast 24 hours a day, because the new agreement gives Canada access to more than 100 new AM station assignments. Johnny was so happy about the deal that he flew to Ottawa to witness the signing of the deal by Communications Minister Francis Fox and U. S. ambassador Paul Robinson." Needless to say, I'm not too thrilled. 1540 is one of my favourite sunset frequencies, with 24 stations heard, plus WPTR, KXEL, and Bahamas. Better camp out on 1540 before it is too late! 73's.

Verification Highlights

John R. Malicky -995 Shadycrest Rd. - Pittsburgh, PA 15216 (pm 1-25; rec'd 1-28)

Good day to all. Starting from the present back to 11-30-83, here are some choice prime cuts of beef - er, veries. Underlined are new On 1-23: KTGR-1580 "Tiger Country" in Columbia, MO for their s/off of PSSA power, as the PD didn't tell me what it was, though their day power is 250 w., with a postmark "Mid-Missouri MO!" Not even a town listing! Also, same day, finally QSLD-1070 Wichita with a v/f, c/m, and QSL card - Great Empire Broadcasting, and, WWBD-790 Bamberg, SC even though I completely had the owner's name wrong, as I thought on tape it was Bert Windsor, Jr. It really was Vic Whetstone, Jr., as he signed a v/l saying I was almost accurate, though I had the announcer as Don Kirby (Guy Kirby) and Pastor Dr. James B. Karcy (Dr. James P. Carroll)! At

least I got Jr., Kirby, and Dr. James right, hi! On 1-20, WLAS-910 Jacksonville, NC with a computer-type v/l, my first of this kind; is this how they'll all be? I prefer scribble myself! (But you'll take any kind of verie, right? -pls) WLAS's CE mentioned letters like mine "give us an extra thrill!" For PSSA, 1-18 brought WLIL-730 Lenoir City, TN operating with 199 watts until they get authorization for 459.6 watts; 1-16 WPMW-730 Madisonville, KY with 357 watts sending a b/s and ad sheet and from the PD, remembering to "Do It with Frequency!"; and 1-14, WJMW-730 Athens, AL with 3336 watts as the signer, Carl Sampieri, CE, was a former CBC DX'er (sign him up! -pls) who could appreciate my report and mentioned that PSSA could "open up the band for areas that were closed before." On 1-16, WPNCC-1470 Plymouth, NC, liked my "very informative letter." On 1-12 WBBQ-780 Forest City, NC sent blank copies of their AM and PM stationery and b/s (Makes you wonder who's been requesting stationery and for what reason ... -pls). The mx dir. asked to come and see them if I'm near there, and to "have a good-un"; WETB-790 Johnson City, TN PD's says, "I wish the best to you and your club."; and WBBQ-1580 Pittsfield, IL sent blank stationery and writes on the back of the AM and PM c/m's thanking me for PSSA reception, but not given; day power is 250 watts. On 1-7, WBAA-920 West Lafayette, IN home of Purdue University; the manager says "the accurate detail ... made it very easy to confirm." It was only word-for-word on their news! On 1-6, KCCV-1510 Independence, MO with 10,000 watts sent a v/l, c/a, and ad sheet and a Fellowship program schedule from Kansas City's Christian Voice. On 1-5, WMTS-810 Murfreesboro, TN's Traffic Manager Linda Tipton wondered how I got her name; only the shadow knows! Why, from Verie Signers! Jumping back to 12-17, WTOP-1380 Winston-Salem, NC's Promotion Manager and secretary are nearby Pittsburgers who miss the city; isn't that nice? From 12-1 on a test WNTN-1550 Newton, MA's CE mentioned he was confused, as I heard their ID through WTHB-Augusta also testing with a commercial and said they are a daytime and shouldn't have done this. They (WTHB) also didn't verify, but WNTN was "delighted". Also 12-1, WRBN-1600 Warner Robbins, GA rewrote practically 4 items I gave them on my reception report (?? -pls). Finally, WZYS-1440 Cowan, TN sent back a verified copy of my report and explained that the "Hawg" man (dj) is from Arkansas - Razorback country! 73's; next week PSSA and January 5-7 DXD receptions.

Bruce A. Conti - 39 Bayberry Drive - West Warwick, RI 02893 (pm 1-29; rec'd 1-30) The good DX'ing conditions have continued during the '83-'84 season as the newies keep rolling in, with 19 heard so far. Even so, I haven't been able to bag anything from the west coast yet. WHLO-640 seems to be on 24 hours with NSP, thus KPI remains unheard. KDAY-1580 is also a possible catch in New England (Humm - I can null it enough to hear KNIX, so ... -pls), but CBJ has been running with a continuous 1 kHz tone on MM, although sometimes they're considerate enough to leave just a silent carrier. It seems to me that if the frequency isn't being used for testing or broadcasting, then the station should go off the air. Otherwise, in my opinion, the frequency is being jammed, not allowing the reception of other stations broadcasting on the same frequency. Silent carriers and tones from Canada have also been noted keeping 690, 730, 740, 860, 940, and 1550 tied up. Monitoring 1150 kHz has brought in a couple of surprises in the past week. All times are EST. On 1-18, WDEL-DE popped in a couple of times thru CKOC/YVMN and an UNID c/w mx station, with WHUE almost nulled out, 8:07 to 8:47 pm. This is the first time I've heard Delaware since 1974! Later that evening, 9:10-10:00 pm, newie CHSJ-NB was in strong for a while before giving in to WHUE/YVMN with "The People's Gospel Hour". On 1-21 at 1150, another newie, WCRK-TN came through WHUE with Mutual mx, local wx, and T40/Disco mx, 6:29-6:47 pm. The DJ had a very southern accent, something you don't really hear on the clear channels of the south. To correct a DDXD report in the 1-23 DXN, I reported WTHB-1550 with c/w mx. That should be 3/30L mx. I must have been half asleep when I prepared that report for mailing. I stand corrected. Verie came in from VOA-1580 Antigua, and WNCT-1070 NC. The CE at WNCT said that they were broadcasting with their auxiliary 5 kw transmitter during the time I received WNCT. 73's.

Neil G. Zank - 623 Lyncrest Dr. - Lincoln, NE 68510 (pm 1-30; rec'd 2-1) A few more radio signals have slithered through my speakers, so a Muse is off again. The first date of note is 1-14-84 when fair/good signal in from CJCL-1430 Toronto, ON at 1:35 am ELT with mail order record ad and CJCL weather update. I believe this is first time since using this call. And KHAS-1230 Hastings, NE was ET'ing with TT's and OC, heard 2:10-2:39 am, popped an ID as testing from transmitter site. New on 1-18 was CFRP-660 Calgary, AB with fair signal at times 2:45-2:55 am with rock mx, "66-CFR" slogans, and "CFRP Line- 291-0789" for requests. MM 1-23 brought WMPM-1470 Chicago Hts, IL with Black Gospel mx and talk, ID's as WMPM Chicago Hts., all-gospel radio 24 hours a day." Good signal at times 2:25-2:40 am fighting with KRBC. 1-29 provided new, WRRO-1440 Warren, OH to my log 2:30-2:55 am with rock mx, female dj, national ads, and sports scores from area high school basketball games. Good signal most of the time. And 1-30 MM while trying for WZKY test finally noted WLIM-1580 Patchogue, NY on ET'ing 2:03-2:15 am with rock oldies and big band mx plus several taped ID's. I missed hearing this one for a number of years previous to this MM. WZKY never noted here. That brings new DX up to date. Several

evenings I have tried 1030 for a shot at new TN stations; I have noted a third behind WZ, KTWO, with c/w mx but no ID snagged yet. We will get this one, I am sure! Two new veries collected since last Muse with WKKE and CKAR in the file now. Total stations heard at 1,325 now, -46/46 states, 9/9 provinces. Most DX'ing done with Panasonic RF-2600 portable or Hammarlund HQ-130A; a number of back-ups are available, hi (I'll say, hi -pls). I love the digital readout of the RF-2600, plus it has provided a lot of DX reception to my ears in the past several years of use.

Two Fine DX'ers Remembered

Dr. Richard E. Wood - College of Education - P. O. Box 959 - Abha, Saudi Arabia
This Musing is in memory of Larry Brookwell, the grand old man of San Diego DX, a lovable curmudgeon with lots of stories to tell, and of H. John Clements, the guiding light of the Longwave Club of America, tragically dead of a heart attack (still tentatively -pls) at age 34. Though his skin was pale, he looked healthy, and went far before his time. Some eyebrows were raised at last year's ANARC convention in Roslyn, VA, when a special award, designed especially for him, was announced. ANARC Secretary General Terry Colgan asked the 200-plus participants "How many of you know John Clements?" Only three or four hands, including mine, went up. Nevertheless, a "specialty band" award had been created, for work in non-SWBC DX, and - seemingly with foreknowledge of John's tragic death so soon to follow - the first one went to him (And he was very proud of it, justifiably so -pls). In DX news here, jamming, the scourge of Middle Eastern DX'ing, continues to grow, and even troubles DX'ers in Pinland, which has a south/north pipeline to the Middle East, with, for example, Dammam, Saudi Arabia-1440 usually dominating Luxembourg-1440. Finnish DX'er Simo Soininen reports that the Iraqi jammer against Shiraz, Iran-990 is so loud that East Germany has switched off its jammer against West Berlin's RIAs also on 990. East Germany is chronically short of electricity, and the Iraqis now do the job! My only TA catch this season is R. Globo-1220 with futebol (soccer) 2255 on 1-22 - even in January, it's Brazil, not North America, that I catch. The problem with TA DX here is that the band is dominated by Europeans and N. Africans until 0000 UTC, which is 3 am local. So for a serious TA DX session I have to stay up all night. It's actually easier for Victor Gonetillaks and other South Asian DX'ers, as that is 5:30 am their time; they just have to wake up early, not stay up in the wee hours. That's probably why they have heard Chile, Peru, Argentina, etc., while I haven't. Kazaross' fine TA DX jibes closely with my observations; his 2201 s/off for Sennar, Sudan-1295 is correct; watch for a hummy, off-the-air relay modulation on this one. This one is listed as a superpower, 1500 kw, but I doubt it; like East Germany but more so, Sudan has electricity generation problems. It's loud here, but I can still get Orfordness, England-1296 thru it, and it lacks the punch of a real superpower like Abu Dhabi-729 or Jedah-648. Vernon's rpt of Poland-1593 being in EE when Swedish is sked is correct; some Swedish bc's from R. Polonia have been replaced by EE. If Vernon had Jersey-1026, then he has a new country, Channel Islands, which is not part of England politically or legally. Technically, they are the last remaining part of the Duchy of Normandy and the Queen's title there is Duchess of Normandy. The name of the Libyan pgm on 711, 1251, etc., is not "Voice of Aran Homeland," but "Voice of the People's Revolution." 73.

Tony Fitzherbert - 356 Jackman Ave. - Fairfield, CT 06432 (pm 1-30; rec'd 2-2)
Hi. Time for a Muse although Metro North, plus church responsibilities, and the presidency of the Western Connecticut Chapter, National Railway Historical Society ... oh, yes, and Cub Scouts, have kept me from the dial, although I have DX'ed a few sunsets, lately. Veries are back from WAEB-790, nice v/f, a v/l, v/q, and b/s from CIHI-1260, my report returned, noted "confirmed" from W190-1520. Also, the CE's ham QSL from WLOR-730, a very nice letter plus b/s from WOTW-900. From WBBQ-780, a v/l and thermometer! From WAEB-780, and on a t/u, a nice v/l from WSMN-1590. And thanks to NRC'er Jay Novello who obtained a WENE-1430 verie for me! The verie noted that a week ago they got a report and tape from Norway. Thanks to Kermit Geary for two station profiles - and to several of you for format contributions!! 73's and good DX!!

Fred Vobbe - Box 127 - Temperance, MI 48182 (pm 1-30; rec'd 2-2)
This Muse is coming live and direct from the Hyatt Regency in Dearborn, MI. Our sister station, WMJC-FM, is simulcasting the "Morning Show with Jeff and Jer" from the Hyatt ballroom every morning this week. The company got a room for my wife and me for the whole week so I can be right here. Not bad; it beats the Howard Johnson's in Monroe (hi). I brought my AMS with me with a loop; however, there is too much noise in the building, and WLQV's xtc site is just miles away! DX on the home front has also been poor due to a local insurance company's computer which radiates some 600 feet in all directions I'll have to have a talk with those boys. Nevertheless, WTAE was pounding the AMS on 1-13, with a very unusual WQAM several days ago. KOA in Denver was in o/ semi-local WJM which is usually the big one on 850. Strange conditions on 1-24, PJB and another station were hammering the Big-8 (CKLW) at 2000 to 2115. Listening to Wolfman Jack on 6-10-TVN was double good as between records (tapes) I got Kansas City again plus a very strong WIP whipping TVN apart for a good 15 minutes (sorry for the pun pls) (me too, hi! -pls). On 2-29 I will be doing a non-directional test of WHND. If you want a verie, send report to 5305 Vineyard Dr. - Monroe 48161. We have new QSL cards on order. Test will be 1230 to 1330

EST. Here's hoping Ernie and Ray on the EC can hear us thru WGAN, WFIL, WHYN, etal. The westerly DX distance is Nebraska; Frank Merrill holds the south by his great catch in Paris, TN in the car! To the east I think NY state. On the other hobby scene, my tape collection grew by 180 tapes. I am sending out new updated lists to everyone currently trading tapes. Some classic airchecks were 1971 WCFB, 1966 WINS, and 1968 KHJ. Great Stuff! That's about all here from the Hyatt. To those of you that are into aircheck swapping, I would like to hear from you. Special thnx to Ken Romstadt, Gary Siegel, and Frank Merrill for stopping by the homestead. Perhaps one day a convention will see us all together; maybe IRCA Toledo '84! 73's and best of DX Always. P. S.: WHND's Monroe studios are now fully remodeled and stereo! If anyone wants to stop by for a peek, give me a call sometime.

Gerry Thomas - POB 2836 - Pensacola, FL 32513 (pm 1-31; rec'd 2-2)

Hello again. I just wanted to take a few minutes to comment on Dallas Lankford's interesting article on ferrite rod theory and application on a few issues back. I, too, have built and tested literally dozens of ferrite rod antenna designs and have arrived at similar conclusions. Although I haven't gone into the mathematical predictions to the extent that Dallas has, I have noted that, when all is said and done, precious little usable difference between the various designs is discernable. After trying rod configurations as long as three feet, I've gone in the opposite direction to shorter (12 inches or less) lengths and concentrated on amplifier design. Interestingly, I've found that some of the newer integrated circuits (specifically, the high slew rate IC's with FET inputs) enable very simple design and acceptable noise figures. Using low noise passive components (e. g., metal film resistors, etc.) and optimal source resistor values results in noise levels that are very acceptable in high-Q/narrow bandwidth applications. Right now I'm using a 18-inch rod antenna with IC amplification that has more gain than a four-foot passive box loop or 50-foot long-wire (with noise level that is less than or equal to the LW). The IC is still slightly noisier than a discrete PET design but less so than a bipolar one. Anyway, I had these technical points on my mind that I felt the need to relay ... sorry to bore the non-technical types. Oh, yeah, Rick Overmann's unfortunate experience with the Hot Rod represents the very first complaint I've had regarding that loop. It must have been damaged in transit because everything is tested at least twice before it is shipped. (All personnel who work in shipping and the P. O. have Murphy as a relative, hi -pls) 73's--GT

William C. Moser - Box 245 - Wishek, ND 58495 (pm 1-30; rec'd 2-2)

Since Doug Beard appreciates my Muses (according to #15), I'd better take a few moments to write! I noted John Malicky's SOS for help getting a response from KFYP. I called their ND toll-free number and talked to Herbert Leupp's secretary about this. If you don't hear from them, let me know, and I'll keep calling. The same goes for any other NRC member. (Could this become a full-time position?) (You know it! -pls) I also noted Ernest R. Cooper's reception of Fargo, ND on FM, but wish he had given call letters. I have a v/l from WCIB, 101.9, for reception on 6-8-82. FM DX'ing will be harder here this coming season with the addition of several new semi-locals to the FM band. As I look over my list of 33 years of CBC veries, I see that Oregon has been my most elusive contiguous state. My one and only verie is from KGW-620. WA and CA are heard often, but nothing in between. Now for what I have been hearing. As January comes to an end, so have good SS cx. My only report for the week went to KQYX-1560, heard o/KKAA on 1-26 just before their change to night operation. SRS reports went to CPCW-790 on 1-24, sneaking in between KGH and KPGO (all 3 with c/w formats); KXGN-1400 on 1-25 with ag news o/din; and KLGR-1490 on 1-26 with items for sale from households (garage sale of the air). I appreciated the 1230 kHz station list and map in #16, and hope the same will be printed for the other local channels. I guess I'm now caught up with odds and ends, so I'll say 73's for now from Dakota Territory.

Sidney E. Marshall - 7224 Pam Dr. - Millington, TN 38053 (pm 1-31; rec'd 2-3)

The 3-week vacation is over so it's back to work for me. While I didn't get in as much DX'ing time as I had planned, I am satisfied with the results of the time I did spend at the dial! I must credit the new PSSA 6 pm s/off ruling for adding several new stations to my log book during December and January. Since my last Muse of 1-16 I've added 3 new catches to bring my station total to 1,141 heard. "Newies" are as follows with times shown in CST: On 1-17 between 5:20 and 5:30 pm, WFMW-730 KY was in vacy strong with mx, station promo, ID, wx and temp., comments about heavy snow and other local info. On 1-22 at 5:45 pm KNIM-1580 MO surfaced with lengthy station promo and ID. Then on 1-26 at 4:44 pm I caught the full s/off announcement of WSVQ-1190 TN over WHMT. Back on 1-28 I got a nice relog on CPGM-1320 ON which was in at 5:24 pm for several minutes with a local-like signal. It has been over a year since this one was heard for the first time. It's good to see several new names appearing in the Musing column. Also was glad to see several names back in this column that had been absent for sometime. While on this subject, due to upcoming work schedule, I'm going to be absent from this column for an extended period of time, so Paul you'll get a Break from my handwritten Muses! (Oh, no-o-o! What I really need is a break from Muses typed with an ancient ribbon and full of overstrikes! -pls) So till later this year, best of DX'ing to all.

Steve Basilla - 307 2nd Ave. - Osceola Mills, PA 16666 (pm 1-31; rec'd 2-3)

DX this season: WDCR-1210 heard often. WRID-1520 Homer City, PA heard a few times very poorly. WNCR-1080 St. Pauls, NC heard at Dec. s/o 5 pm. Jan. 4: WXPX-1300 West Hazelton, PA very short s/o 5 pm. Jan. 9 WYNO-1120 KC Nelsonville, OH easy here at s/o right after WVST's s/off. Jan. 13 WLDW-1570 Westfield MA heard easily; must be on PSSA. Bact to Dec. 30: WRTT-1170 Vernon CT quick s/o; only call given at 4:15 pm. WECO test in; fine signal; sent thank-you note, received verie. WBGB test heard poorly. Someone with tone whistle was on the whole hour. It seemed like a semi-local. WAJE Ebensburg, PA? Enough copy heard though. Dave Schmidt's name heard. (In vain? Hi -pls) Above all newies except WECO, keys in a mess, no copy. Stations about WSVQ on with PSSA's include WCPA-980 Clearfield, WAJE Ebensburg, WKMC Westfield Springs, WFRB-560 Frostburg, MD, WKOL Amsterdam, NY, WRSC-1390 State College, on since 12-1, 2500 w. day, 1000 w. night, not known of SP as heard MM and SM. May not reach out east or s-east at night protecting WLAN Lancaster.

Kernit Geary - 1266 Riverview Drive - Walnutport, PA 18088 (pm 1-31; rec'd 2-3)

I wish to acknowledge rather belatedly the fine time that was enjoyed at NRC's 50th anniversary convention. It was a real pleasure to meet the many members too numerous to mention individually. Of special interest was meeting old-timers Ernie Cooper and Pete Clarius. Ernie needs no introduction, but newer members may not know that Pete, a real nice fellow, was a DX News editor in 1938-1939, along with departed Dick Cooper. DX has been fairly good so far this season, mostly auroral until the New Year, but with some recent good openings to the West. TA's, while not so consistent as last season at this inland location, may improve before Spring. New calls verified total 39 since August, for a return to date of 67% on domestic capcoks. No copies yet from EAK64 (882), Spice Island Radio-990 or HRS0 (700), the latter drowning WLV on the am of 11-28. The best veries this season have come from KZYM-1220 (250w), KVA-860 (first new Arizonian in over 5 years), WMSO-640, WKKE-1130, WSR-740, CJVL-1360, WQSP-1310, WJCC-1170, WNWZ-1450, WMYD-1370 (100 w. PSSA), WHYY-1190, WNGR-960, and WQIK-1320. I would like to urge all who receive veries to please forward the names of signers to Wayne Heinen. Knowing to whom to write is more vital than ever in these days of many reluctant verifiers. There should be no reason for not having a "Verification Game" page at least once a month. It is encouraging to note that WKRE-1520 (ex-WEXM), which regularly ignored reports, is now very friendly to DX'ers under new management. The new PSSA's, in general, have been another blow to domestic DX. Although a few new stations were logged, a number of frequencies such as 1370, 1570, and 1580, which were open hunting grounds for southern stations during the midwinter months, now have nearby stations operating until 6:00 or 6:30 pm, by which time sunset has moved well into the Central time zone. It is interesting to note that WTYO-1580 stays on until 6:30 pm when all the other eastern daytimers on 1580 are off at 6:00 pm. Also, how does WSVQ-740 rate only PSA (6:00 am s/on) on the frequency; another FCC goof? Good DX to all!

Brad Lovett - 700 St. Marys Ave. Apt. 227-C - Frankfort, IN 46041 (pm 1-31; rec'd 2-3)

CONTRARY to popular belief, I haven't left DX'ing, but it has been awhile since I've Mused. And of course you'll note from the new address that I've moved. Yes, despite sound advice, wise counsel, and possibly my own better judgment I'm back in radio, at WIL0/WSHW locally. WSHW "Shine 99" is a 50000 watt Adult Contemporary outlet licensed to Frankfort-Kokomo, and also getting into the Lafayette market. WIL0-1570 is your basic local small market operation, heavy on news and community service with a grabbag-type ex format with A/C, MYL, country, and "The best of the records that never made the top 40" (Oh ... you don't get good service from your one-stop either, hi -pls). Actually, things aren't going too badly here; it sure as heck beats standing in that #11 unemployment line. (I did beat my ex-employer's challenge to my claim, but not before it went to hearing). I'm in a multi-unit pre-fab type apartment complex, of wood frame which won't hurt my radio hobby too badly, but, of course, there's lots of interference from TV's. I don't have the low-band amateur radio station going here yet, hopefully soon. It's going to be a "top secret" affair, as the lease prohibits antennas. Dayton Hamvention-goals! The second annual SWL-DX seminar will be sponsored by the Miami Valley DX Club. We hope to see many of you there. It's open to discussion and attendance by all DX to report, no time. By the way, WIL0-1570 has been using full 250-watt power for PSSA till 6. I don't know what we were authorized for 2 hours past sunset every third full moon with 1/2 watt, hi! Any DX'ers around here? Let's get in touch! We're located about 50 miles north of Indy. All for now, 73.

Tom Connatser - Route 9, Box 78 - Sevierville, TN 37862 (pm 2-1; rec'd 2-4)

ELT. Greetings again from the Smokies. It's great to see Musings appearing again in DX News; sure hope you've got everything squared away as to who gets use of the word processor, Paul. (For the time being -pls) Also, I hope the volunteer effort will come forth to continue the work on the Domestic Log; I'm really looking forward to the next edition. Some big radio news here in East Tennessee: WIVK-850's last day was Sunday 1-29; station is now using the call WHG; nothing else has changed, and according to the station

manager nothing else will, except the station's mascot, which will change to the WHIG bird, a bird that looks similar to a parrot and wears revolutionary war garb. The WIVK call is retained by the FM who now admits that their frequency is 107.7, a refreshing change from all that "FM 108" jazz. Changes may also be coming soon to WRIE-620. Efforts at reorganization have failed, and the station is now in the process of being sold by the bankruptcy trustee. A group from California is interested in the facility and say they will switch to a religious format if they are able to purchase the station. Just what Knoxville needs - another gospel station!! Also noted per Steve Francis in the latest DXN that WGAP-1400 Maryville has dumped the WSM-AP Music Country network and the AM schedule. Music Country net is still available here via WVTN-105.5 Gattinburg. Haven't done that much DX'ing lately; I did take a shot at the WRGB DX test; took me about 23 minutes to find 'em, but I finally managed from 1:23-2:00 am Sunday morning the 15th, no thanks to Mike for printing the wrong date - and address!! Report sent - to the wrong address; guess I'll have to try again for a verie. Looked for the WCHE f/c on the 16th; did hear the famous beep at 12:37, but that's all, as everything else was solid WKSW. No go on the WKZY test - my copy of DX News arrived too late. That's the first CPC test I haven't heard this year. Maybe somebody can set up another beep with them in the future; they are needed here, and I fully suspect I would've heard them had I known of the test. One final note: WNOX-990 has announced that it will carry NASCAR stock car racing and the Motor Racing Network's talk show this year. The talk show ill air Tuesday nights from 7-8 pm ELT. Enough for now. Till next time, 73's.

Stan Morss - R 3 - Bradford, MA 01830 (pm 7; rec'd 2-4)

A late start on the DX season as ground didn't freeze till Dec. 18 and is still "open" off and on. The PSSA order has turned sunset DX into a disaster. With channels like 1530 plugged till 6 by WRXV, 1520 by WPOE, 1170 by WJCC, 800 by WCCM, 950 by WR0L, 1430 by WXKS, etc., etc. - no new logs due to PSSA but 2 new ones on new clears: WYNO and WSKE. Also reports out to WZON, WWCN, WPKK (all verified) and CHLR and WMYL, plus non-verified CJ39 tried one more time. CHLR kills local WBBX here often - another great Canadian DA. Clear channels will soon look like the graveyard channels did in 1940, by the list of applications on file, with grants possible to up to a fat dozen or most frequencies with applications now on file. Sure glad I made it to 4,000+ veries in the days when it was easy. ANARC's idea to protest jammers when reporting will only result in no verie for the reporter and probably any reporters who don't complain will be ignored too and sure won't stop the jammers. DX groups did the same to Doctor Brinkley when his stations "interfered" on Canadian clears in the 30's. He stopped verifying for a number of years and in his case sued RADEX. I don't have the whole story as I was just a kid DX'er at the time but it didn't help anyone. ANARC will have to set up a hit squad to change the governments and knock out Khomeini, Castro, Andropov, Pres. Hussein, etc. When governments change often times policies change. I only hope I'm lucky enough to hear Iraq, Iran, or some of the Soviet "Republics" here well enough to tape and report. Adv. in Broadcasting magazine for equipment for religious AM and FM in Liberia. Here's hoping for a good open frequency. And don't make any derogatory or comical comments about Zimbabwe's President Baravo (sp?) in your reports - it's 5 to 10 years if you ever go for a visit to that that "freedom"-loving nation. FM picked up 1 more percentage point on AM the last survey period so more problems for weak AM's in saturated markets. When A/N stations started to proliferate after WWII letters were printed around the country and an article was printed in Broadcasting about the "poor quality" of A/N programming - that in the days of 50 A/N'ers. Now we've got Larry King and Sally Jessie Raphael and 1,000 A/N (AM and FM). Solution - go with the flow.

Harry Hayes - 9 Henry St. - Wilkes-Barre, PA 18702 (pm 2-1; rec'd 2-4) EST

Latest news: WKRE AM and FM have been sold again. This pair was sold back in 1980 as WBRE AM and FM to Northeast Radio, Inc. of Springfield, MA for \$850,000. The new buyers, the Reliance Group, an insurance firm based in New York City, are paying \$5.3 million for the two outlets. It seems to me that WBRE, Inc. far underestimated the demand for FM radio stations in this day and age. This is the first radio venture for The Reliance Group. All the above information was gleaned from the Wilkes-Barre Citizen's Voice newspaper for 1-31-84. It has also been reported that the new owners intend to retain formats of the two stations as well as personnel. I heard that tune in 1980 when Northeast Radio took over and shortly afterwards they revamped the existing personnel quite well. No DX to report at all this week even though I did spend a couple of sessions at the dials. It must be my imagination but I haven't been able to heard much at sunset DX since Dec. 5 when the change took place in extended hours. I will assume I am just having lousy luck at logging new ones and not place the blame on actual circumstances. I was talking to Glenn Jacobs last week and he is still using a longwire pointed west at Moscow, PA. He reports that things like KYW-1060 and several prominent Canadians are absent on the antenna. He also is reporting hearing Fargo on 1200 shortly after sunset and also reports hearing unknown daytimers from the middle west on 640 and 1160. 73.

Richard W. Turner - 286 Hixville Rd. - No. Dartmouth, MA 02747 (pm 2-1; rec'd 2-4)
Hello everyone. I'm a former member who has rejoined the NRC after a four-year absence. I'm 29, single, and currently employed as an assistant manager with Thom McAN (Swansea Mall men's store). I started DX'ing off and on since August 1967 and was a member of the NRC from 1977-79. A couple of months ago, I was bitten by the bug, and so I dug out my old logs, my reference books, and my Panasonic RP-2900 with a built-in ferrite antenna, and I went to work. Things sure have changed since I was last occupied with this hobby. New call-signs, new stations, new members, even a new look to the DX News. Like I told Ray Arruda in a phone call the other night, I feel like Rip Van Winkel. At any rate, loggings for January: CMKA-600 Cuba, TIW-800 Costa Rica, Radio Paradise-825 St. Kitts, Radio Belize-834 (my first two splits), WJW-350 OH (with WHDH off), WQPP-940 MA, WIBX-k950 NY, WYNN-970 MS, WWDJ-970 NJ, WNYR-990 NY, WCMX-1000 MA, WTPP-1060 MA, WJCC-1170 MA, WOAI-1200 TX, WXYZ-1270 MI, CKCV-1280 PQ Canada, WRCP-1290 RI, WDLW-1300 MA, WQVK-1350 PA, CJCL-1430 ON Canada, WENE-1430 NY, WFPF-1500 CT, WMRG-1510 MA, and WWRL-1600 NY. Although the above address is my mailing address, I live in Fall River and my phone number is (617) 674-8594. Please feel free to call after 10 pm. Also, many thanks to Ray Arruda for his help. Total overall: 195 stations from 18 countries, 29 states, and 6 Canadian provinces. 73's. (And welcome back into the burgeoning fold, Richard - whatever that means, hi! -pls)

Paul Swearingen - 7310 Ensign Ave. - Sun Valley, CA 91352 (818) 765-7651

I had to chuckle a little when I read some of the comments about whether or not to count some of the stations as reported in several columns in the #17 DXN ... so much worry for nothing. First and foremost, Neal Perdue's admonition that we shouldn't take the hobby so seriously should be followed. (Let's dub that Perdue's Axiom, okay?) But perhaps some uniform rules OF YOUR OWN should be followed. For example, when I tape stations, I don't count domestic catches unless they include two out of three of the following: callsign, frequency, or city of license; I bend this rule when I tape foreign stations who don't use callsigns; if their slogan is unique, I sometimes accept only that. (My most frustrating tape is one with a very clear "CKWX" and no other ID on it). My "heards" are a little looser; I count only those that I am positive of, and almost always only when I hear a callsign. However, when I report, I'm careful to follow the guidelines set down by the column editors. Now, what YOU do is your own business, but keep Perdue's Axiom in mind when you do it. /// Newest adult toy here is a 1960 Ford shortbed pickup, or perhaps that word should be "fixup". 73.

INTERNATIONAL DX ACHIEVEMENTS

MALCOM MAXWELL
1041 TUMLIN STREET
APT. A
ATLANTA, GA 30318

NAME	STATE	YEAR STARTED	TOTAL VERIES	TOTAL COUNTRIES	SOUTH AMERICA BEST COUNTRY/STATION
Mike Knitter	WI	1974	936	17	HJVP-1220 Columbia 10Kw
Sharon Shonera	CT	1974	277	43	R. Demada 760
Hilding Gustafson	FL	1934	858	109	
Wayne Heinen	CO	1964	978	19	HJAC-1135
Jim Renfrew	NY	1976	118	21	HCRO3- 915

Folks, this is ALL that has been received here to date. Not a very large group!! I know alot of you have heard a few Foreign stations over the past year! Why not go over your totals and send them to me for this column. It's hard to put out a column when so few have contributed, but.... a column is here! We had more than these people complaining that there was no IDXA Column, where are YOUR totals!! Why not put your pen and paper where your mouth is, hi!!! Send me your Totals!!!

Eric Buenenan - your award for 30 states was mailed and you should have it soon. One Problem Eric..Where are the rest of your totals!? No foreigners!!!!!!

I feel like the MAYTAG repairman, HI.

Malcom Maxwell