

Volume 47, Number 9 Monday, December 17, 1979.

## STATIC FROM HO

We don't have a lot of "Static" this week, so will keep it brief. Inside you'll note that a Publications/Reprint list contains the notation that the NRC Night Antenna Pattern Book is out of stock. Revision of this booklet publication has been underway for a long time and we hope to have them ready before mid-year. Keep sending in your articles, clips, logos, etc. This is your club and we need your support. Also don't forget the CPC effort. Best wishes to you all for a Merry Christmas and Happy New Year.

1/28 KVEL-920 Vernal, Utah 0700-0800 ELT, 5 kw. Program information Monday unavailable. Reports to Margaret Hemmert, CE, KVEL, Box 307, Vernal, UT 84078, Arr: Wayne Heinen, NRC.

Welcome! Report to YOUR club soon!

Nick Agos, 403 Park Drive, Joliet, IL 60436 Nick Agos, 403 Fark Drive, Joliet, IL 60436
John C. Berg, Jr., 285 Aycrigg Avenue, Passaic, NJ 07055
Michael L. Hogan, 13910 Chippewa Avenue, Apt. 1, Burnham, IL 60633 (rejoins)
Terry A. Klasek, 9720 Vickie Place, St. Louis, MO 63136
Pat Mason, 64 Spring Lake, Mahomet, IL 61853
Greg Poole, S.U. Box 943, Birmingham, AL 35209
Herb Mountain, 528 Lytham Road, Blackpool, Lancs. ENGLAND FY4 1QY

Recent renewals: Clay Adamson, Bill & Nancy Hardy (3 yrs), Jeff Kosnett, Thomas White (3 yrs), Art Fregeau, Paul K. Hart, Kermit Geary (3 yrs), William Hutchinson, Bill Coleman, Jr. (3 yrs), Mark L. Mitchell, Curtis Engberg, Jerry Leon (2 yrs), Denis Orlando, David Rogers, Bob Greenlee, Frank John Petrick, Edward Kocsan, Harry Adelmann, Harold Neimanis, Bill Block, Richard Pistek, George Jensen, Guy Kudlemyer, Russell Brown, Juergen Trochimczyk, D. Todd Hyder (2 yrs), Norm Geuder.

Change of address: John Zondlo, 1802 N. Rockwell, Apt. 107, Bethany, OK 73008.

> With Best Wishes for the Holidays and all the New Year



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One last "Static" item. A reminder that the next DX News will be dated for  $\underline{\text{FRIDAY}}$ ,  $\underline{\text{DECEMBER 28}}$ . Unlike other issues, it will likely go into the mail on the issue date, not in advance.

# DOMESTIC DX DIGEST

RAY ARRUDA 47 BURT STREET ACUSHNET, MASS. 02743 (617) 998-3958

Many good sunset loggings in this issue so here goes ......

#### FREQUENCY CHECKS

2nd Mon. WCAZ-990 per list 0115. (MAS-IL) 3rd Mon. WRWH-1350 per list 0000-0006, poor u/WXCL. (MAS-IL)

#### SPECIAL

560 WIND IL CHICAGO - hit by power failure @ Black Oak, IN XR @ 1740, found out about 1845. (KO-IL) Date, Ken? (RA) ANCHORAGE - 11/23 0301 poor u/WSB w/ID, had been signs of them w/Pop mx for 45 mins but kept fading whenever they went into voice, state #50, 11/27 02372 poor w/ID again way u/WSB except for a brief period € 0252 when they were atop, again mx heard for long period, IDs impossible because of fading except € 02372. This time noted 0120-0450 & possibly even later, has to be best bet for AK. (RK-IL) Hey Bob, do you think I'll ever have a shot at that? I'm still shooting for KUOM-77011 (RA) NEWPORT - 11/23 0335 fair w/ID by female annor, was not 1310 KNPT OR heard after this. Was looking for KEIN, I'd have to call this my best catch of this great western morning, for some reason the East was real weak. (RK-IL) 1580 KRZI TX WACO - 11/14 1805 T40 mx & good ID noted, lasted about 6 mins. then gone, absolutely my best catch ever! (BL-CT) EVANSTON - was to run PoP 11/17 0100-???? but goofed... WONX IL it should be soon if not already. Also sked to go fulltime by 6/1/80, DA-N @ 2.5KW, day still 1KW-ND. (MAS-IL) 1610 WXT613 CINCINNATI AIRPORT - TIS, Travelers Information Radio Service 11/13 about 0030 talking noted, taping over the next 30 mins. netted about ten seconds of clear audio, format was recording of alternating male & female talkers evidently giving information about a freeway detour. Tentative sent to Ted J. Bushelman, CE, Travelers Information Radio, Kenton County Airport Board, Box 75000, Cincinnati, OH 45275 w/v/q received (like one in recent DXN), there were at least 2 other UNIDs u/WXT613, who might they be? Any help? (DL-LA)

#### MIDDAY TO MIDNIGHT

550	WKRC	OH	CINCINNATI - 11/22 1656 fair w/ID u/WGR. (WPT-DC)
	KTSA	TX	
560	WIS	SC	COLUMBIA - 11/21 2145 fair w/talk, Williamsburg County
			ments. (JL-FL) Local promos, beer ad € 1850. (KO-IL)
			No date on any of these 560 entries, Ken. (RA)
	WHBQ	TN	MEMPHIS - 1851 wx by YL, promo, "56-HBQ" ID. (KO-IL)
	WJLS	WV	BECKLEY - CBS Nx @ 1900, HS FB game promo, faded @ 1907. (KO)
590	CKRS	PQ	JONQUIERE - 11/23 1711 good w/FF talk in WEEI null. (MC-MA)
	WGTN	NC	WILSON - 11/25 1640 tent. w/C&W mx, poor/good. (WPT-DC)
	WKZO	MI	KALAMAZOO - 11/22 1657 area ments. in ID during Dallas-
			Houston FB game, fair/good. (WPT-DC) 11/22 2046 good
			w/promo, ID & mx. (SEM-TN)
600	WREC	TN	MEMPHIS - 11/21 2206 fair w/CBS Nx mixing w/Cuban pest,
			"Radio 60" ID. (JL-FL)
	WVAR	MA	RICHWOOD - 11/22 tent. w/1715 s/off, poor u/wCAO w/NA. (WPT)
	WFST	ME	
610	WIRB	AL	ENTERPRISE - 11/23 1726 spots for truck dealer &
	Value of the last		furniture store amid WREC/NPLO slop, then gone. (KVJ-GA)
	WIVN	OH	COLUMBUS - 11/23 good 1735 w/nx, femme anner, traffic
	20200000		report, wx, ID, into mx. (KVJ-GA)
	WRUS	KY	RUSSELLVILLE - 11/23 1741 nx, spots for Neil House
		-	Rest. & car dealer to s/off 1744, no SSB. (KVJ-GA)
	WIP	PA	PHILADELPHIA - 11/23 1738 nice surprise, sneaked in w/ID
			while listening to WTVN. not enuff for report. (KVJ-GA)

CFCL ON TIMMINS - 11/23 2150 good in FF w/sporting event in WTMJ null. (SRS-IN) WCBM MD BALTIMORE - 11/23 1633 traffic rpt, ID, sports w/John Davis, atop WRKO/WPTF w/good signal. (DR-CT) AMARILLO - 11/11 1829-1845 in well w/farm nx, wx, TC, 710 KGNC TX spots, CBS FB promos, gone @ 1845 pattern change. (KO-IL) GRAND PRAIRIE - 11/11 much wanted w/good signal 1820-730 KKDA TX 1829 w/Soul mx, ads, then gone. (KO-IL) CHYR ON LEAMINGTON - 11/23 2246 fair w/YL "CHYR Nx Break" w/Mexican QRM. (SRS-IN) WPAL SC CHARLESTON - 11/27 1714 w/IDs, ments. of 1000W & St. Andrews during s/off, fair in CKAC QRM. (DR-CT) KTRH TX HOUSTON - 11/11 1815-1820 L&C after KRMG pattern change 740 w/nx. (KO-IL) KBOE IA OSKALOOSA - 11/13 w/ID on car rx € 1722. (KO-IL) KMMJ GRAND ISLAND - 11/11 heard 1st time 1800-1807 w/MBS Mutual 750 NE Nx, local nx, IDs, fair w/WSB looped. (KO-IL)
DURANT - 11/11 1807-1815 heard when KMMJ faded w/nx in KSEO KRMG QRN, then s/off by YL. (KO-IL) WCPS NC TARBORO - 11/23 1638 good w/equal strength, WJR nulled, w/local nx, ID, spot for Goodyear Store in Tarboro. (MC-MA) ALBUQUERQUE - 11/22 2240 fair/good w/rr, IDs, NM #1, finally after 2 yrs of trying, no WABC QRM. (SRS-IN) KOB WAKY KY LOUISVILLE - 11/25 1734 w/mx & traffic rpt. (AWL-DE) MEMPHIS - 11/25 1750 good w/"The Mid-South Speaks" & WMC Sony spot in WTAR null. (AWL-DE) 800 UNID ----- - 11/13 weak w/C&W 2225-2305, no IDs, u/CKLW/PJB, "Country 80, Country for the desert SW" slogans, faded @ 2300 so no ID, all EE, was it XEROK? (JC-IL) WSJC MS MAGEE - 11/12 1755 good to 1800 pattern change in WGY null w/Pop mx, IDs. (KO-IL) COLUMBUS - 11/23 good € 1700 w/ID, NPR ments, then All 820 WOSU OH Things Considered program. (SEM-TN) CHICAGO - 11/23 strong for several mins. € 1725 w/BFL mx WAIT IL & ID. back @ 1745 w/ID/TC/wx. (SEM-TN) 830 KBOA MO KENNETT - 11/23 1735 fair w/MO Net Nx, alone. (JL-FL) WMOB AL 840 MOBILE - 11/12 noted € 1750 w/Real Estate spot, Paul Harvey Nx. (KO-IL) PHILADELPHIA - 11/26 1725 fair in QRM w/spot for 860 WTEL PA Sheraton Hotel. (WPT-DC) WFLO VA 870 FARMVILLE - 11/23 1651 good atop WWL in WHCU null w/spots for First National Bank, Big Star Grocery, then Dr. Hook record. (MC-MA) WHNC NC HENDERSON - 11/23 1645 good o/WLS w/spot for Wesley 890 Smith Photography, 309 White Street. (MC-NA) WBRJ OH MARIETTA - 11/17 1840 w/bank spot & C&W mx. (KVJ-GA) 910 920 WMMN WV FAIRMONT - 11/24 2256 good w/local spots, promo, "WMMN, M-92" ID & rr. (SRS-IN) LAMAR - 11/14 good o/WOKK, 1815 promo for FM, ID, ad. (JC-IL) KIXZ TX AMARILLO - 11/13 strong € 1825 w/C&W mx, ads, IDs. (JC-IL) 940 WCPC NS HOUSTON - 11/22 1737 good w/ment. of Tupelo Mall. (JL-FL) 11/23 1715-1730 blasting in o/CBM @ times w/T40 mx, IDs, spots, everyone in the northeast should have been able to hear this! (DR-CT) WMAZ GA MACON - 11/23 1729-1730 fair/poor u/CBM/WCPC w/YL anner doing local nx, ments of Macon, then gone € 1730 after power/pattern change. (DR-CT) WKAZ WV CHARLESTON - 11/24 2233 good/fair w/rr, IDs. (SRS-IN) 950 960 KFLN MT BAKER - 11/26 1826 good w/Elvis song, s/off @ 1830, in almost as well as their old f/c. (RK-IL) WHYL PA CARLISLE - 11/24 1644 briefly noted w/mx, ID just before s/off & momentarily atop frequency. (RA-MA)
FARGO - 11/13 good o/WMAY @ 1755 w/wx, ID, big surprise. (JC) WDAY ND ALEXANDRIA - 11/22 1814 good u/WAVE w/ID & Dallas-Houston FB game. (SEM-TN) WJMX SC FLORENCE - 11/24 fair € 1809 w/furniture & food store spots, then ID (SEM-TN) SHREVEPORT - 11/20 1815 good w/some WCFL slop @ s/off. (RK-IL) KCIJ LA 980 WASHINGTON - 11/22 1750 good w/talk show, WFLA slop WRC nulled. (JL-FL) KSGM IL CHESTER - 11/22 2145 poor w/rr, ID, much WONE QRM. (SRS-IN)



Hibbing, Minnesota 55746

1440 KMLB LA MONROE - 11/24 2120 poor w/rr, ID, much WHHY QRM. (SRS-IN) KQRS MN GOLDEN VALLEY - 11/26 1739 blasting in w/spots. (RK-IL) KCHE IA CHEROKEE - 11/26 1754 good w/spot. (RK-IL) GREENVILLE - 11/27 1726 fair w/ID. (RK-IL) WQOK SC 1460 WFMH CULLMAN - 11/20 1733 good w/MoR, local spots. (SRS-IN) ST. GEORGES DE BEAUCE - 11/20 1845, fair w/FF talk. (RK) CKRB KDWA HASTINGS - 11/26 1739 good w/Gopher State Network sports. (RK) 1470 KWSL SIOUX CITY - 11/23 1741 fair o/WMBD w/ID & mx. (KDF-IL) KLIB KS LIBERAL - 11/27 1813 fair u/WMBD w/ID. (RK-IL) 1490 KYNN NE ONAHA - 11/6 1945 good w/C&W mx, rest. ad. (JC-IL) WNUS MA W. SPRINGFIELD - 11/19 1731 1st time heard w/ID & Mutual Nx, good signal. (SM-MA) DANVILLE - 11/21 1729 good in WOPA null w/nx. (RK-IL) WDAN IL 1500 KDFN DONIPHAN - 11/14 thought I had something here, fair, on past sked s/off w/conservation report @ 1835. (JC-IL) BEREA - 11/17 1729 good w/s/off, gave address for reception WKXO KY reports to be sent. (RK-IL) MERKEL - 11/25 1842 fair € s/off o/WOPA slop. (RK-IL) KBCG TX KXVQ PAWHUSKA - 11/27 1815 good w/s/off. (RK-IL) 1510 KANS LARNED - 11/27 1827 good w/REL, then s/off. (RK-IL) KS MESA - 11/27 1929, fair in WLAC null w/s/off, KNIX-1580 KDJQ AZ & KUAT-1550 also in. (RK-IL) CRESTON - 11/19 1751 good w/contest promo. (RK-IL) 1520 KSIB SIOUX FALLS - 11/19 1800 in good after KSIB s/off w/s/off.(RK) KLYX 1530 WJPJ TN HUNTINGDON - 10/21 fair o/WCKY w/s/off € 1815. (JC-IL) DENISON - 11/19 1759 fair € s/off. (RK-IL) WAGONER - 11/19 1815 fair w/s/off. (RK-IL) KDSN IA KWOK OK SPARTANBURG - 11/25 1730 ment of 1KW power € s/off, no SSB WASC SC Was heard. (AWL-DE) 1540 WSMI IL LITCHFIELD - 11/22 1657 good o/WLOI/KXEL w/C&W mx, truck stop ad. (MAS-IL) KLFJ MO SPRINGFIELD - 11/12 fair thru mess @ 1800. (JC-IL) 1550 VINTON - 11/14 1647 good on car rx in Belmont, dominant WKBA o/weird rough tone w/C&W mx, frequent Roanoke Valley ments, 2nd station w/preaching heard way under, domestic skip had pronounced fast-flutter, fading & the time. (MC-MA) HUNTSVILLE - 11/14 1741 L&C w/IDs, T40 mx, local ads 7 promos, no WPTR splatter. (BL-CT) 11/19 1705 fair w/rr, WAAY AL IDs, TC. (SRS-IN) WJIL IL JACKSONVILLE - 11/19 1710 poor w/soft rr, ID & local spots. (SRS-IN) 1560 WCNW OH FAIRFIELD - 11/22 1726 fair o/WPAD/WQXR w/local nx, wx, sports. (MAS-IL) KBER ABILENE - 11/25 1838 fair/good w/ID. (RK-IL) TERRELL - 11/9 fair € 1830 s/off w/ment of 250W. (JC-IL) 1570 KTER KLOV LOVELAND - 11/12 noted weakly € 1830 s/off. (KO-IL) CO KTAT OK FREDERICK - 11/12 fair @ 1830 s/off thru KOLS/CFOR. (JC-IL) WFUR MI GRAND RAPIDS - 11/22 1716 fair o/WBEE w/wx for several western MI cities, s/off 1 min. late, no SSB. (MAS-IL) SELMA - 11/26 1800 s/off w/REL mx in mess. (AWL-DE) WTQX AL 1580 KNIX AZ TEMPE-PHOENIX - 11/5 1915-1930 fair w/C&W, ads, PSA, s/off @ 1930 w/plug for FM, only 2nd time heard, report sent. (JC-IL) ALBUQUERQUE - 11/7 good € 1900 s/off, much wanted. (JC-IL) KZIA NM KFDF VAN BUREN - 11/22 1801 good w/"Hans Van Buren" store ad, GOS mx, s/off w/SSB @ 1816. (NAS-IL) 11/22 1815 ments of AR address, missed ID, claim based on LSS Chart & Log, s/off w/choral SSB. KLUV report now goes to File B. (WPT) KNIM MO MARYVILLE - 11/22 1759 fair w/s/off annemts in WESY null.(SRS) COZAD - 11/22 1800 poor u/KWNT w/Ai Nx, 1816 s/off. (MAS-IL) KAMI NE KLTR OK BLACKWELL - 11/22 1817 fair o/CBJ w/area wx, T40 & Disco mx to  $1829\frac{1}{2}$  s/off. (MAS-IL) DUQUOIN - 11/22 1736 fair w/ID & local sports. (SRS-IN) WDQN IL 11/25 1741 fair w/female anner giving scores from IL State HS FB Tournament, s/off @ 1744. (WAS-IL)

WPMP MS PASCAGOULA-MOSS POINT - 11/11 1753 "Newswatch", several

Bank spots & short s/off annemt @ 1759. (KVJ-GA) 11/26 1745 w/Cosell Sports followed by local nx, wx, spot for Krebs Olds. (AWL-DE)

LELAND - 11/11 1753 fair/poor w/Soul mx, faded u/CBJ WESY MS before s/off. (MAS-IL) 11/14 1801 w/Soul mx, area ments, nx, s/off, good signal. (BL-CT) 11/26 1800 very poor w/ID barely noted u/CBJ. (AWL-DE)
WSKT TN KNOXVILLE - 11/14 1729 ads, ID, fair & s/off w/SSB. (BL-CT)

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1580 WLIJ TN SHELBYVILLE - 11/14 1736 ad, ments of Shelbyville,
                   poor signal. (BL-CT)
       WEYY AL TALLADEGA - 11/14 1745 s/off, fair w/ID/SSB 2500W ments. (BL)
                  JACKSON - 11/11 1816 poor u/WTVB w/C&W mx, WAKR much
1590 WCCL
             MS
                  weaker than usual. (MAS-IL)
WEST ALLIS - 11/25 17292-1731 good w/REL to s/off. (MAS-IL)
1600
       WNEU
                  WHEELING - 11/22 1705 atop w/contest promo, rr mx. (AWL-DE)
       WARU IN PERU - 11/22 1731 fair u/WTRU w/s/off, plug for FM 98.3
                   stereo. (MAS-IL)
       WEUP AL HUNTSVILLE - 11/22 1734 fair u/WTRU w/spot for Disco.
                   AM-FM promos. (MAS-IL)
MIDNIGHT AT THE OASIS
580
       CKPR ON
                  THUNDER BAY - 11/25 0117 fair w/rr, ID, TC, wx & spots,
                  little WCHS QRM. (SRS-IN)
TIMMINS - 11/22 0050 fair/poor u/WTMJ w/FF, EE & Pop mx,
620
                   FF anner, CBC FF Net Nx @ 0100. (MAS-IL)
                  WINNIPEG - 11/19 0245 poor u/Cuban w/male anner talking
630
                   about NHL Hockey today. (MAS-IL)
       WKBX GA SAVANNAH - 11/19 0104 fair w/EZL mx, ID. (RK-IL) WJMW AL ATHENS - 11/17 0821½ fair w/wx promo. (RK-IL)
730
740
                  ---- - 11/12 0308 poor u/CBL, "W--- on the air testing
       UNID
                   w/mx", into UNID song, CBL was on due to emergency
                   because chlorine gas leak. (MAS-IL)
                  NEWPORT - 11/16 0716 weak w/SSB, ID & wx. (KDF-IL)
MARYSTOWN - 11/25 0007 good o/CBL w/O Canada & GSQ €
       CBNM
                   s/off. (MC-MA)
                  MIAMI - 11/19 0007 fair w/nx, local & national. (SM-MA)
790
       WNWS FL
860
       KTRB CA
                  MODESTO - 11/23 0500 weak but clear w/PSA, ID, Mutual
                   Nx, later heard C&W mx, usual KONO/XEMO QRM barely
                   audible. (KDF-IL)
                  WORTHINGTON - 11/23 0759 good w/wx, full ID & nx, noted
       WRFD
                  again € 0815 w/"Columbus 88 Town & Country Wx."

PRINCE ALBERT - 11/23 0200 w/Rock, nx, s/off 0205 w/0
900
       CKBI SA
                   Canada, good signal. (KDF-IL)
920
       KWAD
                  WADENA - 11/22 0036, fair u/KDHL w/ID. (RK-IL)
                  SPOKANE - 11/23 0405, good/fair w/CBS Nx, but then
       KXLY WA
                   Murphy took over, and they were barely audible @ s/off. (RK)
       KYXX
                  ODESSA - 11/24 0155 good w/mx & ID. (SEM-TN)
             TX
            SD ABERDEEN - 11/25 0300 fair w/wx, ID & rr. (SRS-IN)

IA DES MOINES - 11/25 0311 good w/rr & ID. (SRS-IN)

SC MONKS CORNER - 11/12 0613 fair/good w/late s/on, C&W mx. (KDF)

AL BIRMINGHAM - 11/19 0300 fair o/WFIR, "96-ERC" ID, T40
940
       KIOA
                  mx, 1st time heard while trying for KSRA Test which was
                   not heard. (MAS-IL)
       WFIR
                  ROANOKE - 11/23 0045 good w/ID & wx. (JL-FL)
                  NEW HAVEN - 11/25 0330 fair w/soft rr, ID, TC, wx. (SRS-IN)
                  LOS ANGELES - 11/19 0555-0621 traces heard most of AM
980
                   poorly w/nx-sports-wx, talk fighting WONE/CKRM/WSIX,
                   WCFL 0558 s/on not too much of a problem. (KDF-IL) (RK-IL)
       WNOX
                  KNOXVILLE - 11/12 0103 good w/T40 mx, lost to WCAZ TT &
                   WCFL OC € 0125. (MAS-IL)
       KKIS CA PITTSBURG - 11/19 03002, fair w/quick s/off, long sought. (RK)
                                                          Continued next page
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## COLLEGE FOOTBALL BOWL GAMES

BILL HARDY

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All times are Eastern.
Fri. 12/21/79, 2100 Mutual Holiday Bowl (Indiana-Brigham Young)
Sat. 12/22/79, 1330 CBS
Sat. 12/22/79, 1430 Mutu
                               Sun Bowl (Texas-Washington)
                               Liberty Bowl (Tulane-Penn State)
Fiesta Bowl (Pitt vs. ?)
                      Mutual
Tues. 12/25/79, 1545 NBC
Fri. 12/28/79, 2100 Mutual Gator Bowl (Michigan-North Carolina)
Sat. 12/29/79, 2000 Mutual
                               Hall of Fame Classic (South Carolina-Missouri)
Tues. 1/1/80,
                 1410
                      CBS
                                Cotton Bowl (Houston-Nebraska)
Tues. 1/1/80.
                1700 NBC
                                Rose Bowl (Ohio State-Southern California)
Tues. 1/1/80,
                2000 Mutual
                               Orange Bowl (Oklahoma-Florida State)
Sat. 1/5/80,
Sat. 1/12/80,
                1500 Mutual
                               East-West Shrine All-Star Game at Palo Alto
                1300 CBS
                               Senior Bowl All-Star Game at Mobile, Ala.
  As of this writing, nobody plans to cover the Sugar Bowl on 1/1/80
  (Alabama-Arkansas) from New Orleans. This, of course, could change .-- BH.
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1020 WCIL IL
                  CARBONDALE - 11/17 s/on 0700 w/female anner into nx
                  w/male annor, good in KDKA null. (KVJ-GA)
WILLIAMSPORT - 11/25 0600 fair € s/on. (RK-IL)
LOS ANGELES - 11/19 0520 fair w/KNX Newsradio ID,
1050 WLYC PA
1070 KNX
                   unn, but best reception ever to date. (MAS-IL)
                  INDIANAPOLIS - 11/23 0807 o/others w/local nx thru
       WIBC IN
                                                                        (SM-MA)
                   WGTR-1060 slop. (MC-MA)
                  KITCHENER - 11/19 0101 w/AM-FM IDs, Canadian & World Nx.
1090 CKKW ON
1100
      KFAX CA
                   SAN FRANCISCO - 11/19 0140 fair/good w/REL phone in
                   program, 3WE finally went off on a MM when western cx
                   were good. (RK-IL)
                   SARNIA - 11/23 0125 fair w/elevator mx, TC & ID. (SRS-IN)
1110 CKJD ON
                   DETROIT - 11/23 0805 totally atop WNEW w/Mutual &
       WCXI MI
                   WCXI Nx. (MC-MA)
                   NORTH LAS VEGAS - 11/18 0254 xlnt w/Rock mx & ID as
1140 KMJJ NV
                   KMJJ Magic 11. (RK-IL) X1nt 0341 w/Glenn Campbell
                   Album, Magic 11 IDs, suspect using 10KW day power. (KDP-IL)
                   LOGANSPORT - 11/17 0600 fair w/SSB s/on. (RK-IL)
1230 WSAL IN
                  DANVILLE - 11/18 0147 loud w/C&W mx, ID. (DR-CT)
TALLAHASSEE - 11/18 0151 C&W mx, poor w/ID "Country
1250
      WDVA
              VA
1270
       WTNT
                   Dynamite, WTNT." (DR-CT)
                  TWIN FALLS - 11/17 0701, fair w/nx/ID while trying to ID
       KTLC
                   one of the SSB's I had here, quick ID, then gone. (RK-IL)
                   ANDERSON - 11/16 0309 xlnt on ET/OC /TT, ID @ 0318. (RK)
1280 WANS SC
                  CANTON - 11/16 0604 poor in sign on under WIRL/WHIO. (KDF-IL)
SYLACAUGA - clear u/KUOA 11/24 @ 1026 w/TC/ID/mx. (SEM-TN)
1290
       WCHK
       WMLS
                  BENTON - punched in like a local 1053-1100 11/24 w/sports
       WCBL
                   scores station promo, wx, Ac Nx, full ID. (SEM-TN)
                   HUNTINGTON - 11/16 0630 poor w/ID under WOOD/WAAC. (KDF-IL)
1300
      WHLT
             IN
                   MOULTRIE - 11/20 0600 good @ s/on, no SSB. (RK-IL)
       WMTM
                   MANCHESTER - 11/17 0700 fair w/s/on, then SSB. (KDF-IL)
1320
       WMSR
             TN
                   JACKSONVILLE - 11/18 0156-0200 think it was they w/
       WVOJ
                   Rita Coolidge song cut off by DJ w/quick ID, then
                   NBC Nx @ 0200. (DR-CT)
                  WATERLOO - 11/25 0533 fair w/ID/TC/C&W mx in much QRM. (SRS)
LAKELAND - 11/26 0045 atop w/PSA & rr mx. (AWL-DE)
       KWWL
1330
1430
       WQPD
              FL
1440
       WHHY AL
                  MONTGOMERY - 11/19 0105 Rock mx, ID in mess. (JC-IL)
                  GRAND FORKS - 11/23 0319 fair w/ID. (RK-IL)
       KKXL ND
                  POINTE CLAIRE - 11/21 0015-0115 fair w/all nx "CKO, the news voice of Canada." (KR-CT)
BUFFALO - 11/19 noted weak around 0115 after end of
1470
       CKO
       WKBW
1520
                  KOMA ET. (JC-IL)
MYRTLE BEACH - 11/25 0645 poor w/mx theme, s/on
       WTGR SC
                   u/KOMA. (KDF-IL)
                  CINCINNATI - 12/3 AN MM due to broadcast of U. Of KY BKB from Alaska. WPAD-1560 AN MM for same reason. (RA-MA)
1530 WCKY OH
                  ALBANY - 12/3 noted off this MM leaving ZNS & UNID
1540 WPTR NY
                   TTer on & off. (RA-MA)
                  LOS ANGELES - 11/19 0231, in best ever w/PSA & AM-PM ID, so must simulcast nights. (RK-IL) 11/19 0248 fair
       KPOL CA
                   signal w/black public affairs time w/telephone calls,
                   ment. of LA & pgm on channel 9, ending @ 0259, weak ID
                   then lost. (KDF-IL)
                  WINDSOR - 11/17 s/on 0558 w/O Canada. (KVJ-GA)
MOBILE - 11/19 strong 0100-0115 w/GOS mx, IDs on ET. (JC-IL)
ABERDEEN - 11/19 0120 good on ET/OC/ID, WPAD off. (JC-IL)
1550 CBE
       WMOO AL
1560 KKAA
                   12/3 very strong on ET/OC 0240-0254* w/loud IDs @ 2:42:30, 2:42:45 & 2:53:10. (ERS-NJ)
                  PADUCAH - 12/3 atop most of am & ANing due to Kentucky BKB broadcast from Alaska. (ERS-NJ)
                   BRANDON - 12/3 only second time heard w/CKLM off & no
                   sign of CFOR/CHLO 0351-0405 w/C&W mx to nx & ments.
                   of Album Hour @ 0405, weak, but heard in short intervals
                   of fading, ERS grabbed em too. (RA-MA)
1580 KDAY CA SANTA MONICA - 12/3 possibly the one w/black female
                   announcer running public affairs programming, weakly
                   in & out in deep fades 0200-0300+ but not sure, no
                  positive IDs. (RA-MA) (ERS-NJ)
PATCHOGUE - 11/17 0037 loud on ET/ID/mx to 0045* (KR-CT)
       WYFA NY
                  CHATTAHOOCHEE - 11/23 good w/0700 s/on w/SSB, then
       WSBP
                   REL. (KVJ-GA)
       WANB PA
                   WAYNESBURG - 11/24 0205 on ET/mx, anncr mentioning testing
                   w/lKW. (MC-NA)
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9)

I'd like to welcome all new reporters. With this kind of support, I may have to hire a staff. It's getting to be too much typing for me & Misty! MM 12/3 was the best morning to the west in some time with KSO, KKAA, WPAD, CKLQ, and maybe KDAY all coming in here 12/3. Did anyone win the free trip to Vancouver? Happy New Year everyone! 73

K.R.

#### THE BIG 19

JÇ-IL John Clemmer, Peoria, IL Mark Connelly, Billerica, MA KDF-IL Karl Forth, Chicago, IL Karl Jeter, Decatur, GA KVJ-GA RK-IL Robert Kramer, Chicago, IL DL-LA Dallas Lankford, Ruston, LA BL-CT Bryan Lee, Brooklyn, CT JL-FL Jeff Lockwood, Tampa, FL AWL-DE Allen W. Luckey, New Castle, DE SEM-TN Sidney E. Marshall, Millington, TN SM-MA Steven Miller, Boston, MA KO-IL Ken Onyschuk, Park Forest, IL DR-CT Dave Rukakoski, Brooklyn, CT KR-CT Konstantine Rychalsky, Bridgeport, CT Steven Shaffer, Hammond, IN SRS-IN ERS-NJ Elliot R. Straus, West Orange, NJ MAS-IL Mark Strickert, Chicago, IL William P. Townshend, Washington, DC Ray Arruda, Hey Cush Net, MA

R-390A, HQ-180A, TRF, Pinto HQ-160, 3' LoopCar Rx, SM2, LW HQ-150, 4' Loop HQ-129X, HQ-100C, LW, Loops HQ-180A, TRF, Loop, RF Amp TRF, RF-2200, Loop TRF TRF, 60' LW RF-2200, SM2 GE Superadio TRF Paper Clip TRF R-390A, Loop TRF, RF-2200 TRF, DX-160 SX-122, tubes missing



## INTERNATIONAL DX DIGEST

CHUCK HUTTON P.O. BOX 2087 DECATUR, GA 30030 (404) 633-1198 BEFORE 2300 ELT

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

5	25	COSTA RICA TICAL Cartago very good w/mx and much noise which always seems to plague reception below 540 kHz; 0438 11/26. (Kaz)
5	31	ALGERIA Ain Beida poor w/AA mx in QRM from beacon on 530 at 0526
		11/24. This can't be heard on HQ180A. (Kazaross) In w/strong carr-
		ier; woman in AA, then AA mx at low audio level 0530 11/24. 549
	**	present as het on CFNB at the time. (Connelly)
5	40	VENEZUELA YVOV Villa del Rosario good o/CFNB slop w/festive LA
		mx then R. Preija ID, dominant 0530 11/25. (Connelly) Xlnt, like
-	40	a local w/R. Perija ID as strong as Cuba on 600!! 0437 11/25. (Kaz UNID from Venezuela, hrd "R. Barica ?? Venezuela" 0527 11/19 fair
2	140	but QSB'ing (fading-CH). (Miller) No doubt YVOV-CH
5	60	UNID w/soft LA MoR mx u/domestics 0437 11/26. Any ideas?? (Kaz)
		Sorry, the only LA I've heard here is JBC. I don't even recall
		any reports of other LA's recently-pretty much of a dead channel
	_	for them-CH
5	70	UNID (and a big mystery) noticed good 0550 11/26. This was not
		77590 or 600. At 0600 I heard "cadena ??" followed by an anthem that wasn't Colombian or YV. The anthem had much trumpet mx. Any
		idea? (Kazaross) Yes, R. Cadena Central in El Salvador w/their
		0600 s/off. The El Salvador NA is best known for having a part
		that sounds much like the William Tell Overture, or alternately
		the Lone Ranger; it is full of trumpets. Bet your LA anthems
		tape confirms this is R.C.C. which has a handful of stns on
=	80	570-CH UNID w/lively LA mx noted 0605-0610 not //Rebelde and about equal
2	00	to WKAQ strength MM 11/26. Is the YV AN? (Kazaross) Don't know,
		but down here Jamaica/Mexico are more likely-CH
5	85	SPAIN Madrid o/slow SAH w/man and woman in SS at fair level 0534
		11/24. (Connelly)
6	12	MOROCCO Sebaa-Aioun fair w/man in AA at 0504 and good w/AA vio-
6	39	lins at 0535 11/25. (Connelly) Poor w/AA 0247 11/25. (Kazaross) SPAIN (tentative) mx weak in CMQ slop 0537 11/24. (Connelly)
	40	UNID noted w/good signal 0533 11/19; man and woman in SS with
	7	news. (Miller) Likely TGW, but not positively-CH
6	60	ST. LUCIA Babonneau weak but readable in WNBC null w/accented EE,
		then "This is Radio St. Lucia" at 0000 11/26. What is the power
		here, 10 or 20 kw? (Kenneally) Believe it is 10 kw, check the 79 WRTH and see what they have to say as I haven't seen any info to
		amend what WRTH says-CH
6	66	PORTUGAL Lisboa fair to good w/plaintive male vocal, 0525 11/24.
		PORTUGAL Lisboa fair to good w/plaintive male vocal, 0525 11/24. (Connelly) Good 0523 12/3 w/non-stop talk, apparently giving the
,	0.0	results of Portugal's Sunday elections. (Hutton)
Ь	80	PUERTO RICO/COLOMBIA bombing out WRKO. San Juan heard w/WAPA (wah-pah) ID 0425 w/cl mx from HJBU who signed off at 0433 on
		11/26. (Kazaross)
6	84	SPAIN Sevilla to fair peaks w/male SS vocal, in WRKO slop at
		0522 11/24. (Connelly)
	111	FRANCE Rennes poor thru WOR and het 0450 11/21. (Kazaross)
7	119	PORTUGAL Norte good w/"never My Love" by the Association, then woman in PP 2206 11/23. (Connelly) Azurara noted w/strong sig
		2206 11/23 w/rr mx, PP talk. Also fair at 0542 w/mx but strong
		WOR-710 splatter. (Eckman)
7	20	CUBA CMGN Colon fair on south Beverage until 1530 11/18 and occ-
		asionally copiable thru weak WGN during lulls in WOR slop 11/21
		1715-1840. In the winter at least some skip often arrives all
		day so I suspect the Beverage is pulling in weak skip or a mix- ture of weak skip and groundwave. WAPE 690 is also received.
		(Kazaross)
7	735	ECUADOR Quito HCGB1 fair-good 0435 11/21. This was just superb
	E The	0415 11/26 w/ID, but not noticed after 0600 so likely off. (Kaz)
	y a	Usual s/off is 0600 but runs: AN some nights-CH

UNID-Holland likely-carrier w/tones 0513 11/24. (Connelly)

at 0217 fair u/WSB. (Townshend)

NICARAGUA YNX Managua w/talk in SS by male, R. Sandino ID 11/24

747

750

756 PORTUGAL Lisbon fair 0445 11/21. (Kazaross) Good w/soft cl mx 2204 11/23. (Connelly) 756t WEST GERMANY Braunschweig/Ravensburg probable w/"love is Blue" instrumental, then more Muzak, poor-fair 0545 11/24. (Connelly) COLOMBIA HJAJ Barranquilla off-channel again; LV de Barranquilla 760.3 ID and het chewing up WJR 11/24. (Connelly) SENEGAL Dakar loud and steady, jamming WABC: pgm was a-capella female chanting w/interspersed talk by man 2240 11/14. Loud w/ man in FF, then plucked string mx; equalling 760/770 strengths 2210 11/15. Xlnt w/AA talk 2139 11/23. (Connelly) Dakar loud & clear w/man in FF thru WABC splash 2205 11/5; good w/chanting 2130 11/19. (DeLorenzo) SWITZERLAND light orchestral mx, poor 0512 11/24. (Connelly) SPAIN Caceres-San Sebastian good w/Dean Martin rendition of "Hello Dolly" way 0/775 Costa Rica het 0511 11/24. (Connelly) So that's where all the old Dean Martin records went..... 780 COLOMBIA HJZG Cali briefly o/CMJN w/two R. Sonorama ID's 0747 on 11/26. (Kazaross) CUBA CMJN w/ID "Radio Rebelde Nacional, Cuba" 0457 11/19, then Cuban NA, interval signal, and ID at 0500 as R. Habana Cuba. Good signal. (Miller) CUBA/2 UNIDS CMCH here w/Guba mention and non-excited man mixed with two LA's 0530-0550 MM 11/26. One of the LA's was heard several times w/synthesized tones of two notes which sounded almost like a deep cucu. These were followed by "aqui la hora (sah-bentay)" which is what the last word sounded like. Any help will be appreciated. Interestingly, the Beverage had 3 LA's w/WNWS while the loop only had a weak WNWS w/low growl. (Kazaross) Sorry...CH UNID a big growl on 790 here 0735 11/26. This was not here earlier so maybe somebody drifted. (Kazaross) A big WQXI on 790 here-CH 790.4 FRANCE Limoges poor-fair w/WEAN off 0513 11/26. (Kazaross) 800 NETHERLANDS ANTILLES PJB Bonaire 11/19 ID heard in SS "Radio Trans-Mundial", then station's interval signal or national anthem (??CH) at 0540 s/off. (Miller) 0330 11/28 with religious pgm, very good signal. (Bartek) UNID LA noted way u/ZNS3 0615 11/26. Sutatenza and WGY off of course. (Kazaross) 819 MOROCCO Rabat loud on car rx in Sandwich, Ma.; man in AA o/low het grumble 0215 11/24. (Connelly) 820 CUBA Habana on top w/R. Ciudad de la Habana ID 0430 11/21. Is this the former 10 kw R. Metropolitana? (Kazaross) RCH and Metropolitana swapped freqs (820 and 860) but I'm not sure of the current power here. Check the Cuban list in DXN-CH 820 UNID talk in what sounded like FF dialect, not SS; audio mushy, 2346 11/15. (Connelly) ITALY Roma poor w/II vocal 0551 11/24. (Connelly) PERU OAXLA Lima logged for definite country #81 w/R. Nacional de Peru ID, poor-fair 0503 MM 11/26. Audio was heard earlier but WHDH went off just before the ID helping matters. I don't believe this is AN. (Kazaross) Sure is, always hear it when checking for DU's from 0600-1000 ... CH SPAIN Murcia weak w/SS QRM'ed by Peru 854 0520 11/26. (Kazaross) Murcia loud w/SS talk, Muzak, time pips, nx in SS 0500 11/24. (Con) FRANCE Paris fair w/FF 0440 11/21 and 0458 11/26. (Kazaross) UNID het on 864-France noted w/south Beverage all morning 0500-0630 11/26. (Kazaross) PERU OBZUN xlnt, burying CMAF w/LA mx and R. Union ID 0627 MM 11/26 880 with WCBS off. WCBS was off, ran OC and TT for the next hour alternatingly. Mentions of Peru and "Union, la radio grande" were heard. Except for a few fades this was at least Cuba's equal!! I taped an ID at 0730 off the TRF by placing the Beverage along the loopstick in the TRF; new R390A not wired up for taping. I could still hear the LA mx w/Cuba's BFL mx while WCBS audio was on for the ID! I tried to null them with the loop but could not hear the Brazilian. 860 Mundial not heard either. (Kazaross) (Nice, hasn't been heard on the east coast for a good while-CH) CUBA CMJV Ciego de Avila o/mess w/R. Liberacion ID //640 and 740 900 2315 11/24. (Kazaross) LA w/Cuba 0647 11/26. (Kazaross) CUBA here w/Radio Reloj format in mess 0652 11/26. Are there two 930 Reloj xmtr's on this channel? (Kazaross) Not that I know of; why do you ask? CH 945t ECUADOR HCDA2 w/T40 (Barry Manilow) and male SS annor in 944

QRM 0356 11/26. What's their ID slogan now? (Kazaross) Usually

a simple "Ifesa"-CH

COLOMBIA HJES Cali very good to xlnt w/Radio El Sol and RCN mention along with "Mas musica en Cali" 0755 11/26 way on top of another LA. Who might the second LA be at this late hour? (Kaz) Cuba most likely-CH COLOMBIA/VENEZUELA here w/LV de Medellin HJDB dominating over Mundial Tricolor YVTA. RCN ID at 0807 11/26. (Kazaross) 995 ECUADOR noticed in passing, strong in 4 kHz bandpass 0340 11/26. (Kazaross) 1000 COLOMBIA HJAR Cartagena 10/1 at 0632 w/instrumentals and man in SS. (Bartek) 1008 AUSTRALIA 4IP Ipswitch 11/19 1013 many spots, ID, then rr, xlnt sig. 1ZD was tops here till last week, no sign of it now. (Vernon) 1010 UNID LA under WINS 0633 11/26. Any idea? (Kazaross) Probably Mil Veinte-CH 1026 AUSTRALIA 4MK Mackay 11/19 1009 rr w/male anncr, local-like signal. (Vernon) Up in Elsa, "local-like" signal doesn't have much 1035 PORTUGAL Porto Alto fair in WBZ slop; festive accordion and electric organ mx, then PP talk by man 0616 11/25. (Connelly) 1040 CUBA CMCW La Fe suspected here w/sedate male and female anners in mess w/the HJ's 0225 11/26. (Kazaross) 1045 PANAMA Las Tablas to good peaks w/lively talk by man in SS 0034 11/16. (Connelly) 1060 CUBA totally dominant w/man and woman in SS 0330 11/15. (Connelly) But which one?? CH

MARSHALL ISLANDS WSZO Majuro 11/19 1057 male in native lingo, 1100

ID "you're listening to the sound of the islands, WSZO, Majuro" 1098 in EE, poor signal w/much KFAX splash. (Vernon) 1110 CUBA (and 1120 too) both w/parallel R. Angulo pgms and equal strength although there was more QRM on 1110 allowing better copy of 1120, 2302 11/24. (Kazaross)

<u>AUSTRALIA</u> 4BC Brisbane 11/19 1047 many spots, ID, then rr. (BV)

<u>COLOMBIA</u> HJAC Barranquilla good through WNEW w/Emisor Rio-Mar ID 1116 1130 0737 11/24. (Connelly) 1134t AUSTRALIA 2AD Armidale 11/19 1044 religious pgm, male w/DU accent, poor signal w/much CKWX splash. (Vernon) 1143 SOUTH KOREA KBS unknown 11/18 1122 female in EE to 11282, then a male mentioning see you same time tomorrow. Is apparently on on the weekends with EE service. (Vernon) 1150 CUBA CM?? R. Bayamo blasting in during beautiful AU. Full ID at 2332 11/24. (Kenneally) 1161 FRANCE Strasbourg very good w/FF talk by man 0642 11/24. (Connelly) UNID carrier (Honduras listed) at 0340 11/25. (Kazaross) 1163.3 ANTIGUA St. John's C.R.L. fair w/man in EE 0044 11/16. (Connelly) 1165 1179 AUSTRALIA 3KZ Melbourne 11/19 1042 male w/ID and record titles between rr mx, poor sig. (Vernon) ALASKA (cut this item out, place it above the 11.79 log, and then 1170 you will have compensated for my inability to put simple numbers in order-CH) KJNP North Pole 11/17 1128 noted w/RR religious pgm, full ID, then weather forecast 1130 all in RR. Is a local. (Vernon) This station propagates over the pole to the USSR almost every day of the year and is alleged to have a large audience in northern Scandinavia and the USSR-CH AUSTRALIA 2NZ Inverell 11/19 1030 religious pgm w/priest and very 1188t small choir, much KEX splash. (Vernon) CUBA R. Sancti-Spiritus //1210 w/light string mx in WOWO null 2351 11/24. (Kenneally)
AUSTRALIA 4GG Southport 11/19 1129 rr mx, "double G" SID, TC for 1190 1197 L.T., and south of the border" (NSW), xlnt sig. (Vernon) FRANCE Birdeaux good w/man in FF 2300-2305 11/1. (DeLorenzo) Fair 1206 w/man in FF, slightly hetted by weaker Cayman-1205 2237 11/23. Extremely strong (like a local) w/man in FF 0642 11/24. (Connelly) CUBA CM?? station here o/Coro w/light instrumentals, believe it is a Sancti-Spiritus outlet. Garbled ID at 2330 11/24 //1190. (Kenneally) ST. KITTS Basseterre loud w/preacher from Gaffney, S.C., 0020 11/16. (Connelly) They can keep him....CH
PORTUGAL I believe the stn I have heard here a few times recently is Radio Renascenca in Lisbon. Apparently they (like the national 1265 1286t RDP stations) have not moved to 1287. Heard best so far at 0510

12/3 with non-stop talk by at least three different males that

seemed to be news. Upon picking up Monday's paper, I noticed that Portugal had national elections Sunday; possibly this was

an elections return pgm as practically everything in Portugal

was noted in the 0500-0600 period carrying "news". No ID noted

but the language seemed SS, which does not concern me as I have

(1286, continued) never developed the skill of telling weak PP from weak SS by the sound-have to have a good enough signal to pick out definite articles etc. (Hutton) AUSTRALIA 4BK Brisbane 11/19 1055 rr mx, seems to play records in threes, strongest of all the Aussies here, including the ABC stns, must be the DA. (Vernon) 1296 UNID probably England-EE or GG talk, poor in slop 0638 11/24. (Connelly) 1314 AUSTRALIA 2WL Wollongong 11/17 rr at 1214, spot for Aussie Savings Bonds w/9.25% interest, not much is it? (Vernon) Depends on the maturity period-would be OK for a short period bond but one could do better-CH PS-you got extra money why don't you buy a dogsled and escape from the polar bears and lichen?? 1314 UNID weak carrier here 0515 11/21, possibly Norway as high latitude TA cx were not bad. 747, 909, 1008 all had carriers but QRN was bad and audio not copiable. (Kazaross) 1314 UNID several stations here, audio jumble resulting 0633 11/24. (Connelly) UNID carrier in slop, loops LA 0100 11/16. (Connelly)
AUSTRALIA 4BU Bunderberg 11/17 1203 end of Macquarie net nx, 1315 1332 then weather for "Sunshine Coast" (Queensland is the Sunshine State), rr and then spot at 1208. (Vernon) ITALY Rome fair w/soft II mx 0510 11/24. (Kazaross) 1332 JAPAN JOSF Nagoya 11/18 1119 EE rr mx, 1120 YL in JJ, seldom hrd here. (Vernon) 1377 FRANCE Lille fair w/woman in FF, then mx; hetted by stronger 1375 2234 11/23. Loud w/Supertramp album cut, then woman in FF 0630 11/24. (Connelly) 1395 ALBANIA Lushnje good, clear in peaks w/woman in EE 2204-2210 on 11/26. (DeLorenzo) Fair w/usual female 0518 11/21. (Kazaross) Poor w/talk 2233 11/23. (Connelly) Noted w/fair signal at tune-in 2056 11/23. IS noted 2058-2100 followed by pgm in FF. (Eckman) GUINEA Conakry poor in WOND/WLLH slop during semi-auroral cx 0105 1404 11/16. (Connelly) Fair w/string mx 2155-2159 11/26. (DeLorenzo) 1413t SPAIN SS-sounding talk and vocal, badly slopped 0624 11/24. (Con) WEST GERMANY Saarbrucken fair w/MoR male GG vocal o/a mishmash of hets 0623 11/24. (Connelly) 1422 1425 GREENLAND Thule Radio 1425 ID's on the hour as "... 14-25, the sound of America", usually has APR net nx also on the hour. (BV) UNID het here, possibly Italy 0507 11/24. (Kazaross) ENGLAND unid EE stn here in slop w/talk and mx 0655 and 0704 on 1458 11/24. (Kazaross)
MONACO Monte Carlo pushing through slop; man in GG, then pop mx 1467 0619 11/24. (Connelly) Xlnt w/religion 0505 11/24. (Kazaross) Fair signal 2102 11/23 w/religious-type mx. No positive id noted. AUSTRIA ORF Wien-Bisamberg 11/14 0559% noted w/an unfamiliar (not 1476 listed in WRTH) IS, single gong at 0600 male annor. (Vernon) Their IS in the past has been a three note chime thing-CH AUSTRIA cl mx in a graveyard-type carrier pile-up 0617 11/24. 1476t (Connelly) UKRAINIAN SSR Lvov Program 2 11/14 0459 Mayak IS, then 6 pips o/ 1476 Austrian single gong, 0500 female annor, then man. (Vernon) UNID mess of weak carriers here 0628 11/24. (Kazaross) UNID disco mx in and out of carrier pile-up 0615 11/24. (Connelly) 1485 FRANCE Bastia et al poor w/man and woman in FF, u/strong OC, OG14 11/24. (Connelly) Poor //1557 O538 11/24. (Kazaross) COLOMBIA HJLJ Cali poor-fair w/growl mess and Caracol ID 0855 1494 1500 MM 11/26. (Kazaross) UNID carrier jumble 0610 11/24. (Connelly) 1503 UNID w/lively LA mx briefly w/WITS 0310-0320 w/fades between mx 1510 11/26. (Murphy at work-hi) Is this DR? (Kazaross) No way to tell from the info you gave .... Pueblo is on 1510.3 if that helps you any-CH COLOMBIA/CUBA CMKT here w/Victoria mention and sedate man and woman speakers here 0325 w/R. Minuto's accordian dance mx. This was finally logged through WKBW talk show after nearly an hour of trying Sunday night 11/26. (Kazaross)

COLOMBIA HJLQ Barranquilla-R. Minuto mentioned, achromatic

in WKBW null 0108 11/16. (Connelly)

2229 11/23. (Connelly)

accordion mx (similar to some rustic Irish mx) was played; good

SAUDI ARABIA Duba loud w/AA chanting and violins; WKBW nulled

1520

UNID loud het on WKBW 0707 11/24. This was strongest to the east and noticeably quite weaker with the loop to NE so likely from Spain and not Britain. (Kazaross) CUBA/UNID R. Moron on top o/LA mx 0240 11/26. I spent much time here w/WCKY almost totally absent on the Beverage but couldn't catch the second station. (Kazaross) ENGLAND Liverpool good on peaks through slop: old-time mx, man in EE gave R. City ID and info about contest, then current pop mx was played 0711 11/24. (Connelly) ENGLAND Bristol/unid-I listened to band mx 0650 11/24. It faded into WPTR slop and I tuned to 1458 kHz. I returned at 0657 and heard top 40 mx which was buried as another EE stn came up at 0659. At 0700 this ID'ed as R. Bristol by female anner after BBC pips. I received a phone call from Mark Connelly and he told me that he heard the stn with mx identify as R. City in Liverpool when they switched from band to modern mx, but I can't claim this as definite. (Kazaross) GABON (in reference to previous report) thanks for the advice here. I removed Gabon from countries heard list since reception should have been reported as tentative in the first place. Case closed. (Kazaross) FRANCE Nice xlnt w/man in FF o/other stn 0609 11/24. (Connelly) FRANCE/MALTA Nice/Cyclops: Cyclops noted very strong w/man in GG 0431 11/24. AA noted at 0448. Nice also on channel causing slow SAH noted w/foreign language pgm at 0530. All alone on channel at 0607 w/FF pgm. (Eckman) Malta xlnt w/AA o/France w/FF talk 11/24 0457. (Kazaross) 1557 UNID good carrier and faint audio floating through WPAD and storm QRN. France suspected 0545 11/25. (Kenneally) MEXICO XEVIP Mexico City s/off by male in SS/EE after nx. Mention of Taxco. Fair at 0606 11/22. (Townshend) 1560 1560 PUERTO RICO WRSJ San Juan fair in slop from supermodulated disco on WPTR after 0857 s/on. (Kazaross) Date?? CH PORTUGAL Covilla noticed w/fair level carrier 0644 11/24. Audio barely copiable 0703 11/24. This one is sadly undermodulated as carrier was not weak. Superb high-end cx tonight (11/24). (Kazaross) 1566 SWITZERLAND Sarnen presumed to be the stn here over Sfax 0612 11/24 w/cl mx. (Eckman) Sarnen good o/others w/man in GG, then sax mx 0607 11/24. (Connelly) Fair w/FF song after Tunisia fade 0632 11/24. When Sfax was in it was much stronger than this. (Kazaross) Ditto here-Sfax is my most reliable TA with the exception of Guinea, and is usually the strongest-CH TUNISIA Sfax a real surprise w/beautiful signal but low modulation. AA chanting till 0524, then AA talk. Audio kinda fuzzy, 11/24. (Kenneally) (Don't know what the problem is with their xmtrs but the audio is always slightly garbled as if there is a slight time lag between the two xmtrs. As the two are ostensibly located in the same place, usual explanations like satellite delay or non-synchronization don't hold water. Anybody have a better idea? CH) With <u>loud</u> sig at s/on 0430 11/24. Extremely strong signal thru 0600 w/AA chants and mx. (Eckman) Good w/CKLM nulled; AA talk w/slightly distorted audio as if 2 xmtrs were being used w/their carriers on slightly different frequencies-heard at 2226 on 11/ 23. (Connelly) (My impression exactly but Charlie Taylor says that // xmtrs (such as Sfax has with 2 x 750 kw) always use the same oscillator (makes sense doesn't it?) so a slight frequency difference becomes impossible-CH) Sfax good w/man in AA 2140-2153 11/26. No slop from WQXR/CKLM. (DeLorenzo) X1nt 0455 11/24 w/superloud AA mx equal in strength to WQXR. (Kazaross) 1570 MEXICO XERF Ciudad Acuna fair w/"XERF Ciudad Acuna" ID 0848 11/26 w/CKLM off. (Kazaross) 1575 EAST GERMANY Neubrandenberg very good w/T40 mx and female GG annor 0530 11/24. (Kazaross) ITALY Genoa good w/man in II 0605 11/24. (Kazaross) UNID strong carrier through CHLO/CKLM/CBI slop. Maybe Spain 1575 0549 11/25. (Kenneally) Spain is no longer here, so must be Italy/East Germany-CH CUBA Cadena Agramonte outlet noticed often and occasionally good on Beverage w/Radio Noticias mentions many times. Power

estimated at 1 kw. (Kazaross)

PORTUGAL Lisbon noticed with OC strong 0643 11/24. PP talk and mx was in from 0702-0723 at fair level. (Kazaross) Canidelo fair to good w/man in PP 0702 11/24. (Connelly) (Neil, WRTH

calls this Canidelo-CH) SPAIN fair o/jumble w/march mx, then SS talk 0600 11/24; noted

w/time pips, fast SS talk 0700 11/24. (Connelly)

1584

1584

SPAIN I was listening to a cacophonous mess of weak carriers and SAH's when on popped a SS stn poor-fair at 0600 11/24. It reached fair-good peaks for the next 40 minutes. Radio Popular was heard many times. At 0613 I heard a female say "Radio Popular" followed by a male who I believe said Tortosa. There was also a reference to Valencia at 0601 during apparent nx but I feel this was just an incidental reference. Several times about 5 or 6 synthesized tones were heard followed by what may have been a TC although never very clear. Can our European members help here? (Kazaross) Not much for them to go on-lots of the Spanish stns have slogans of Radio Popular de \_\_\_\_ so it could be anyone. I'd search your tape carefully many times and see what is there-CH

1584 UNID usual pack of carriers yielding strong SS audio 0622 on 11/24; presumably one of the Spanish outlets listed here.

1593 WEST GERMANY Langenberg loud w/man in GG who mentioned Westdeutscher Rundfunk 0556 11/24. (Connelly) Strong w/mx 0623 11/24. Severe splatter from 1590 domestics. (Eckman)

SPAIN unid SS stn here w/SS mx poor-fair w/fades 0656 11/24. 1602 (Kazaross)

1602 UNID SS-sounding talk in jumble 0557 11/24. (Connelly)

A respectable column this week as IDXD makes a recovery from the issue before last.

You people out west who are looking for TA's ought to be making an effort to hear Tunisia 1566. This stn is audible most nights here in Atlanta, often with amazing strength that makes me sure this can be heard far west. So far, I remember that it has been heard in Ohio, Texas, and Louisiana and I wouldn't be surprised to have it make the west coast some night this year. After all, Gene Martin has heard Turkey 1017 in Denver and it doesn't have near the signal. Sign-on is 0430 with the anthem, often preceded by a bit of tone testing. Usually they launch right into Koranic chants, which seems to be all the programming they have. Let IDXD know if you have any success with this.

Some fair TA openings have occurred so far in November; 11/24 and 11/26 both featured fair propagation to Africa/Europe by 1979 standards. Monday morning 12/3 saw TA's in OK again, with most areas in poor to fair but the British Isles in better than anybody else. Most of the BBC stations were putting in a decent signal including some of the outlets like 693 that aren't heard very regularly in Atlanta. All of the Portuguese stations were on, apparently with election returns from Sunday's national election. Africa was very poor however with only Tunisia 1566 (there they are again) pushing through.

Pinyin guide explaining the new Chinese spelling system is available for 25g from a typography (specializing in typos??CH-hi) firm: Spectrum Composition, 264 W. 40th, NYC 10018. (Dick Nolan column in the SF Examiner 9/5 via Joel Rubin and NASWA Listener's Notebook. Should prove useful to those west coasters trying to keep everything straight. Right Pete Taylor ?? CH)

Dan Bartek GE pocket radio Rochester NY HQ100, SM2 Marc DeLorenzo Holbrook, MA R390A, SM2, 2 37 m. phased wires Mark Connelly Billerica, MA Richard Eckman Philly, PA Decatur, GA Chuck Hutton Neil Kazaross Narragansett, RI DX160, SM2 Rick Kenneally Cincinnati, OH TRF Steve Miller Boston, MA Washington DC TRF Bill Townshend Elsa, Yukon Terr. Brian Vernon

HQ180A, SB620, Sanserino loop R390A, 1900' phased Beverages R390A, Sanserino loop, 1500' Bev

DX300, FRG7000, 1530-866-500-500, and 300 meter Beverages

COLOMBIA HJZD R. Panzenu, Monteria great in KDKA null w/LA mx and ID 2327 11/25. (Kenneally)

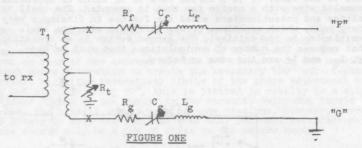
#### PRACTICAL PHASED BEVERAGES

#### CHUCK HUTTON

The two-wire phased Beverage is a design that combines the great directivity of the Beverage antenna with the sharp null of a loop antenna. In practise the null of a Beverage is actually superior to that of a loop because in addition to discriminating on the basis of compass direction, it discriminates by arrival angle also. This allows the user to null one TA and hear another of almost identical bearing, or null a US station and hear a Latin on much the same angle but much further away.

This time around theory will be ignored and practical construction details featured.

Figure One is a simplified diagram of a two wire phased Beverage and the associated control box. One wire is termed "F" and the other "G"; "F" is the floating wire and "G" is the grounded wire. Cf, Lf, and R, are in the leg of the system associated with "F"; C, L, and R are in the "G" leg. The same system of nomenclature will be used in all succeeding diagrams.



In this, as well as all other diagrams to follow, the two variable capacitors are standard 365 pf units, the coils are 250 uH (preferably shielded in aluminum cans-the Miller A320A is an excellent choice), and all potentiometers are 1000 ohms. For T1 see Figure Two.

The procedure for creating a null is: (1) turn each pot to minimum resistance. Start with "F" and adjust Cf for maximum meter reading. (2) adjust Cg for maximum reading. (3) adjust either Cf or Cg until a null is seen on the S-meter or the offending station is reduced in strength. This generally will involve only a slight movement of the capacitor from the position where signals peaked. (4) adjust whichever capacitor was not used in #3 until the null is deepened. (5) adjust Rg slowly and observe to see whether the null deepens. (6) if #5 yielded no improvement, slowly try the same procedure with Rf. (7) slowly rotate Rt and observe for any possible deepening of the null. (8) repeat the process, making fine adjustments as long as improvement is noted.

At the points marked "X" in Figure One (which is identical to the unit Mark Connelly uses to phase his two 37 meter longwires) Mark has inserted a DPDT switch; in one position it grounds that antenna leg and in the other position it connects that antenna leg to the transformer. Mark's procedure for nulling is: (1) switch in "F" with "G" grounded. Set pot Rf at minimum resistance. Tweak Cf for peak signal; note S-meter reading. (2) switch in "G" with "F" now grounded. Set pot Rg at minimum resistance. Tweak Cg for peak signal. Note if S-meter reading is higher or lower than peaked Cf reading. (3) if "F" reading is higher than "G" reading, adjust Rf to equaize the readings. If the "G" reading is higher, adjust Rg for equal readings. (4) flip both switches to connect both "F" and "G" to the balun coil. Carefully adjust the pot just used to equalize signals to reduce the strength of the undesired station. If no null is obtained, re-equalize strengths (step 3). Adjust the other pot with both "F" and "G" connected for a null. Touching up the capacitors slightly will deepen the null. Continue adjusting Rf and Rg plus Cf and Cg to obtain the best null.



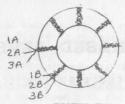
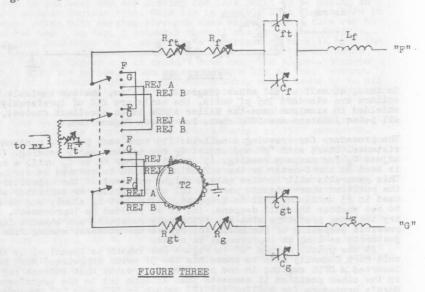


FIGURE TWO

To wind the balun, obtain about three feet of enameled or insulated wire and cut it into identical sections each a foot long. Either twist the wires by hand or put one bunch of ends in a vise and the other bunch of ends in a drill and use the drill to twist. Wind the coil as pictured, being careful to mark each lead before starting. Solder 1B to 2A and also solder a short piece of wire to this junction. This is the center tap of the transformer; the short piece of wire will connect to R<sub>t</sub>. Wires 1A and 2B are the wires to which the "F" and "G" legs will be attached. Wires 3A and 3B are the receiver connection wires. After winding and soldering are completed, fix the windings in place with coil dope, epoxy glue, or silicon rubber sealant.

This balun has worked very well for me. I can not compare it with the coil used by Connelly and Bailey because they are using a "black box" balun of non-commercial origin.

Figure Three is a slightly more elaborate phasing unit. The basic idea is the same. T2 is a toroid core of 84 turns of approximately #28 enameled wire with a center tap that is grounded. The small value capacitors and potentiometers added are for use in finding a very deep and sharp null, which sometimes proves difficult with the basic setup; the positioning is too critical. The ganged switch is an operating convenience that reduces the number of manipulations that must be made. Cg, Cf, Rg, Rf, Lg, and Lf are the same as before.



 $c_{\rm gt}$  and  $c_{\rm ft}$  should be small trimmers of perhaps 15 pf or so. Rft and Rgt should be 10-50 ohms. Neither value needs to be exact; anything with a low value compared to the main components will suffice. "REJ A" is the standard null position. In "REJ B" the toroid T2 is in the circuit; T2 is a phase reversing transformer.

The nulling procedure is the same as with the simpler unit. One may either resonate each wire separately by putting the switch in "F" and "G" and then adjusting for the null, or simply putting the switch in "REJ A" or REJ B" and adjusting for the null without bothering to resonate the wires. With a little experience one can tell quickly where the nulls will be in terms of capacitor settings, and the resonating step can be eliminated.

Connection of the Beverages to the phasing box can be accomplished with coax, open-wire transmission line, or simply running the Beverage wire directly to the unit. The impedance mismatch between the antenna and R658 does not seem to affect matters very much. If open wire line is used, each line will have to run into a balanced transformer in order to neutralize transmission line non-directional pickup. A slight bending of the antenna wires in order to bring them directly to the phasing box will probably not affect matters too much.

Some problems that may be encountered:

- (1) Q: I can null OK but nulls sometimes last a few minutes-sometimes only a few seconds. Why?
  - A: This is probably not due to your antenna or phasing box, but rather changes in ionospheric conditions. This situation is identical to that seen when you use your loop; skywave signals will often drift a bit, requiring re-positioning of the loop.
- (2) Q: I still say my nulls aren't steady enough, requiring constant readjustment of the controls.
  - A: If the fault is to be in the antenna system, the only possibility is that the two wires are spaced too far apart. If this is the case, diversity reception is occuring; your wires are not "seeing" the same skywave signal due to their physical separation. While appreciable diversity effect is usually found only at a minimum of ½ wavelength separation, enough diversity effect is encountered at 100 feet for the effects to be slightly noticeable.
- (3) Q: I can null stations WXXX or WYYY fine but station WZZZ won't null at all. Why?

  A: Almost all stations should be nulled to a substantial degree. Unfortunately, there will be a few which prove impossible to null. Generally, these stations are from 60 to 90 degrees off the front or rear of the antenna and the L-C circuit can not provide enough phase alteration to create the necessary 180° out-of-phase current. While the theoretical limits of the phase adjustment by the L-C circuits are ± 90°, this is limited in reality to a slightly lower figure by the losses in the circuit. Switching toroid To into the circuit should help on some stations. However, there are likely to be a few stations that will not null satisfactorally. There should only be a few of these on the entire band.
- (4) Q: I can't null at all. Why? A: Don't go looking at the wires and wondering if that slight bend is responsible. The phasing system is very forgiving of such imperfection. The problem is in either the wiring of the phasing controls or the transformer T. Check to make sure that everything is exactly per the diagrams; even with sloppy construction of the antenna and unit decent nulls should be obtained.
- (5) Q: My nulls are only 10 or 15 dB. Why? A: If this is the case for all stations on the band, check T<sub>4</sub>. If you have wound your own transformer on an air core, consider obtaining the toroid core and winding it as per the diagram. A toroid is likely to be better balanced electrically and will have self-shielding properties that should minimize pickup from undesired sources.
- (6) Q: What design considerations are important in construction of the phasing control box?
  - A: Very little is critical. The toroid should be mounted at least one inch from metallic surfaces. The windings should be coated with coil dope, epoxy glue, or a silicon rubber sealant. The input wires should be kept as short as possible and separated from the output. Ground the case of the minibox to the station ground.
- (7) Q: I note the differences between operation procedures for the different phasing systems. Why the difference?
  - A: In the systems where each leg is resonated individually and then adjusted for a null, the end result is the same as in the onestep procedure. The resonant peak is quite easily noted on the receiver in the one step procedure, even though both antennas are connected. The difference becomes less important when you take into account that the position of C and C, when peaking "G" and "F" respectively are almost always not the position where the null is encountered. The position where the null is encountered should be very near the peak position; this makes location of the peak advantageous in the nulling process.

(8) Q: I just don't have the (wire/time/land) to put up another wire parallel and of equal length to the first wire, so that I can null stations using the two-wire phasing technique. Is there

anything that I can do?

A: Most definitely. The stipulation that the wires be parallel and of equal length is made in order to assure optimum performance. As the basic requirement is that we have a source of current which can be phased against the first wire, this current can actually be derived from any source. Beverages of different length and direction, longwires, verticals, dipples, rhombics, bedsprings, anything can be used and will provide adequate nulling in most instances. Beware, however, that you are introducing signal pickup into the system which may well partially defeat the tremendous directionality of a Beverage. This is the one and only reason why the system is described as two equal length, parallel wires!

(9) Q: I am pleased with the performance of my system and its nulls. Sometimes when I try to deepen nulls further by adjusting C or C<sub>f</sub>, I succeed only to have the deep null lessened when I<sup>S</sup>

remove my hand. Why?

A: The cause is hand capacitance, which is sufficient to disturb a deep null. As the variable capacitors are insulated from the chassis (not grounded on one side as is usually the case), your body capacitance will be added to the system. The best remedy is to mount the capacitors on a panel behind the front panel of the minibox and epoxy plastic extension shafts onto each.

(10) Q: I am using posts to support my Beverage as no trees are available. Rather than be forced to install another set of posts 10 feet away for the second wire, can I mount it on the post along with the first wire?

A: Yes and no. Yes if you can keep it at least a foot away from the first wire. No if it is closer, because undesirable re-radiation from the first wire will couple into the second

Wire

(11) Q: I live in a part of the country where the ground is not very conductive. In addition, I don't want to spend a small fortune on ground rods. Do I need to invest a large amount of time and money establishing a "perfect" ground for one wire?

A: Not really. The purpose of the ground is not really to ground the wire, but to reverse the phase of the current on that wire. While a decent ground is desirable, experience shows that an excellent ground is not necessary to operation of the system.

(12) Q: I read elsewhere that a ground counterpoise wire run underneath the wire will improve performance. That is an awful lot of trouble, and could prove hazardous to persons walking in the

area. Is it worth it?

- A: It doesn't seem to be. The purpose of the wire is to reduce ground losses, and by doing so, eliminate alterations of phase relationships created by losses in the antenna. The L-C circuits can compensate for this condition. The improvement in loss characteristics of the antenna does not seem to be worthwhile. Also, the wave velocity of the Beverage will be increased by a ground counterpoise. This is important in only two situations: when running extremely long Beverages (on the order of a mile at MW frequencies) or when operating a Beverage at the upper frequency limits of its practical operation (5-10 mHz).
- (13) Q: I have never wound a toroidal core transformer and will therefore probably have some trouble. What are some tips on construction?
  A: No need to worry. Toroids are pretty forgiving devices, and this circuit is non-critical. It doesn't matter whether the windings are evenly spaced around the core or whether one turn doesn't sit completely flat against the surface of the core. Also, the center tap does not need to be positioned with anything more than a normal degree of exactitude.
- (14) Q: Sometimes I notice nulls in signal level (of very good deepness) but this does not bring out the DX underneath; rather it seems to only weaken everything on the channel. Why?

A: The cause is unknown. Usually a null that allows the DX to surface can be found by moving one variable capacitor slightly and re-adjusting the other for a new null. These "false nulls" are semi-frequent occurences but usually can be corrected for as above.

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- R6 ELECTRONIC VERNIER TUNING, R. Moore. Detailed instructions on how to fit a varactor to a MW receiver to provide fine bandspread.
- R7 MECHANICAL FILTERS FOR THE HQ-180, J. Starr. Complete details on the conversion of the popular Hammarlund HQ-180A receiver to mechanical filter operation. Order with R2.
- R8 REDOING OLDER RECEIVERS, C. Hutton. The author explains how he took a \$50 HQ-129X receiver and "re-juvenated" it to compare favorably with a Collins R-390 or R-388. An electronics background is helpful in implementing this article.
- R9 RECEIVER/ACCESSORY INTERFACES MADE SIMPLE AND CHEAP, R.J. Edmunds. A discussion of methods of interconnecting DX equipment.
- R10 UP THE CARRIER, W. Bailey. Dig the weak DX out of the mud with this form of exalted carrier reception.
- Rll PRECISION FREQUENCY MEASUREMENT, R. Schatz. How to use the frequency counter, an instrument now within the budget of the average serious DXer.
- R12 THE FMS-3 FREQUENCY MARKER STANDARD, R. Foxworth. A review of operation, how to make the proper connection to the receiver, and some modifications incorporated by the author to permit full use of the unit's capabilities.
- R13 SINGLE SIDEBAND RECEIVING ADAPTERS, T. Sundstrom. How to sharpen your receiver's IF bandpass using a B&W #370 receiving adaptor.
- R14 REVIEW OF THE AUTEK Q-BOX, T. Sundstrom. Describes the uses of this new noise filtering device and its applications in MW DX.
- R15 REVIEW OF THE HEATH SB-620 SPECTRUM ANALYZER, R. Foxworth. A comprehensive and detailed analysis of the unit's operation and uses as related to MW DXing.
- R16 THE WORCESTER LONG DISTANCE AM RECEIVER, J. Worcester. A stage by stage description of the construction, theory and circuitry of a new type of AM DX receiver.

<sup>\*</sup>Night Pattern Book temporarily out of stock. New, revised edition expected, mid-1980.

- R17 BUILD YOUR OWN AUDIO FILTERS, P. Sullivan. A somewhat technical theory and construction article on inexpensive homebrew audio filters for the DXer.
- R18 THE RUSTRAK R-88 RECORDER, R. Schatz. Explains operation and use of this versatile chart recording marker and its applications to the study of propagation in MW DXing, and gaining insights into potential loggings.
- R19 A BRIEF REVIEW OF THE AUTEK QF-1 AUDIO FILTER, C. Hutton. A non-technical review of this new noise and interference filter.
- R20 A FREQUENCY COUNTER FOR RECEIVER TUNING, R. Foxworth. A very thorough paper on digital readouts and what to look for in various models. Discusses technical theory and provides circuitry to enable the experimenter to build a counter for use as a "digital dial". Very thorough.
- R21 FURTHER RECEIVER HOT RODDING HINTS, C. Hutton. Tells what you can do to further improve the performance of even the best commercial receivers, and some problems with the older receivers being used.
- R22 THE LYONODYNE CRYSTAL WIRELESS RECEIVER, R.W. Tuggle. The concepts of vintage crystal radio are incorporated in these detailed construction plans for a simple receiver, offered as a "sporting" alternative to modern receivers; yet it has the potential for real DX.
- R23 DIVERSITY RECEPTION, C. Hutton. Using more than one antenna and receiver in an effort to reduce fading and interference of one frequency. This article deals briefly yet concisely with the basics of "DR" and how it can be applied to Medium Wave DX.
- R24 TIPS ON REMOTE TAPING, R.J. Edmunds. Are you going away during that rare DX test? This article explains several methods you can use to turn your receiver and recorder on while you are otherwise occupied. Useful with R9 and A26.

#### DOMESTIC DX

- Dl 1570-1580 STATION LOCATION MAPS. Two maps pinpointing the location of all domestic stations operating on these two superb sunrise/sunset skip channels. A valuable aid to the sunrise/sunset DXer.
- D2 IT TAKES TWO TO VERIFY, PLUS HELPFUL HINTS, J. Murley and R. Schiller, respectively. If you are unhappy with your domestic QSL returns, read this article on the station's attitude toward reception reports. Also, veteran DXer Ron Schiller gives tips on increasing your returns.
- D3 CANADA'S WILDERNESS RADIO: THE LPRT, P. Taylor. In depth study of those 20 and 40 watt Canadian stations that you hear, but don't understand. A must for the domestic DXer.
- D4 WHAT IS A PRE-SUNRISE AUTHORIZATION? R.J. Edmunds. Some U.S. stations are authorized to operate with powers such as 14.3 watts during certain hours; this article explains why.
- D5 LONG DISTANCE RECEPTION OF DX TESTS, F. Dailey. Are you thinking about asking a station to do a DX test? Here are some proven techniques, that if used by the station, could make it easier for DXers to hear the test. A must for novice CPC members.
- D9 THE NSP SITUATION, J. Starr. A look at this problem from the broad-casters' side of the fence.
- Dlo DX FROM THE TWILIGHT ZONE, P. Sullivan. For various reasons some stations are audible at sunrise and sunset only. This article tells the reasons.
- Dll GRAVEYARD DX, R. Foxworth, with addition by M. Levintow. This article tells you how to DX those cluttered local channels and get results.

- D12 CANADIAN FAMILY LIFE...IT'S TWINS. Explains why many station "families" exist in Canada. List of station groupings as of November 1, 1978, including LPRT's and other stations of better DX potential.
- D13 THE CANADIAN AUDIO NETWORKS, Brian Vernon. Explains origin of Canadian audio networks and tips on identifying stations belonging to them.
- D14 GRAVEYARD STATIONS MAPS, B. Hale. Useful maps for those who like the challenge of "dead" frequency DX. Includes station listings for each graveyard frequency.
- D15 SOME TIPS ON IDENTIFYING UNID'S, R. J. Edmunds. Offers practical tips on how to ID stations using reference materials and deductive logic.
- D16 SUNRISE SKIP DX, R. Kramer. Practical explanation of how to add stations to your log through understanding pre-sunrise authorities, station allocations on clear channels and auroral effects.

#### STATION LISTS

- L1 FREQUENCY CHECK LIST, Joe Fela. Many U.S. stations run equipment tests at regular intervals and times. This list is a valuable aid to new loggings. Updated yearly.
- L2 THE BANANA LIST, R.F. Schatz. A breakdown of stations in the San Pedro Sula and Tegucigalpa, Honduras areas as of January, 1978.
- L3 CUBAN STATION LIST, C. Hutton. This up-to-date listing is a handy resource for the International DXer. Updated yearly.
- L4 NON-DIRECTIONAL AERONAUTICAL BEACONS, D. Davis. An explanation of the types of beacons found in and near the MW band, plus updated listing of aeronautical beacons.
- L6 A SURVEY OF LA SPLITS, C. Hutton. A list of all Latin American stations presently operating on split frequencies. Updated yearly.

#### FOREIGN DX

- Fl ITU FREQUENCY PLAN EUROPE, AFRICA, ASIA. D. Monferini & A. Merriman. Allocations assigned effective November, 1978.
- F2 ASIA AND PACIFIC DRAFT FREQUENCY PLAN, N.Z. DX Times. List includes Australia, New Zealand, Japan and east Asia.
- F3 PORTUGESE FOR DX'ERS, R. Schatz. Describes the important and unusual features of this language; a must if you DX Brazil.
- F5 HUNTING THE LATINS BY MUSIC, R. Schatz. Describes types of LA music indigenous to various countries and tells how to ID LA's using this information.
- Fll ITU FREQUENCY ALLOCATIONS AND THEIR IMPACT ON TA DX'ING. M. Connelly. Trying for TA's on their new frequencies? What are your chances of logging a specific station? All region 1 MW frequencies are listed and what should be heard under good conditions. Goes with Fl.
- F12 COMMON SENSE T.A. DX STRATEGY, M. Connelly. Practical hints are given for newer DXers to hear Trans-Atlantic stations.

#### MISCELLANEOUS ARTICLES

- Ml LOCAL SIDEBAND SPLASH: HOW MUCH IS TOO MUCH? G.P. Nelson. Many DXers complain about certain local stations overmodulating and producing large amounts of interference. Article describes FCC regulations on sideband radiation on the MW band and types of station originated spurious radiation.
- M2 MODULATION ARCING, J. Starr. Describes a frequent but rarely discussed cause of MW interference originating at the station that can wreak havoc on the MW band.
- M3 SUNRISE-SUNSET TABLES, G.P. Nelson. These charts permit the DXer to determine accurate time of sunset and sunrise at any point in the world on any particular day. Very useful for international DXers.

#### VIA STEVEN MILLER

A little-noticed reference in paragraph 276 of the final document of the recent meeting in Cubs of nonaligned nations warns that the next battlefield on which the deweloping and nonaligned countries will engage their industrialized counterparts is broadcasting. It is a reference to the World Administrative Radio Conference (WARC), a little known, 10 week conclave that will have a profound effect on the world's use of the airwaves for the next two decades.

The developing countries have come of age in the telecommunications world and are now a force to be reckoned with. More than that, they now realize that they have the power to exert great influence over the communications services that will-or will notbe made available to everyone in even the most powerful nations. Since technological restrictions keep the number of available slots on the radio bands limited, a block of wates from several developing countries could decide, for example, whether there will be 700 more AM radio stations in the United States. There are some 90 developing sountries out of the 154 members, giving the Third World a disproportionately powerful wekne.

The International Telecommunication Union has sponsored WARC conferences at epproximately 20 year intervals since 1865, when 20 European states met to adopt the Morse code as a uniform telegraph code for international communications.

Until this year, WARC conferences have been little more than club meetings of the top communications technicians from the most advanced countries who quietly discussed problems and breakthroughs in communications, and how they best could serve their respective countries. Times have changed, and the number of countries participating in WARC 1979 is almost double the 87 that attended WARC 1959. In addition, virtually all of the newer member countries are less developed countries with sharply different needs and priorities than the developed nations.

The communications business also has changed since 1959, when the sky had yet to be littered with even its first communications satellite. Technology is developing so quickly that some forms of communications that didn't even exist is 1959 already are obsolete. And international cooperation is needed now more than ever to insure that radio signals don't interfere with each other.

The US has sent a 65-member delegation with 36 additional technical and administrative staffers to the conference, under the direction of delegation chairman Glen Robinson, a University of Virginia law professor and former FCC member signed on by the State Department for this purpose.

Armed with 2000 pages of position papers on major issues, which have been worked on by subcommittees for years, the delegation-made up of representatives from all segments and interest groups, ranging from the government to sonsumer groups-is prepared to haggle over even the most technically difficult issues.

Third World nations have watched for years as the industrial giants have grabbed the frequencies and bands they needed for whatever services they sought to develop. Now, as the limits of technology have crept up to the point where the telecommunications spectrum is becoming crowded, the developing nations have begun to call for a "New World Information Order."

"The US and USSR, the two most technologically developed countries, have 15 percent of the world population and use 50 percent of the world broadcast spectrum." said Thomas A. Hart Jr., treasurer of the National Black Media Coalition.

The US policy is to seek maximum usage of the airwaves, to allow those who can use the spectrum now to do so and to work out a sharing program when others are ready. That concept is viewed with skepticism, to say the least, by many Third World nations fearful that what they give up today, they never will be able to retrieve.

Box 1260, Amery, Wis. 54001 715-268-7185

**KWK RADIO** DOUBLEDAY BROADCASTING CO., INC. 2360 HAMPTON AVENUE ST. LOUIS, MISSOURI 63139

schuylkill trans-audio corp.

P. O. BOX 1530

SHENANDOAH, PA. 17976

RADIO

(15) Q: I am phasing wires that run in different directions. Sometimes I have a very difficult time finding nulls; this is not the case when I phase wires that run in the same direction. What is the

A: The reason seems to be that since signal levels for station WZZZ are likely to be much different on two non-parallel wires, the phasing controls can be properly adjusted to create the  $180^{\circ}$ phase difference but no null will be created because of the extreme difference in magnitude of the current. The solution is to adjust the capacitors to the peak position and then try alternately  $\mbox{R}_{\mbox{\it f}}$  and  $\mbox{R}_{\mbox{\it g}}$  at a mid-scale value while twiddling the capacitors to create a null.

(16) Q: What about Rt? When should it be adjusted? A: While this is not usually a critical adjustment, it is always best to rotate it slowly after adjusting the other controls. Sometimes it will be possible to further deepen the nulls. In very rare instances, no null or little null will be noticed until Rt is adjusted to the proper position.

My thanks to Bill Bailey and Mark Connelly for forwarding their set-ups. Bill introduced me to the practical details which led to me setting up my first phased Beverage in 1977; Mark has sent along much information on the electrical properties of the toroid and balun he uses, along with his set-up for phasing longwires.



1017 FRONT ST SACRAMENTO, CA 9580 TELEPHONE 916/446-4965

National Radio Club P.O. Box 32125 Louisville, Ky 40232

Dear Sirs,

I have found a few errors in our listing within the NRC Domestic Log, 5th edition, 1978-1979. These errors result from a change of station ownership. I am sending the correct information for future NRC publications.

The 1470 Khz. channel in Sacramento known as KNDE is now KXOA. The KNDE facilities were purchased by KXOA-FM in September of 1978. The call letters of this channel were originally KXOA, the AM and FM were sold to different owners in 1969. KXOA-AM changed to KNDE at this time. The KNDE owners then sold KNDE to KXOA-FM in 1978.

The listing on Page 145 of the Domestic log should list 1470 as follows: 5 2 3 4 KXOA Sacramento, Ca U4 5000/1000 PO Box 1677 (95808)

ROK 20d(5) N

I have enjoyed the NRC publications, especially the Night Pattern Book. I hope the above information will be of some use.

Sincerely,

Hank Schwartz Chief Engineer

BOX 66, SHAKOPEE, MINNESOTA 55379

- M4 QUASIMONTHLY PATTERNS IN ATYPICAL MW DX RECEPTION, G.P. Nelson. A large body of data on TA reception gathered by R. Wood in England. Information is analyzed in an attempt to disprove the Lunar Phase Theory.
- M5 UNRESTRICTED RADIATION, G.P. Nelson. Discussion of carrier current stations and how to hear them.
- M6 RF POLLUTION, G. Hauser. General discussion of the radio interference problem and steps necessary to control it.
- M7 PATTERNS, PARTS I, IIa AND IIb. P. Hart. An understanding of the directional patterns used by North American MW stations is vital for the active domestic DXer. This series of articles explains in authoritative detail what patterns mean and how the DXer can fatten his log by understanding them.
- M8 PRECISION FREQUENCY ANALYSIS, R. Schatz with notes by R. J. Edmunds. A discussion of the technique of analysing the characteristics of a station's frequency over the long term as an aid to the identification or elimination of stations as possible DX catches at any given time.
- MORE ON HOW DIRECTIONAL ANTENNA PATTERNS ARE PRODUCED, Wes Boyd. Supplementary information to the articles contained in the current edition of the NRC Night Pattern Book.
- M10 SUPERMODULATION AND EFFECTS ON DX'ING, Steve Kennedy. Discusses why there is overmodulation and how this problem will affect the DXing hobby for some time to come.
- M12 NOISE LEVELS AND USEABLE RECEIVER SENSITIVITY, Chuck Hutton. Discussion, in technical terms, of the affect of noise on receiver sensitivity.
- M13 GREAT CIRCLE CALCULATIONS REVISITED, Mike Tuggle. If you like to do calculations, this is the article for you. Mike explains how to figure distance and direction of stations mathematically.

#### PROPAGATION

- Pl MEDIUM WAVE SIGNAL PATHS, PARTS I, II, III AND IV, G.P. Nelson. Discusses Great Circle Paths, seasonal absorption pattern, auroral effects and the Midwinter Anomaly.
- P2 SOLAR CONTROL OF DAWN E BLANKETING ON THE MW BCB, G.P. Nelson. Explains how the position of the sun controls the fadeout time of transatlantic and transpacific stations.
- P3 EAST-WEST SYMMETRY AND THE FADE-IN PROBLEM, G.P. Nelson. Explains how the sun controls the fade-in times for MW stations.
- P4 SUMMER RECEPTION ON THE BROADCAST BAND, G.P. Nelson. First article describing the seasonal patterns in solar terminator location which makes summer MW reception from deep South America and Africa possible.
- P5 METEOROLOGICAL EFFECTS ON MW GROUNDWAVE RECEPTION, R.J. Edmunds. Short term variations in groundwave propagation at MW frequencies and their relationship to weather conditions is discussed.
- P6 AURORAL EFFECTS AND THE 1969 TRANSATLANTIC LISTENING TEST, G.P. Nelson. Brief simple description of how the geomagnetic and auroral phenomena control TA reception from various stations. Best general introduction to MW auroral effects.
- P7 THE AURORA OF NOVEMBER 6-9, 1970, G.P. Nelson. Traces a classic MW auroral attack from its origins on the sun to its effects on MW reception.
- P8 COMPARATIVE MEASUREMENTS OF GEOMAGNETIC INDICES, R.J. Edmunds. The author compares on a daily basis for three months the various A-index measurements as reported by several major observatories. He tells how the indices are related to each other.
- P9 SKYWAVE OR GROUNDWAVE RECEPTION? G.P. Nelson. How to tell whether the signal from a station you are listening to is arriving via groundwave or skywave or both.

- Plo A BEGINNER'S GUIDE TO THE IONOSPHERE, Fr. J. Pejza. Radio wave propagation is influenced greatly by the conditions in the ionosphere. This article explains the processes which change the ionosphere and the effects of these changes on radio waves.
- Pll THE LIMITS OF MIDDAY MW DX. G.P. Nelson. Comprehensive article describing the factors which influence radio wave propagation and reception during the late morning and early afternoon hours.
- P12 LIMITATIONS IN THE USE OF THE A-INDEX, G.P. Nelson. While the A-index is a valuable tool for MW DXers, it is easily misinterpreted. This article shows why.
- P13 BCB RECEPTION DURING PERIODS OF HIGH AURORAL ACTIVITY, G.P. Nelson.
  Describes the author's research into the effects of the aurora on MW propagation.
- P14 SKYLINE BLOCKAGE, Fr. J. Pejza. Mathematical derivation of the formulas needed to calculate the effect which terrain has on signals.
- P15 SKYLINE BLOCKAGE, SOURCES OF UNCERTAINTY, G.P. Nelson. Takes into account the possibility of signal propagation by some less common modes which are subject to blocking by the horizon.
- P16 HORIZON BLOCKAGE: CAN FRESNEL DIFFRACTION BE IGNORED? G.P. Nelson. No, it can't!! This article shows how signals that should be blocked by the horizon can sometimes be heard.
- P17 TRANSPOLAR DX RECEPTION, R.J. Edmunds. Are you looking for Asian DX more exotic than Urumchi-1525? This technical article relates to the transpolar reception of central and eastern Asiatic stations at sunset in North America.
- P18 OBSERVATIONS OF TRANSATLANTIC MEDIUM WAVE RADIO SIGNALS, C.W. Bailey. The results of a lengthy survey to TA receptions made over a one year period.
- P19 PROPAGATION AT MEDIUM WAVE FREQUENCIES, P. Sullivan. Discusses some aspects of the factors which control signal reception on the MW.
- P20 FACTORS OF MEDIUM WAVE PROPAGATION, F. Dinning. Further discussion of the nature of MW propagation.
- P21 DOMESTIC PROPAGATION-ANSWERS TO FREQUENTLY ASKED QUESTIONS, R.J. Edmunds. A brief discussion on some of the propagational factors that affect domestic reception.
- P22 REVIEW OF SOLAR ACTIVITY FOR THE MEDIUM WAVE DX'ER, R. J. Edmunds. A concise explanation of the Fredericksburg A-index as well as its use in the hobby is given in this article. Goes with P1, P6, P7, P10, P12, P13, P19 and P20.
- P23 MEDIUM WAVE IONOSPHERIC PROPAGATION, R. Schatz. This article takes a different approach to propagation and presents new terms and theory. It is designed as an introduction to P24.
- P24 TERMINATOR TRANSIT MECHANIX, R. Schatz. Parts I and II of a series which the author states features practical techniques to hear new stations; techniques never before available.

#### RECEIVER REVIEWS

- RR1 RECEIVER COMPARISONS-WHAT DO THEY MEAN? R.J. Edmunds. Certain problems arise when comparing product summaries and receiver reviews. The author explores these comparisons with an emphasis on MW DX.
- RR2 QUALITATIVE REVIEW OF THE YAESU FRG-7 RECEIVER, G. Hauser. A detailed non-technical review of this popular communications receiver.
- RR3 A REVIEW OF THE SONY ICF-5900W, Dan K. Phillips. A review and comparison with other portable receivers. Also deals with SW and FM sections of the unit.
- RR4 HEATH GR-78. R. Schatz.
- RR5 BARLOW-WADLEY XCR-30. M. Hardester.

- RR6 A REVIEW OF THE PANASONIC RF-2200, Michael Sapp. A non-technical comparison of the RF-2200 with the Sony ICF-5900 and Realistic TRF.
- RR7 A NON-TECHNICAL REVIEW OF THE WORCESTER LONG DISTANCE RECEIVER, Jerry Starr. A user's critical commentary of this revolutionary receiver. Note: This receiver is not readily available to the average DXer as it was built in limited quantities.
- RR8 MCKAY-DYMEK DR-22, J. Clements. A detailed, non-technical pre-production review of one of the "new breed" of receivers; mentions features, performance and how it measures up to receivers now in use.
- RR9 PANASONIC RF-4800 REVIEW, Grant Manning. Article evaluates the overall performance of this multiband receiver. Includes schematic and the technical specifications provided by Panasonic.
- RR10 HQ-180 SERIES RECEIVERS, Dallas Lankford. Reviews technical details and includes personal comments on the popular Hammarlund HQ-180 receivers. An ideal supplement to the NRC Receiver Manual.
- RR11 SONY TR-6500 VS. THE TRF, Charles Barfield and Gerry Thomas. Thinking of buying either of these popular inexpensive receivers? This reprint compares them side-by-side and gives impressions.
- RR12 GENERAL ELECTRIC'S SUPERADIO, Gerry Thomas and Charles Barfield.
  A detailed review of this new portable AM/FM receiver, compared side-by-side with the Radio Shack Realistic TRF.
- RR13 RADIO SHACK DX-300--A SHORT REVIEW, W. Heinen. Very brief review, non-technical, from the MW DXer's viewpoint.
- RR14 REVIEW OF THE DRAKE R7, Chuck Hutton. A comprehensive summary of the features of this new (July, 1979) communications receiver, plus in-use evaluation of performance.

#### PRODUCT SUMMARY

PS1 DRAKE SSR-1 RECEIVER, R. Foxworth.

#### UPDATERS TO THE NRC LOG AND PATTERN BOOK

- UDL A year's set of updaters to the NRC Domestic Log is available to members for a flat fee of \$1; to non-members \$2.\*
- UPB A year's set of updaters to the NRC Night Pattern Book, available to members for \$1; to non-members \$2.\*
- \*Inquiries as to availability are advised.

#### SUNRISE/SUNSET MAPS

SSM A set of 12 maps  $(8\frac{1}{2}\times11)$  with instruction sheet showing the monthly average sunrise/sunset times for the United States. An invaluable aid to the sunrise or sunset DXer. \$2 to all.

#### BROADCASTERS GUIDE TO DX

GUIDE A tri-folded guide for use with reception reports explaining DXing, how the NRC was formed and the importance of QSLs to DXers. 25 for \$1.

SSGUIDE Spanish version of the same guide. 25 for \$1.

#### STATIONARY/REPORT FORM MASTERS

FORMS A set of 3 masters for use in photo-offset printing to permit members to prepare their own NRC stationary, report forms--both Spanish and English. For members only. 50¢ per set. Availability to be announced in DX News.

## NRC REPRINT LIST

#### PAST ARTICLES FROM DX NEWS

DECEMBER, 1979 - SUPERCEDES ALL PREVIOUS LISTS AND ORDER FORMS WHICH SHOULD NOT BE USED.

#### ANTENNAS

- Al HIGH PRECISION DIRECTION FINDING ON THE BCB, PARTS I & II. G. P. Nelson. Part I uses Maxwell's equations to derive the equations describing MW direction finding with a loop. Part II is a non-technical discussion of how a loop antenna operates and how to get the most out of a loop.
- A2 A ZERO SHARPENING DEVICE FOR A BCB LOOP. T. Holmes. If you're having trouble obtaining sharp nulls with a standard loop, this simple device may help. The 1965 forerunner of the Pattern Controlled Loop.
- A3 A VERSATILE LONGWIRE ANTENNA COUPLER, R. Foxworth. How to get the maximum amount of signal from your longwire.
- A4 ROLL YOUR OWN (LOOP THAT IS...), D. Fischer. Loop won't tune the entire band? This article describes what's wrong and how to cure it.
- A5 LOOP DISTORTION: WHY GET SKEWED? G.P. Nelson. Discusses origin on distorted loop patterns. Unique technical material not available elsewhere; a must for those interested in designing MW loop antennas.
- A6 PATTERN CONTROLLED LOOPS, PARTS I & II. G.P. Nelson. Introduction to the theory and practise of pattern controlled and cardiod loops for the MW DXer.
- A7 THE FLORIDA BEVERAGE, J. Conrad. Jerry describes the fantastic results with a Beverage antenna and compares it with others he has used.
- A8 THE CARE AND FEEDING OF A WAVE ANTENNA, J. Starr. Practical construction hints for a Beverage antenna.
- A9 DOWN TO EARTH GROUNDS, G.P. Nelson. Hints on making low resistance ground connections for terminating a Beverage antenna.
- AlO A CALIFORNIA BEVERAGE, Fr. Jack Pejza. Another article describing the spectacular results obtained with a Beverage.
- All THE SUPER SIGNAL SNATCHER, D. Fischer. Article describes the theory of the Beverage antenna. Includes equations, tables, many diagrams.
- Al2 THE VERTICAL PICKUP PATTERN OF THE MW LOOP ANTENNA, G.P. Nelson. Helpful information for those doing horizon blockage experiments with a loop antenna.
- Al3 USING TWO ANTENNAS TO GENERATE ASYMMETRICAL RECEIVING PATTERN. M. Levintow. Shows and describes a simple way to skew your loop's pattern to effect a null that will permit reception of a station impossible to receive on a figure 8 loop antenna by itself. Reading of of reprints A5 and A6 are a requirement for understanding this technique.
- A14 A NEW MEDICAL BREAKTHROUGH FOR LONGWAVE TA'S, C. Clayton. Instructions on how to build an inexpensive loop antenna for LW.
- Al5 REVIEW OF THE DYMEK DA-3 ANTENNA, Pete Taylor, with notes by R. J. Edmunds. Evaluates this recent development in MW antennas and its application to MW DXing.
- A16 MORE ON BEVERAGE ANTENNAS, Wes Boyd. An update on Beverage antenna theory and application.
- Al7 AN FET LOOP PREAMPLIFIER WITH COAXIAL OUTPUT, James Hagan. This article describes a highly effective balancing amplifier for the air core loop, useable with unbalanced receiver inputs, and featuring power tapped from the receiver and switchable attenuation controls to prevent overloading.

- Al8 A WHIP ANTENNA COUPLER FOR USE WITH PORTABLE RECEIVERS, J. Hagan. A simple construction project to inductively couple a whip antenna to the internal ferrite rod in many portable multiband receivers.
- Al9 NEBE: THE NEBRASKA BEVERAGE, D. Fischer, C. Dabelstein, R. Mitchell. A discussion of the Nebraska Beverage and the results of its use.
- A20 THE LSCA-1. Ron Schatz. Complete construction plans for building the Loop Sense Cardioid Array. NOT A PROJECT FOR BEGINNERS! This antenna system is complex to build and operate. Should yield a unidirectional receiving pattern if operated properly.
- A21 A GOOD LOOP IS EASY (AND CHEAP) TO MAKE, J. Tull. Construction plans with photographs for a simple loop amplifier system.
- A22 THE WEDGE ANTENNA. C. Wolff. Plans for construction of a revolutionary alternative to the 4-ft. box loop for those with limited space.
- A23 A STURDY AND EFFECTIVE FLOOR STAND MOUNTING ARRANGEMENT FOR LOOP ANTENNAS. M. Maloney. Article on mounting air core loop antennas.
- A24 A LARGE APERTURE FERRITE CORE LOOP ANTENNA FOR LONG AND MW RECEPTION, J. Hagan. Details and theory for the construction of this new type of DX antenna.
- A25 A NOVEL APPROACH TO BUILDING YOUR OWN BCB LOOP, M. Maloney. New ideas for improvements in ease of operation and sturdiness of loop antennas.
- A26 AN AC POWER SUPPLY FOR THE FET LOOP AMPLIFIER, J. Hagan, R. Edmunds. Tired of the high expense and short lifespan of batteries for your amplified loop? Here is a simple plan, complete with schematic, to adapt your loop amp to wall current.
- A27 SOME THOUGHTS/MORE THOUGHTS ON BEVERAGE ANTENNAS. J. Clements and C. Hutton. Originally two articles, this report gives some valuable additional thoughts on construction and use of the Beverage antenna. Goes well with A7, AlO, All and Al6.
- A28 ANALYSIS OF THE BEVERAGE ANTENNA. C. Hutton. This lengthy article is divided into two parts; the first giving basic theory of the Beverage antenna and the second dealing with two wire phased antennas. Filled with calculations and features 35 illustrations.
- A29 HARLEY LOOP ANTENNA, Harley Steward. This 18-turn spiral loop is very directional. A detailed drawing and construction hints are given.
- A30 REMOTELY TUNED DIRECTIONAL LOOP ANTENNA, E. L. Cummins. This article shows how limitations of a very poor "shack", in this case a mobile home, can be overcome by use of an outdoor, remotely controlled, loop antenna. Mr. Cummins gives many practical points for others wishing to experiment with remote antenna installations.
- A31 SIMPLE CHEAP AND EFFECTIVE PRESELECTOR-LONGWIRE TUNER-AMP, B. Sherwood. This constuction project will result in a device which not only will tune your longwire, but will amplify the signal as well. Schematic and brief instructions are given.
- A32 RADIO WEST LOOP VS. THE SM-2, Mark Connelly. Two commercially available ferrite loop antennas are tested side-by-side for sensitivity, frequency range, nulling, tuning sharpness/selectivity of preamplifier and ease of operation.
- A33 ANTENNAS FOR AM BROADCASTING, Steve Kennedy. This article gives a brief history of early station antenna systems and explains what types are in use today.
- A34 DX'ING WITH THE DX FLIERS, G. Thomas and C. Barfield. Describes the results of experiments using kite supported antennas for MW reception.

#### BOOK REVIEW

#### LIST OF BROADCASTING STATIONS... BELOW 5950 KHz: A REVIEW

MICHAEL S. HARDESTER

On returning to the United States, from Okinawa, my wife and I traveled around the country and one place we visited was the United Nations in New York. While there, I checked out the UN Bookstore, in the basement, which offers ITU publications. I had hoped to pick up a couple of current "Lists" for DX purposes, but was more than a little unhappy to note that the selection was poor and outdated. However, I was able to review some "Lists" which I had heard of, but had no idea of the material contained within. So, it was on this occassion that I had the opportunity to look through a, very, dated copy of the ITU publication entitled List of Broadcasting Stations Operating in the Bands Below 5950 kHz.

After looking through the book, I was convinced it had potential value and decided to purchase a copy from the ITU in Geneva. I waited until the Tenth Edition, February 1979, was available figuring it would have current information including the changes brought about by the November 1978 switch to a 9 kHz frequency allocation...was I ever wrong!

The book, printed in French, English and Spanish, clearly states "The present edition of this list is printed from information recorded in the Master International Frequency Register at 1st February 1979." It went on to mention that a computor had been used in preparation of the material for publication, so I assumed the information would be very current...wrong again.

Before mentioning some of the errors(?) noted, the format should be mentioned. The main section of the book is divided into "countries" based on the ITU abbreviations for countries. Before the main section are 36 pages (12 per language) of instructions on how to use the list. After the main section are 24 pages of explanations from the "Remarks" column. Under each country are ten columns: supposed transmitter site (in alphabetical order); frequency in numerical order for each cit, station call-sign (if any is known); geographic coordinates ("agree/minute); the area of intended coverage (local, all over the country, etc); power output in kilowatts; antenna direction (most are listed as non-directional); sign-on/sign-off times of the stations based on GMT/UTC; the operating agency/company; and remarks.

If the information contained in the publication is taken as accurate, it would provide an excellent source by which transmitter sites of European longwave stations, broadcast band, and shortwave broadcast stations (below 5950 kHz) could be confirmed. Additionally, the dispute over transmitter site, by frequency, could be resolved. However, this would be true only if the information is considered as accurate.

The ITU states the information is from information on file, so it is either the error of the ITU computors or the broadcasting agencies involved which allowed, as examples—and not at all totally inclusive, the following errors to be printed: Fiji listed with shortwave stations active on 3230, 3284, 3935, 3980, 4756 and 4785 kHz; Gilbert Islands with a 2kw transmitter on 4912.5 kHz operating at 0400 to 0700 GMT/UTC; or how about this - Z8W on 3940 kHz, with 2000 watts of non-directional power, from 2200 to 1500 hours GMT/UTC from, are you ready for this?, Hong Kong!! The listings for Ukinawa (Ryukyu Islands), Japan, are at least three years old. I could continue, but this is enough for now.

After reviewing the book, it would appear to have very limited value for most DXers, and at US\$42.00 or so (plus approximately US\$10) it isn't something you add to your reference shelf simply because someone else has one! With the exception of listing all of the coordinates of the stations listed, the remaining information can be found, in a more up-to-date form, in the current World Radio-TV Handbook. If, for whatever reason, you decide you need a copy, it can be ordered direct from the ITU in Geneva. I would, however, suggest you write the ITU to check on the current availability/price plus the surcharge for airmail postage, if desired. And when sending payment (not to advertise), I have found the most widely accepted form of payment, and least expensive, when a personal check will not be accepted is an American Express Money Order.



### RECEIVER REVIEW: SONY ICF-D11W

Jerry H. Neves

A couple of years ago I saw an ad in the magazine called "Asian Electronics Union" for a new Sony portable radio, the ICF-D11W. The ad caught my eye, mainly because of its features such as electronic quartz clock, digital display of the received frequencies, timer, alarm functions, etc.

I wrote to Sony in Tokyo and they advised me that this model would be introduced in the United States market around June. 1979. I purchased my unit in August, 1979. The instruction booklet mentions that this unit has ceramic filters on the FM band and mechanical filters for medium wave. These are non-switchable. The digital display presents the received frequencies (MW and FM) at the touch of a button, then reverts back to its clock function after about 30 seconds. The displayed frequency is displayed again by another touch of the button. The unit can also be turned on at any specific time automatically. It can buzz to awaken you. It also beeps on the hour (one beep for 1:00 o'clock, two beeps for 2:00 o'clock); has a timer that will shut the radio off after 60, 50, 40, 30, 20, down to 10 minutes.

The display has a light at the push of a button for night viewing, a bright red LED for proper station tuning. When the station is properly tuned in, the LED is very bright. It has sliding type tone and volume controls, jacks for tape recording, earphones and external DC power. There are no connections for an outside antenna.

The ICF-D11W is very sensitive and selective on the FM and MW bands. On the MW band it can easily separate stations 10 kHz apart; even powerful locals like XETRA-690 kHz can be separated from local pest KNBR on 680 kHz. I find it compares with my Sony ICF-5900 W as far as sensitivity and selectivity. The FM section is also very good. No images or spurs. All the different buttons are of the soft "touch" type, very smooth. The clock also displays the time that the alarm is set for; day, month, year and of course, the received frequency. All of this are in black LCD display. On FM, the frequency is shown down to 10 kHz and on NW it displays down to 1 kHz. The turning knob is very touchy! One slight touch and you have moved 2 or 3 kHz! However, once you tune a station, the station will not drift 1 kHz.

Overall performance: Very neat little portable. Quite selective and sensitive. Its LCD frequency display, clock and timer features spoil you. I have had a couple of TP's on it this season. I like the idea of having a set that you can have turn itself on automatically at a pre-determined time and pre-determined frequency. It's small and compact, smaller than my TRF. List price is \$199.95 (OUCH!!!). I got mine for \$179.95, still high and over-priced I believe.

Complaints: The frequency display on the NW is off by about 2 kHz at the low end of the band. Not really noticeable when tuning a station, but I'm a nut for accuracy! On rare occasions I will get CW (code) 'images on the MW band, but these are easily tuned out. The push button dial light is very weak for night viewing, but you can get by. No strength meter.

My biggest complaint is the inability of Sony technicians who I contacted to even try to correct the problem of calibration being off 2 kHz on the MW band. One guy told me it met factory specifications and he gave me the usual run-around. Another technician told me the calibration is off by 2 kHz because of station fading!\*!\*! This is not the first time I've had a problem and the Sony personnel look at you as if you are crazy!

Specifications: Semiconductors = 1 LSI, 1 PUT, 1 IC's, 1 FET, 25 transistors, 17 diodes Antenna = FM telescopic, MW internal ferrite bar Speaker = 4 inch dynamic (it has a good sound) Power requirements = Radio - 2 D cells, Clock - 2 AA cells Weight = 3 lbs, 4 oz. Dimensions =  $5\frac{1}{2}$  H x  $10\frac{1}{4}$  W x 2 D. Color = Silver gray metal and plastic Carrying handle is removable.

Jerry H. Neves, 3951 Colby Way, San Bruno, CA 94066 12/1/79

# GRAVEYARD ACHIEVEMENTS

BILL HALE 1451-B FAITH DRIVE RANTOUL. IL 61866

The December edition of Graveyard DX Achievements is presented for your perusement, and in some cases, amusement. This month we spotlight the old favorite, 1340 kc/khz. Some new listings and quite a few updates kept ve olde editor hopping. After this, the deadline for entries is going to be the second to last Thursday of every month. That makes this next deadline December 20th. Let's get on with the achievements...

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KPKJ Edgewater CO  Charles Martin Springfield Garden NY 1725 KGLN Glenwood Springs CO  Gene Allen Vallejo CA 1080 KVRH Salids CO  KCRT Trinidad CO  Norm Maguire Albuquerque NM 200 WNCH Norwich CT  WICH Norwich CT  WROD Daytona Beach FL  WSSR Lake City FL  Gene Allen Vallejo CA 2340 WHORD Advance CT  WROD Atlanta GA  WROTH Maguire East Hartford CT 1015 WSSR Lake City FL  Gene Allen Vallejo CA 2340 WGCH Trinidad CO  Norm Maguire East Hartford CT 1015 WSSR Lake City FL  Gene Allen Vallejo CA 2340 WGCH Trinidad CO  Norm Maguire East Hartford CT 1015 WSSR Lake City FL  Gene Allen Vallejo CA 2340 WGCH Atlanta GA  Norm Maguire East Hartford CT 1095 WGAA Cedartown GA  Norm Maguire East Hartford CT 735 WGAA Cedartown GA  Norm Maguire East Hartford CT 690 WDAK Columbus GA  Norm Maguire East Hartford CT 690 WDAK Columbus GA  Norm Maguire East Hartford CT 670 WWGS Tifton GA  Gene Allen Vallejo CA 2250 KGFM Boise ID Gene Allen Vallejo CA 505 KGFST Preston ID Gene Allen Vallejo CA 625 KLIX Twin Falls ID Norm Maguire Albuquerque NM 640 WSOY Decatur IL Gene Allen Vallejo CA 1810 WGRS Galesburg IL Gene Allen Vallejo CA 1810 WGRS Galesburg IL Gene Allen Vallejo CA 1810 WGRS Galesburg IL Gene Allen Vallejo CA 1810 WGRC Edlen IN Charles Martin Springfield Garden NY 710 WGRC Cadar Rapids IA Charles Martin Springfield Garden NY 710 KFGR Boone IA Charles Martin Springfield Garden NY 710 KFGR Boone IA Charles Martin Springfield Garden NY 710 KFGR Gedar Rapids IA Charles Martin Springfield Garden NY 710 KFGR Gedar Rapids IA Charles Martin Springfield Garden NY 710 KFGR Gedar Rapids IA Charles Martin Springfield Garden NY 710 KFGR Gedar Rapids IA Charles Martin Springfield Garden NY 710 KFGR Gedar Rapids IA Charles Martin Springfield Garden NY 710 KFGR Gene Callen Vallejo CA 7715 KHIL Estherville IA		Santa Rosa CA	Norm Maguire Albuquerque NM	890
KFXJ Edgewater CO  Gene Allen Vallejo CA  S15  KGLMC Clenwood Springs CO  Gene Allen Vallejo CA  S16  KVMH Salida CO  KVMS Sifton CA  KOLIM Maguire East Hartford CT  SOS  KVMS Sifton CA  KOLIM Maguire East Hartford CT  SOS  KVMS Sifton CA  KOLIM Maguire East Hartford CT  SOS  KVMS Sifton CA  KOLIM Maguire East Hartford CT  SOS  KVMS Sifton CA  SOS  KVMS Sovannah GA  NOrm Maguire East Hartford CT  SOS  KVMS Sifton CA  SOS  SOS  SOS  SOS  SOS  SOS  SOS  S		Watsonville CA		
KIMPA Lamar CO Gene Allen Vallejo CA 1080  KVRH Salida CO Gene Allen Vallejo CA 890  KVRH Salida CO Gene Allen Vallejo CA 890  KVRH Trinidad CO Norm Maguire Albuquerque NM 200  WNCH New Haven CT Charles Martin Springfield Garden NY 100  WICH Norwich CT Charles Martin Springfield Garden NY 125  WINX Washington DC Norm Maguire East Hartford CT 270  WROD Daytona Beach FL Norm Maguire East Hartford CT 1015  WISK Lake City FL Gene Allen Vallejo CA 2340  WJCM Sebring FL Norm Maguire East Hartford CT 1095  WGAU Athens GA Charles Martin Springfield Garden NY 690  WHEE Atlanta CA Norm Maguire East Hartford CT 735  WEBQ Augusta CA Norm Maguire East Hartford CT 735  WGAA Cedartown GA Norm Maguire East Hartford CT 690  WDAK Columbus CA Norm Maguire East Hartford CT 690  WDAK Columbus CA Norm Maguire East Hartford CT 670  WWGS Tifton GA Gene Allen Vallejo CA 2250  KCEM Boise ID Gene Allen Vallejo CA 505  KPST Preston ID Gene Allen Vallejo CA 1800  WSOY Decatur IL Gene Allen Vallejo CA 1800  WSOY Decatur IL Gene Allen Vallejo CA 1800  WKBS Galesburg IL Charles Martin Springfield Garden NY 865  WJFF Herrin IL Gene Allen Vallejo CA 1810  WIGH Muncie IN Charles Martin Springfield Garden NY 680  WJAK Marion IN Charles Martin Springfield Garden NY 710  WHOR Terre Haute IN Charles Martin Springfield Garden NY 710  WHOR Cadar Rapids IA Charles Martin Springfield Garden NY 710  WHOR Cadar Rapids IA Charles Martin Springfield Garden NY 710  WHOR Cadar Rapids IA Charles Martin Springfield Garden NY 710  KROS Clinton IA Charles Martin Springfield Garden NY 710  KROS Clinton IA Charles Martin Springfield Garden NY 710  KROS Clinton IA Charles Martin Springfield Garden NY 710  KROS Clinton IA Charles Martin Springfield Garden NY 710  MED Terre Haute IN Charles Martin Springfield Garden NY 710  MERC Edar Rapids IA Charles Martin Springfield Garden NY 710  MERC Cadar Rapids IA Charles Martin Springfield Garden NY 710  MERC Cadar Rapids IA Charles Martin Springfield Garden NY 7105  MERC Cadar Rapids IA Charles Martin Springfield Garden NY 7		Denver CO		
KIMPA Lamar CO Gene Allen Vallejo CA 1080  KVRH Salida CO Gene Allen Vallejo CA 890  KVRH Salida CO Gene Allen Vallejo CA 890  KVRH Trinidad CO Norm Maguire Albuquerque NM 200  WNCH New Haven CT Charles Martin Springfield Garden NY 100  WICH Norwich CT Charles Martin Springfield Garden NY 125  WINX Washington DC Norm Maguire East Hartford CT 270  WROD Daytona Beach FL Norm Maguire East Hartford CT 1015  WISK Lake City FL Gene Allen Vallejo CA 2340  WJCM Sebring FL Norm Maguire East Hartford CT 1095  WGAU Athens GA Charles Martin Springfield Garden NY 690  WHEE Atlanta CA Norm Maguire East Hartford CT 735  WEBQ Augusta CA Norm Maguire East Hartford CT 735  WGAA Cedartown GA Norm Maguire East Hartford CT 690  WDAK Columbus CA Norm Maguire East Hartford CT 690  WDAK Columbus CA Norm Maguire East Hartford CT 670  WWGS Tifton GA Gene Allen Vallejo CA 2250  KCEM Boise ID Gene Allen Vallejo CA 505  KPST Preston ID Gene Allen Vallejo CA 1800  WSOY Decatur IL Gene Allen Vallejo CA 1800  WSOY Decatur IL Gene Allen Vallejo CA 1800  WKBS Galesburg IL Charles Martin Springfield Garden NY 865  WJFF Herrin IL Gene Allen Vallejo CA 1810  WIGH Muncie IN Charles Martin Springfield Garden NY 680  WJAK Marion IN Charles Martin Springfield Garden NY 710  WHOR Terre Haute IN Charles Martin Springfield Garden NY 710  WHOR Cadar Rapids IA Charles Martin Springfield Garden NY 710  WHOR Cadar Rapids IA Charles Martin Springfield Garden NY 710  WHOR Cadar Rapids IA Charles Martin Springfield Garden NY 710  KROS Clinton IA Charles Martin Springfield Garden NY 710  KROS Clinton IA Charles Martin Springfield Garden NY 710  KROS Clinton IA Charles Martin Springfield Garden NY 710  KROS Clinton IA Charles Martin Springfield Garden NY 710  MED Terre Haute IN Charles Martin Springfield Garden NY 710  MERC Edar Rapids IA Charles Martin Springfield Garden NY 710  MERC Cadar Rapids IA Charles Martin Springfield Garden NY 710  MERC Cadar Rapids IA Charles Martin Springfield Garden NY 7105  MERC Cadar Rapids IA Charles Martin Springfield Garden NY 7		Edgewater CO	Charles Martin Springfield Garden NY	1725
KURH Salida CO  KURH Trinidad CO  KURH Trinidad CO  KURH Trinidad CO  KURH Salida CO  KURH Salida CO  KURH Salida CO  KURH Trinidad CO  KURH Salida CO  KURH S	KGLN	Glenwood Springs CO	Gene Allen Vallejo CA	815
KVRH Salida CO  KCRT Trinidad CO  MNCH New Haven CT  Charles Martin Springfield Garden NY  100  WICH Norwich CT  Charles Martin Springfield Garden NY  125  WINX Washington DC  MROD Daytona Beach FL  WIST  Lake City FL  WIST  MCAU  Athens GA  Charles Martin Springfield Garden NY  125  WEGA  Atlanta GA  Norm Maguire East Hartford CT  1095  WEGA  Atlanta GA  Norm Maguire East Hartford CT  1095  WEGA  Atlanta GA  Norm Maguire East Hartford CT  1095  WEGA  Atlanta GA  Norm Maguire East Hartford CT  1095  WEGA  Atlanta GA  Norm Maguire East Hartford CT  1095  WEGA  Atlanta GA  Norm Maguire East Hartford CT  1095  WEGA  Columbus GA  Norm Maguire East Hartford CT  1096  WEGA  WEGA  Columbus GA  Norm Maguire East Hartford CT  1096  WEGA  WEGA  Columbus GA  Norm Maguire East Hartford CT  1096  WEGA  Savannah GA  Norm Maguire East Hartford CT  1097  WIGS  Tifton GA  Gene Allen Vallejo CA  1096  KEFM  Preston ID  Gene Allen Vallejo CA  1096  WEGS  Trin Falls ID  Gene Allen Vallejo CA  1096  WEGS  Galesburg IL  Gene Allen Vallejo CA  1097  WEGS  MIST  Galesburg IL  Charles Martin Springfield Garden NY  1000  WEGS  MIST  Gene Allen Vallejo CA  1000  WEGS  Galesburg IL  Charles Martin Springfield Garden NY  1000  WEGS  MIST	KLMR		Gene Allen Vallejo CA	1080
WICH Norwich CT  Washington DC  Norm Maguire East Hartford CT  270  WROD  Daytona Beach FL  Norm Maguire East Hartford CT  1015  WISH  Sebring FL  Norm Maguire East Hartford CT  1025  WGAU  Athens GA  Charles Martin Springfield Garden NY  690  WBCE  Atlanta GA  Norm Maguire Albuquerque NM  1275  WEBQ, Augusta GA  Norm Maguire East Hartford CT  735  WGAA  Cedartown GA  Norm Maguire East Hartford CT  735  WGAA  Columbus GA  Norm Maguire East Hartford CT  690  WDAK  Columbus GA  Norm Maguire East Hartford CT  690  WDAK  Columbus GA  Norm Maguire East Hartford CT  670  WGCS  Tifton GA  Gene Allen Vallejo CA  KEEM  Boise ID  Gene Allen Vallejo CA  KEEN  Gene Allen Vallejo CA  SOS  WKBS  Galesburg IL  Gene Allen Vallejo CA  SOS  WKBS  Galesburg IL  Charles Martin Springfield Garden NY  685  WJAK  Marion IN  Charles Martin Springfield Garden NY  680  WHOR  Tifton GA  Charles Martin Springfield Garden NY  685  WJAK  Marion IN  Charles Martin Springfield Garden NY  680  Charles Martin Springfield Garden NY  680  WHOR  Tifton GA  Charles Martin Springfield Garden NY  680  WHOR  WHOR  Tifton GA  Charles Martin Springfield Garden NY  680  WKBS  Galesburg IL  Charles Martin Springfield Garden NY  680  WHOR  WHOR  Till Gene Allen Vallejo CA  1810  Charles Martin Springfield Garden NY  710  Charles Martin Springfield Garden NY	KVRH	Salida CO	Gene Allen Vallejo CA	890
WICH Norwich CT  Washington DC  Norm Maguire East Hartford CT  270  WROD  Daytona Beach FL  Norm Maguire East Hartford CT  1015  WISH  Sebring FL  Norm Maguire East Hartford CT  1025  WGAU  Athens GA  Charles Martin Springfield Garden NY  690  WBCE  Atlanta GA  Norm Maguire Albuquerque NM  1275  WEBQ, Augusta GA  Norm Maguire East Hartford CT  735  WGAA  Cedartown GA  Norm Maguire East Hartford CT  735  WGAA  Columbus GA  Norm Maguire East Hartford CT  690  WDAK  Columbus GA  Norm Maguire East Hartford CT  690  WDAK  Columbus GA  Norm Maguire East Hartford CT  670  WGCS  Tifton GA  Gene Allen Vallejo CA  KEEM  Boise ID  Gene Allen Vallejo CA  KEEN  Gene Allen Vallejo CA  SOS  WKBS  Galesburg IL  Gene Allen Vallejo CA  SOS  WKBS  Galesburg IL  Charles Martin Springfield Garden NY  685  WJAK  Marion IN  Charles Martin Springfield Garden NY  680  WHOR  Tifton GA  Charles Martin Springfield Garden NY  685  WJAK  Marion IN  Charles Martin Springfield Garden NY  680  Charles Martin Springfield Garden NY  680  WHOR  Tifton GA  Charles Martin Springfield Garden NY  680  WHOR  WHOR  Tifton GA  Charles Martin Springfield Garden NY  680  WKBS  Galesburg IL  Charles Martin Springfield Garden NY  680  WHOR  WHOR  Till Gene Allen Vallejo CA  1810  Charles Martin Springfield Garden NY  710  Charles Martin Springfield Garden NY	KCRT	marine 2 3 - 3 CO	Norm Maguire Albuquerque NM	200
WICH	WNCH		Charles Martin Springfield Garden NY	100
WINX Washington DC WROD Daytona Beach FL WROD Daytona Beach FL Norm Maguire East Hartford CT 1015 WSCAL WJCM Sebring FL Norm Maguire East Hartford CT 1095 WGAU WHOD Atlanta GA Norm Maguire East Hartford CT 1095 WGAA Cedartown GA WGAA Cedartown GA WSAV Savannah GA WGAA Norm Maguire East Hartford CT 1096 WGAA Cedumbus GA Norm Maguire East Hartford CT 1097 WGAA Cedartown GA Norm Maguire East Hartford CT 1098 WGAA Cedartown GA Norm Maguire East Hartford CT 1099 WGAA Cedartown GA Norm Maguire East Hartford CT 1099 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire East Hartford CT 1090 WGAA Cedartown GA Norm Maguire Albuquerque NM 1015 WGAA Cedartown GA Norm Maguire Albuquerque NM 1021 WGAA Cedartown GA 1090 NORM Martin Springfield Garden NY 1000 WGAA Cedar Rapids IA Charles Martin Springfield Garden NY 1000 WGAA Cedar Rapids IA Charles Martin Springfield Garden NY 1001 WGAA Cedar Rapids IA Charles Martin Springfield Garden NY 1005 Cedar Rapids IA Charles Martin Springfield Garden NY 1006 WGAA Cedar Rapids IA Charles Martin Springfield Garden NY 1007 WGAA Cedar Rapids IA Norm Maguire Albuquerque NM 1001 WGAA Cedar Rapids IA Norm Maguire Albuquerque NM 1001 WGAA Cedar Rapids IA Norm Maguire Albuquerque NM		The second secon	Charles Martin Springfield Carden NV	125
WROD         Daytona Beach FL         Norm Maguire         East Hartford CT         1015           WIDKR         Lake City FL         Gene Allen Vallejo CA         2340           WICM         Sebring FL         Norm Maguire East Hartford CT         1095           WGAU         Athens GA         Charles Martin Springfield Garden NY         690           WBCE         Atlanta GA         Norm Maguire Albuquerque NM         1275           WBAQ         Augusta GA         Norm Maguire East Hartford CT         690           WDAK         Columbus GA         Norm Maguire East Hartford CT         690           WSAV         Savannah GA         Norm Maguire East Hartford CT         690           WGS         Tifton GA         Gene Allen Vallejo CA         2250           KGEM         Boise ID         Gene Allen Vallejo CA         505           KGEM         Boise ID         Gene Allen Vallejo CA         625           KKLIX         Twin Falls ID         Norm Maguire Albuquerque NM         640           WSOY         Decatur IL         Gene Allen Vallejo CA         1800           WKBS         Galesburg IL         Charles Martin Springfield Garden NY         865           WJFF Herrin IL         Gene Allen Vallejo CA         1840		Washington DC	Norm Maguire Fast Hartford CT	270
WISM Sebring FL  Norm Maguire East Hartford CT  1095 WGAU Athens GA  Athens GA  Charles Martin Springfield Garden NY  690 WBCE  Atlanta GA  Norm Maguire Albuquerque NM  1275 WEBQ  Augusta GA  Norm Maguire East Hartford CT  735 WGAA  Cedartown GA  Norm Maguire East Hartford CT  690 WDAK  Columbus GA  Norm Maguire East Hartford CT  805 WSAV  Savannah GA  Norm Maguire East Hartford CT  670 WWGS  Tifton GA  Gene Allen Vallejo CA  Cene Allen Vallejo CA  625 KLIX  Twin Falls ID  Morm Maguire Albuquerque NM  640 WKSS  Galesburg IL  Gene Allen Vallejo CA  Sobsett Columbus GA  WKBS  Galesburg IL  Charles Martin Springfield Garden NY  865 WJFF  Herrin IL  Gene Allen Vallejo CA  Tifton GA  Gene Allen Vallejo CA  WKBS  Galesburg IL  Charles Martin Springfield Garden NY  865 WJFF  Herrin IL  Gene Allen Vallejo CA  Tifton GA  Gene Allen Vallejo CA  WKBS  Galesburg IL  Charles Martin Springfield Garden NY  865 WJFF  Herrin IL  Gene Allen Vallejo CA  Tifton GA  Charles Martin Springfield Garden NY  MIBC  WIRC  Elkhart IN  Gene Allen Vallejo CA  Tifton GA  Charles Martin Springfield Garden NY  Titon Gene Gallen Ny  Titon Gallen Ny  Titon Gene		Paytone Reach FL	Norm Magnine Fast Heatford CM	1015
WBBQ         Augusta GA         Norm Maguire         East Hartford CT         735           WGAA         Cedartown GA         Norm Maguire         East Hartford CT         690           WDAK         Columbus GA         Norm Maguire         East Hartford CT         805           WSAV         Savannah GA         Norm Maguire         East Hartford CT         670           WWGS         Tifton GA         Gene Allen Vallejo CA         2250           KEFM         Preston ID         Gene Allen Vallejo CA         625           KLIX         Twin Falls ID         Norm Maguire         Albuquerque NM         640           WSOY         Decatur IL         Gene Allen Vallejo CA         1800           WKBS         Galesburg IL         Charles Martin Springfield Garden NY         865           WJOL         Joliet IL         Gene Allen Vallejo CA         1810           WJOL         Joliet IL         Gene Allen Vallejo CA         1840           WTRC         Elkhart IN         Gene Allen Vallejo CA         1940           WLBC         Muncie IN         Charles Martin Springfield Garden NY         680           WJAK         Marion IN         Charles Martin Springfield Garden NY         730           KFGR         Boone IA			Come Aller Weller CA	1015
WBBQ         Augusta GA         Norm Maguire         East Hartford CT         735           WGAA         Cedartown GA         Norm Maguire         East Hartford CT         690           WDAK         Columbus GA         Norm Maguire         East Hartford CT         805           WSAV         Savannah GA         Norm Maguire         East Hartford CT         670           WWGS         Tifton GA         Gene Allen Vallejo CA         2250           KEFM         Preston ID         Gene Allen Vallejo CA         625           KLIX         Twin Falls ID         Norm Maguire         Albuquerque NM         640           WSOY         Decatur IL         Gene Allen Vallejo CA         1800           WKBS         Galesburg IL         Charles Martin Springfield Garden NY         865           WJOL         Joliet IL         Gene Allen Vallejo CA         1810           WJOL         Joliet IL         Gene Allen Vallejo CA         1840           WTRC         Elkhart IN         Gene Allen Vallejo CA         1940           WLBC         Muncie IN         Charles Martin Springfield Garden NY         680           WJAK         Marion IN         Charles Martin Springfield Garden NY         730           KFGR         Boone IA			Weene Alien vallejo CA	2340
WBBQ         Augusta GA         Norm Maguire         East Hartford CT         735           WGAA         Cedartown GA         Norm Maguire         East Hartford CT         690           WDAK         Columbus GA         Norm Maguire         East Hartford CT         805           WSAV         Savannah GA         Norm Maguire         East Hartford CT         670           WWGS         Tifton GA         Gene Allen Vallejo CA         2250           KEFM         Preston ID         Gene Allen Vallejo CA         625           KLIX         Twin Falls ID         Norm Maguire         Albuquerque NM         640           WSOY         Decatur IL         Gene Allen Vallejo CA         1800           WKBS         Galesburg IL         Charles Martin Springfield Garden NY         865           WJOL         Joliet IL         Gene Allen Vallejo CA         1810           WJOL         Joliet IL         Gene Allen Vallejo CA         1840           WTRC         Elkhart IN         Gene Allen Vallejo CA         1940           WLBC         Muncie IN         Charles Martin Springfield Garden NY         680           WJAK         Marion IN         Charles Martin Springfield Garden NY         730           KFGR         Boone IA			Norm Maguire East Hartford CF	1095
WBBQ         Augusta GA         Norm Maguire         East Hartford CT         735           WGAA         Cedartown GA         Norm Maguire         East Hartford CT         690           WDAK         Columbus GA         Norm Maguire         East Hartford CT         805           WSAV         Savannah GA         Norm Maguire         East Hartford CT         670           WWGS         Tifton GA         Gene Allen Vallejo CA         2250           KEFM         Preston ID         Gene Allen Vallejo CA         625           KLIX         Twin Falls ID         Norm Maguire         Albuquerque NM         640           WSOY         Decatur IL         Gene Allen Vallejo CA         1800           WKBS         Galesburg IL         Charles Martin Springfield Garden NY         865           WJOL         Joliet IL         Gene Allen Vallejo CA         1810           WJOL         Joliet IL         Gene Allen Vallejo CA         1840           WTRC         Elkhart IN         Gene Allen Vallejo CA         1940           WLBC         Muncie IN         Charles Martin Springfield Garden NY         680           WJAK         Marion IN         Charles Martin Springfield Garden NY         730           KFGR         Boone IA			Charles Martin Springfield Garden NY	690
WGAA Columbus GA Norm Maguire East Hartford CT 690 WDAK Columbus GA Norm Maguire East Hartford CT 690 WDAK Columbus GA Norm Maguire East Hartford CT 670 WSAY Savannah GA Norm Maguire East Hartford CT 670 WGGS Tifton GA Gene Allen Vallejo CA 2250 KGEM Boise ID Gene Allen Vallejo CA 505 KFST Preston ID Gene Allen Vallejo CA 625 KLIX Twin Falls ID Norm Maguire Albuquerque NM 640 WSOY Decatur IL Gene Allen Vallejo CA 1800 WKBS Galesburg IL Charles Martin Springfield Garden NY 865 WJFH Herrin IL Gene Allen Vallejo CA 1810 WJOL Joliet IL Gene Allen Vallejo CA 1840 WTRC Elkhart IN Gene Allen Vallejo CA 1940 WLBC Muncie IN Charles Martin Springfield Garden NY 680 WJAK Marion IN Charles Martin Springfield Garden NY 710 KFGR Boone IA Charles Martin Springfield Garden NY 730 KFGR Boone IA Charles Martin Springfield Garden NY 730 KFGR Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KKROS Clinton IA Gene Allen Vallejo CA 1715 KROS Clinton IA Gene Allen Vallejo Ga 1715 KROS Clinton IA Gene Allen Vallejo Ga 1715 KROS Clinton IA Gene Allen Vallejo CA 1715 KLIL Estherville IA Norm Maguire Albuquerque NM 815		Atlanta GA	Norm Maguire Albuquerque NM	1275
WGS Tifton GA Gene Allen Vallejo CA 2250 KGEM Boise ID Gene Allen Vallejo CA 505 KFST Preston ID Gene Allen Vallejo CA 625 KKLIX Twin Falls ID Norm Maguire Albuquerque NM 640 WSOY Decatur IL Gene Allen Vallejo CA 1800 WKBS Galesburg IL Charles Martin Springfield Garden NY 865 WJFF Herrin IL Gene Allen Vallejo CA 1810 WTRC Elkhart IN Gene Allen Vallejo CA 1840 WTRC Elkhart IN Gene Allen Vallejo CA 1940 WIBC Muncie IN Charles Martin Springfield Garden NY 680 WJAK Marion IN Charles Martin Springfield Garden NY 710 WFOW Terre Haute IN Charles Martin Springfield Garden NY 710 KFGR Boone IA Charles Martin Springfield Garden NY 730 KFGR Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030		Augusta GA	Norm Maguire East Hartford CT	735
WGS Tifton GA Gene Allen Vallejo CA 2250 KGEM Boise ID Gene Allen Vallejo CA 505 KFST Preston ID Gene Allen Vallejo CA 625 KKLIX Twin Falls ID Norm Maguire Albuquerque NM 640 WSOY Decatur IL Gene Allen Vallejo CA 1800 WKBS Galesburg IL Charles Martin Springfield Garden NY 865 WJFF Herrin IL Gene Allen Vallejo CA 1810 WTRC Elkhart IN Gene Allen Vallejo CA 1840 WTRC Elkhart IN Gene Allen Vallejo CA 1940 WIBC Muncie IN Charles Martin Springfield Garden NY 680 WJAK Marion IN Charles Martin Springfield Garden NY 710 WFOW Terre Haute IN Charles Martin Springfield Garden NY 710 KFGR Boone IA Charles Martin Springfield Garden NY 730 KFGR Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030	WGAA	Cedartown GA	Norm Maguire East Hartford CT	690
WGS Tifton GA Gene Allen Vallejo CA 2250 KGEM Boise ID Gene Allen Vallejo CA 505 KFST Preston ID Gene Allen Vallejo CA 625 KKLIX Twin Falls ID Norm Maguire Albuquerque NM 640 WSOY Decatur IL Gene Allen Vallejo CA 1800 WKBS Galesburg IL Charles Martin Springfield Garden NY 865 WJFF Herrin IL Gene Allen Vallejo CA 1810 WTRC Elkhart IN Gene Allen Vallejo CA 1840 WTRC Elkhart IN Gene Allen Vallejo CA 1940 WIBC Muncie IN Charles Martin Springfield Garden NY 680 WJAK Marion IN Charles Martin Springfield Garden NY 710 WFOW Terre Haute IN Charles Martin Springfield Garden NY 710 KFGR Boone IA Charles Martin Springfield Garden NY 730 KFGR Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030 KWCC Cedar Rapids IA Charles Martin Springfield Garden NY 1030	WDAK	Columbus GA	Norm Maguire East Hartford CT	805
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KROS Clinton IA Gene Allen Vallejo CA 1715 KLIL Estherville IA Norm Maguire Albuquerque NM 815			Charles Martin Springfield Garden NY	1005
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(34)						W. W. Jan. Bart Wart Card CM	
	Dodge City KS	Norm Maguire Albuquerque NM	395		Johnstown PA	Norm Maguire East Hartford CT Charles Martin Springfield Garden NY	330 135
	Kansas City KS	Gene Allen Vallejo CA	1500		Lancaster PA Oil City PA	Norm Maguire East Hartford CT	350
	Pittsburg KS Ashland KY	Norm Maguire East Hartford CT	1145		Philadelphia PA	Norm Maguire East Hartford CT	155
	Bowling Green KY	Gene Allen Vallejo CA	2150		Reading PA	Norm Maguire East Hartford CT	125
	Hazard KY	Norm Maguire Albuquerque NM	1120		Wilkes-Barre PA	Norm Maguire East Hartford CT	165
	Richmond KY	Pete Taylor Durham NC	250		Charleston SC	Gene Allen Vallejo CA	2400
	Lexington KY	Pete Taylor Durham NC Norm Maguire East Hartford CT	300	WRHI	Rock Hill SC	Norm Maguire East Hartford CT	580
	Lafayette LA	Norm Maguire East Hartford CT	630 1265		Sumter SC	Gene Allen Vallejo CA	2360
	Shreveport LA	Gene Allen Vallejo CA	1660		Huron SD	Norm Maguire Albuquerque NM	640 1400
	Augusta ME	Charles Martin Springfield Garden NY	295	KRSD	Rapid City SD	Ralph Sperry Fairfield CT Norm Maguire East Hartford CT	775
	Fitchburg MA	Norm Maguire Albuquerque NM	1900	WBAC	Cleveland TN	Norm Maguire East Hartford CT	835
	Gardner MA	Gene Allen Vallejo CA	2670		Columbia TN Greenville TN	Norm Maguire East Hartford CT	645
	New Bedford MA Pittsfield MA	Charles Martin Springfield Garden NY	190		Jackson TN	Norm Maguire East Hartford CT	975
	Flint MI	Charles Martin Springfield Garden NY	165		Knoxville TN	Gene Allen Vallejo CA	2130
	Grand Rapids MI	Charles Martin Springfield Garden NY	535		Memphis TN	Gene Allen Vallejo CA	1810
	Hillsdale MI	Norm Maguire East Hartford CT	635		Union City TN	Charles Martin Springfield Garden NY	795
	Marquette MI	Frank Wheeler Erie PA	230		Winchester TN	Frank Wheeler Erie PA	575
	Royal Oak MI	Norm Maguire East Hartford CT Gene Allen Vallejo CA	720		Abilene TX	Charles Martin Springfield Garden NY	1600
	Moorhead MN	Gene Allen Vallejo CA	2090	KAND	Corsicana TX	Charles Martin Springfield Garden NY	1625
	Rochester MN	Gene Allen Vallejo CA	1440 1610	KFPL	Dublin TX	Charles Martin Springfield Garden NY	1595
KWIM	Wilmar MN	Norm Maguire Albuquerque NM	1065	KDAH	El Paso TX	Charles Martin Springfield Garden NY	1895 525
	Columbus MS	Gene Allen Vallejo CA	1930		Fredericksburg TX	Norm Maguire Albuquerque NM	1500
	Greenville MS	Norm Maguire Albuquerque NM	1120		Greenville TX	Charles Martin Springfield Garden NY Norm Maguire Albuquerque NM	705
	Laurel MS	Gene Allen Vallejo CA	1935	KFRO	Longview TX Lubbock TX	Norm Maguire East Hartford CT	1640
	Hannibal MO	Norm Maguire Albuquerque NM	835	KFYO	Monahans TX	Norm Maguire Albuquerque NM	325
	Jefferson City MO Mexico MO	Norm Maguire East Hartford CT	1000	KPDN	Pampa TX	Norm Maguire East Hartford CT	1540
	Poplar Bluff MO	Norm Maguire Albuquerque NM	820		Port Arthur TX	Gene Allen Vallejo CA	1730
	St Joseph MO	Norm Maguire East Hartford MO	970	KTXL	San Angelo TX	Gene Allen Vallejo CA	1330
	Springfield MO	Charles Martin Springfield Garden NY Gene Allen Vallejo CA	1125.		Sherman TX	Norm Maguire East Hartford CT	1365
	Helena MT	Norm Maguire Albuquerque NM	1575	KVIC	Victoria TX	Gene Allen Vallejo CA	1600
	Kalispell MT	Charles Martin Springfield Garden NY	850	KSUB	Cedar City UT	Norm Maguire East Hartford CT	
	Livingston MT	Gene Allen Vallejo CA	2390 810	KJAM	Vernal UT	Gene Allen Vallejo CA	710
KPRK	Miles City MT	Pete Taylor Durham NC	1650	WTWN	St Johnsbury VT	Frank Wheeler Erie PA	430
	Missoula MT	Gene Allen Vallejo CA	745	WHAP	Hopewell VA	Norm Maguire Albuquerque NM	1595 1545
	Wolf Point MT	Charles Martin Springfield Garden NY	2165	WJMA	Orange VA	Norm Maguire Albuquerque NM Norm Maguire Albuquerque NM	
	Fremont NE	Norm Maguire Albuquerque NM	650	WGH	Newport News VA	Norm Maguire Albuquerque NM Charles Martin Springfield Garden NY	- 0 -
KGFW		Charles Martin Springfield Garden NY	1615	KXRO KPRW	Aberdeen WA Pasco WA	Ron Schiller Avenel NJ	2700
	Sidney NE	Norm Maguire Albuquerque NM	455	KAPA	Raymond WA	Hank Holbrook Chevy Chase MD	
KORK	Elko NV Las Vegas NV	Gene Allen Vallejo CA	395		Spokane WA	Gene Allen Vallejo CA	
	Reno NV	Norm Maguire Albuquerque NM	470	KMEL	Wenatchee WA	Norm Maguire Albuquerque NM	1110
	Laconia NH	Norm Maguire Albuquerque NM Charles Martin Springfield Garden NY	790	KIT	Yakima WA	Charles Martin Springfield Garden NY	2910
	Atlantic City NJ	Norm Maguire East Hartford CT	250	WHAR	Clarksburg WV	Norm Maguire Albuquerque NM	1570
	Albuquerque NM	Norm Maguire Albuquerque NM	165	KOWB	Laramie WY	Gene Allen Vallejo CA	925
	Aztec NM	Norm Maguire Albuquerque NM	160	MON	Montgomery WV	Gene Allen Vallejo CA	2330
	Sante Fe NM	Norm Maguire East Hartford CT	1790		Milwaukee WI	Gene Allen Vallejo CA	1840 1455
KSIL		Gene Allen Vallejo CA	875	WFHR		Gene Allen Vallejo CA Norm Maguire East Hartford CT	1645
	Auburn NY	Norm Maguire East Hartford CT	300		Mayaguez PR	Gene Allen Vallejo CA	730
	Buffalo NY	Charles Martin Springfield Garden NY	375		Victoria BC Saskatoon SA	Gene Allen Vallejo CA	1250
	Gloversville NY Massena NY	Charles Martin Springfield Garden NY	190		Mexicali BCN	Gene Allen Vallejo CA	545
	Middletown NY	Charles Martin Springfield Garden NY	395	ALIANA	Heartonia Don		O TINE
	Plattsburg NY	Frank Wheeler Erie PA Charles Martin Springfield Garden NY	295		1340*** 0	on or After January 1, 1960 *** 1340	
	Lenoir NC	Norm Maguire East Hartford CT	375	WYOR	Florence AL	Robert Kramer Chicago IL	490
	Oxford NC	Frank Wheeler Erie PA	585 415		Sylacauga AL	Robert Kramer Chicago IL	615
WHED	Washington NC	Gene Allen Vallejo CA	2530		Miami AZ	Gene Allen Vallejo CA	725
	Wilmington NC	Norm Maguire East Hartford CT	570		Page AZ	Rick Carr Bloomington IL	1250
	Wilson NC	Norm Maguire East Hartford CT	490		Batesville AR	Wayne Heinen Colorado Springs CO	760
WSJS	Winston-Salem NC	Norm Maguire East Hartford CT	540		Hot Springs AR	Carl Dabelstein Lincoln NE	470 640
	Grafton ND	Dan Phillips Cookeville TN	1070		Springdale AR	Don Davis Warner Robins GA Gene Allen Vallejo CA	215
	Ashland OH Springfield OH	Norm Maguire Albuquerque NM	1350	KATA	Arcata CA	Gene Allen Vallejo CA	455
	Steubenville OH	Gene Allen Vallejo CA	2065		Cathedral City CA	Gene Nix Billings MT	825
	Hugo OK	Norm Maguire Albuquerque NM Norm Maguire Albuquerque NM	1420		Fresno CA Mojave CA	Gene Allen Vallejo CA	310
According to the Control of the Cont	Oklahoma City OK	Gene Allen Vallejo CA	615 1390	KAOR		Gene Allen Vallejo CA	100
	Tulsa OK	Norm Maguire East Hartford CT	1295	KDEN	Denver CO	Carl Dabelstein Omaha NE	480
KBND	Bend OR	Gene Allen Vallejo CA	420		Grand Junction CO	Bill Hardy Aberdeen WA	845
	Corvallis OR	Norm Maguire Albuquerque NM	1100		New Haven CT	George Santulli Cranford NJ	80
	Grants Pass OR	Norm Maguire Albuquerque NM	1045		Washington DC	Konstantine Rychalsky Bridgeport CT	250
	Hood River OR	Stan Morss Bradford MA	2400		Clearwater FL	Alan Imprescia New York NY	1000
	Medford OR North Bend OR	Charles Martin Springfield Garden NY	2400		Daytona Beach FL	Andy Rugg Montreal PQ Ernest Wesolowski Omaha NE	1210 880 <sub>tie</sub>
	Altoona PA	Don Kaskey Omaha NE	1435	WTYS	Marianna FL	Robert Kramer Chicago IL	880
	Grove City PA	Norm Maguire East Hartford CT Norm Maguire East Hartford CT	300	LIDTO	Dalm Dasah DT	Ernie Cooper Provincetown MA	
		THE THE PROPERTY OF	370	WIBR	Palm Beach FL	CALLED SOME TO SELECT THE RESERVE OF THE SELECT THE SELECT OF THE SELECT	orth sixth

WOKE Charleston SC

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WGAU	Athens GA	George Santulli Cranford NJ	100
WIGO	Atlanta GA	Robert Kramer Chicago IL	675
WBBQ.	Augusta GA	Russ Edmunds Parsippany NJ	595
WOKS	Columbus GA	Robert Kramer Chicago IL	745 635
KSKI	Hailey/Sun Valley ID	Gene Allen Vallejo CA	575
KAIN	Nampa ID	Gene Allen Vallejo CA	490
WSOY	Decatur IL	Carl Dabelstein Lincoln NE	400 -
WJPF	Herrin IL	George Santulli Cranford NJ	800tie
		Russ Edmunds Parsippany NJ	800 tie
WJOL	Joliet IL	Carl Dabelstein Lincoln NE	440
WBIW	Bedford IN	John Buehler Toledo OH	270
WTRC	Elkhart IN	George Santulli Cranford NJ	605
WLBC	Muncie IN	Carl Dabelstein Lincoln NE	580-
KROS	Clinton IA	Carl Dabelstein Lincoln NE	330
KCKN	Kansas City KS	Carl Dabelstein Omaha NE	205tie
PODE	Dittahum VC	Dave Margritz Omaha NE	205
KSEK	Pittsburg KS	COLL PERSONNEL OFFICER OF	810
WBGN	Ashland KY Bowling Green KY	Harry Hayes Gouldsboro PA Carl Dabelstein Omaha NE	410
WNBS	Murray KY	THE PERSON OF TH	585 -
WEKY	Richmond KY	George Santulli Cranford NJ George Santulli Cranford NJ	820
KVOB	Bastrop LA	Rick Carr Austin TX	575
KRMD	Shreveport LA	Frank Wheeler Erie PA	390
WNBH	New Bedford MA	Dave Yocis Fairfield CT	135
WBRK	Pittsfield MA	Dave Yocis Fairfield CT	65
WLEW	Bad Axe MI	Morris Sorensen Emsdale ON	215
WLAV	Grand Rapids MI	Bruce Conti West Warwick RI	780
WCSR	Hillsdale MI	George Santulli Cranford NJ	575
WMTE	Manistee MI	Dave Yocis East Lansing MI	135
WAGN	Menominee MI	Russ Edmunds Parsippany NJ	820
WEXT	Royal Oak MI	George Santulli Cranford NJ	480
KVBR	Brainerd MN	Jerry Starr Hubbard OH	760
KDLM	Detroit Lakes MN	Andy Rugg Waterloo ON	775
WEVE	Eveleth MN	Morris Sorensen Leaf Rapids MB	710
KROC	Rochester MN	Carl Dabelstein Lincoln NE	300
KLID	Mexico MO Poplar Bluff MO	Andy Rugg Montreal PQ	1010
KSMO	Salem MO	Jeff Kosnett Chicago IL	385
KICK	Springfield MO	Rich Eddie St Louis MO Carl Dabelstein Omaha NE	110
	DPILLE IN	Dave Margritz Omaha NE	320 320 <sup>tie</sup>
KCAP	Helena MT	Nancy Hardy Aberdeen WA	490
KPRK	Livingston MT	Forest Osborn Hooker OK	775
KATL	Miles City MT	Carl Dabelstein Omaha NE	585
KYLT	Missoula MT	Gene Allen Vallejo CA	745
KHUB	Fremont NE	Carl Dabelstein Lincoln NE	40
KGFW	Kearny NE	Carl Dabelstein Omaha NE	165
KSID	Sidney NE	Carl Dabelstein Omaha NE	360
KRAM	Las Vegas NV	Bill Hardy Aberdeen WA	785
KBET	Reno NV	Gene Allen Vallejo CA	165
WDCR	Hanover NH Atlantic City NJ	Rich Eddie St Louis MO	1015
WMID	arramentary out of the	Debra Hidden Orlando FL	860
KHAP	Aztec NM Silver City NM		790
KKIT	Silver City NM Taos NM	Robert Wien San Jose CA	830
WENT	Gloversville NY	Robert Wien San jose CA George Santulli Cranford NJ	900
WKSN	Jamestown NY	George Santulli Cranford NJ	160
WUSJ	Lockport NY	Carl Dabelstein Lincoln NE	275 915 —
WMSA	Massena NY	Russ Edmunds Red Bank NJ	290
WALL	Middletown NY	Frank Dailey Preston CT	140
WIRY		George Santulli Cranford NJ	275
WOOW		George Santulli Cranford NJ	430
WJRI		Ron Musco Windsor CT	630
WISB		Russ Edmunds Syracuse NY	605
WGNI		Andy Rugg Montreal PQ	810
WAIR		Andy Rugg Montreal PQ	745
KXPO WNCO	Grafton ND		1250
WOUB		Jeff Kosnett Chicago IL	315
WIZE		Paul Mount Nelsonville OH Richard Waterman Southwick MA	10 590
KIHN		Carl Dabelstein Omaha NE	500
KOCY	Oklahoma City OK		440
KTOW	Sand Springs OK	Karl Jeter Atlanta GA	675
MCAI	Connellsville PA	John Buehler Toledo OH	265
TAHW	Philadelphia PA	John Buehler Toledo OH	470
WRAW	Reading PA	John Buehler Toledo OH	415
WBRE	Wilkes-Barre PA Charleston SC	Goerge Santulli Cranford NJ	75

Tim Kerfoot Weston ON

Carl Dabelstein Omaha NE Dave Margritz Omaha NE Carl Dabelstein Omaha NE	240 21:0 <sup>tie</sup>
	21:0r16
Carl Dabelstein Omaha NE	
	405
Dave Yocis Fairfield CT	840
Andy Rugg Montreal PQ	830
George Santulli Cranford NJ	950
Brett Hanavan Chula Vista CA	1085
Carl Dabelstein Lincoln NE	685 —
Frank Wheeler Erie PA	1120
. Gene Allen Vallejo CA	1195
Carl Dabelstein Lincoln NE	660
Robert Kramer Chicago IL	840
Alan Imprescia New York NY	1400
Carl Dabelstein Lincoln NE	830
Gene Nix Billings MT	465
Sharon Waterman Southwick MA	405
Bruce Conti West Warwick RI	490
Ron Musco Windsor CT	320
Jeff Kosnett Charleston WV	60
Rich Eddie St Louis MO	475
Andy Rugg Montreal PQ	715
Robert Kramer Chicago IL	1175
Gene Allen Vallejo CA	965
Morris Sorensen God's Narrows MB	700
Morris Sorensen Leaf Rapids MB	840
Morris Sorensen Emsdale ON	31
Morris Sorensen Toronto ON	80
Carl Dabelstein Omaha NE	670
	Andy Rugg Montreal PQ George Santulli Cranford NJ Brett Hanavan Chula Vista CA Carl Dabelstein Lincoln NE Frank Wheeler Erie PA Gene Allen Vallejo CA Carl Dabelstein Lincoln NE Robert Kramer Chicago IL Alan Imprescia New York NY Carl Dabelstein Lincoln NE Gene Nix Billings MT Sharon Waterman Southwick MA Bruce Conti West Warwick RI Ron Musco Windsor CT Jeff Kosnett Charleston WV Rich Eddie St Louis MO Andy Rugg Montreal PQ Robert Kramer Chicago IL Gene Allen Vallejo CA Morris Sorensen God's Narrows MB Morris Sorensen Leaf Rapids MB Morris Sorensen Emsdale ON Morris Sorensen Toronto ON

There you have it, Graveyard fans...another award-winning (?) edition of GYDXA. As you can see, there are quite a few stations not reported. So if you have logged any of them, or, have better mileages than those shown on the stations here, send them in. Best wishes to all for a joyful holiday season, no matter how you celebrate it. See you in January ...

(37)

Want to learn how to winterize your car or fix a Thanksgiving feast of turkey, dressing and pumpkin pie in Vietnamese?

If you happen to speak Vietnamese or Tai Dam, you can learn all that and more by listening to WHO radio Sunday between 8:30 and 9 p.m.

The show, half in Vietnamese and half in the Laotian language Tai Dam, is produced by the Des Moines Area Community College in Ankeny and the Iowa Refugee Service Center in

WHO donates time for the show which program director Bob Gifford calls a "public service to a growing number of people."

"We plan on continuing it indefinitely." he said.

Gifford said the time and day for the show, which started in July 1976, were picked to reach the most people

"We wanted to do it at night so we could take advantage of our clear channel." he said, adding that WHO is heard nightly in 45 states. "We assume our audience for this show is quite large."

"As far as I know, this kind of radio program, which is a combination of news and music, is one of the few of its kind in the whole country," said

Willis Dobbins, coordinator of the show and an employee of the Adult Education Center of DMACC, said it is hard to estimate the size of the show's audience. largely because refugees seldom call or write in response to it.

But. Imbbins said, he and others connected with the show have received letters from refugees as far away as Colorado and Virginia.

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One of the show's hosts, Houng Baccam, 39, of 1524 Sampson St., takes pleasure in the "great service that we are doing for our people. We are very proud of the show.

Cuong Nguyen Phu, 22, of Ankeny is the Vietnamese host.

Baccam, host of the Tai Dam segment, clips newspapers, news magazines and other materials looking for stories "about our homeland" - Vietnam, Laos and Cambodia.

The hosts translate their material on Thursdays and tape the show on Friday afternoons.

Baccam said he asks friends for records to play on the show and occasionally a guest will sing folk songs at the taping. And refugees often call him with news of weddings, funerals, births and other social news of local refugees.

"They get very excited about having news of their wedding broadcast on our show," said Baccam "It is a way of letting others in the community know what is going on."

The show also deals with many things Americans take for granted topics like Halloween, Thanksgiving, how to winterize cars, what kind of clothing to buy for winter and an explanation of municipal elections.

"These people do not understand things like why American kids dress up in costumes for Halloween, or why we have Thanksgiving, or how elections work in America," said Dobbins.

"This show helps them feel comfortable in this country, and also gives them a touch of home through their native music

Nguyen Phu, who replaced the

former Vietnamese host last September, said he has learned to be a better announcer and also "to gather news efficiently."

Bill Johnson, director of Adult Basic Education at the college, said agencies with information for refugees are encouraged to give it to him or Dobbins.

#### Importance growing

Recently, the Iowa Conservation Commission, worried about the refugees' knowledge of fish and game laws, sent a news release explaining those laws.

"The program is becoming more and more important and more as more refugees arrive here," Johnson said. "We want to continue to be a service to the people, and make them feel at home in our country."

Johnson said there has been some negative reaction from people who want to know what this program is doing on the air."

But he said most Iowans support the show. "They say, 'How would you feel if you were in a strange country and didn't know what was going on?" he said. "They know how frightening it can be."

WHO puts Viet tongue on the air...via Stephen J. McIntire

SOME NICE LOGGINGS HERE

ERNEST R. COOPER 5 ANTHONY STREET PROVINCETOWN, MASS. 02657

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

INTRODUCING "MARY" 1

"MARY" is our "guest typewriter", on loan from St. Mary of the Harbor (Episcopal) Church at the end of Anthony Street, in Provincetown. She is a long-carriage completely and recently reconditioned Royal, on which we are now typing the masters for the weekly church bulletins.

\*FIRST ANNIVERSARY OF MEMBERSHIP MUSE\*

STEVEN MILLER - Boston, Massachusetts Vol. 3 No. 4 Hello everyone - how's DX? Well, here it is as I promised! This Muse will contain my contributions to the NRC's famous bulletin, DX NEWS. If this is Vol. 47 #9 this Muse is right on time, but itht's not I'll let you fellas in on the secrets of my first year of membership in the NRC anyway. Here it goes. Out of 31 issues received I've contributed to 27 issues received, I haven't contributed to a mere seven out of 31 issues received, that's pretty good, hit Combined contributions (of Log Reports & Musings) tally a nice 47, 23 log reports to DDXD, 24 Musings to ERC's column. Out of total 238 stations heard 141 were reported to DDXD, a mere 97 were not reported (shuccs! Hit). For the GYs, I have a nice total of 23 heard, seven of which were on 1240, two from 1230, four on 1340, three on 1400, five on 1450, & three on 1490, not bad, huh! Now a listing of the states & provinces from which I heard-n-logged most of my log entries. First is N.Y., second, the Bay State, Mass., third, Pa., 4th, Ont. & 5th "Little Ole" Conn. Those are the top five from which I heard-n-logged most of my log entries. Here's a list of receivers used before the purchase of the TRF. A Realistic AM\_FM digital clock radio, an Electrophonic AM\_FM eight\_track stereo RX, a Nordmende AM-FM cassette RX, very good one; A 1950 GE AM clock radio also good, a Sony AM-FM clock radio, a GE AM-FM w/phono RX, and the "present" Realistic TRF. Stations were heard an logged from most of those receivers used with the "bulk" coming from the TRF. Total no. of stations reported since I've owned the TRF is a nice! 1871 Wow! That's really good! But if this is Vol. 47 #10 Mon. Dec. 28 issue, I've contributed to 28 out of 32 issues received! By the time this sees print I'll be the proud owner of the RF-2200, which means the TRF will be put on vacation until I leave for the IRCA 1980 Louisville convention. I will have the Radio West Shotgun Loop on its back. Eventually upon receipt of the RF-2200, I will be lured into another DXing hobby, being none other than SWLing. I will also join into three of the major SW clubs, so my total club memberships will stand at an even five. So eventually my hands will be tied, but I'll continue my contributions to DX NEWS although not too frequently. "Sad note" - Due to my upcoming expansion in DXing interest I don't think I'll be in any of the Jan. or Feb. issues, with the exception of my GY Achievements contributions, but as I mentioned before "It will continue" you can bet on that: I have a couple of interesting articles on the WARC-179 meeting in Switzerland. Both will be submitted to HQ & should be in this is-

TWILIGHT'S BEEN GOOD IN NEW YORK CITY

sue, of not please watch for 'em. Merry Christmas an have a joyous holiday season.

BILL BERGADANO \_ 39 Marble Street \_ Staten Island, New York \_ 10314 11/19/79

Hi all. Well, I've not Mused for a while, but a\_DXing I've been. October

179 gave me 21 newies, 28 in one month is my all time high, in March '78, that's when I
switched my sights from SW to MW. States are now 39 with the addition of WDEV-550, Waterbury

Vt. 388 last month. QSL's are not in big demand, but in case the FCC removes the Clears,

I'm in the process of QSLing the remaining ones I haven't veried yet, a la WFTK, KXEL, WTOP,

WWWE. SSS in the last five days have been great w/WTAR-790, Norfolk, Va. w/T\_40 3 5pm, WSVS-800 Crews, Va. same day & time w/ID, QSB, etc., WQIZ-810 St. George, S.C. 4:57pm w PSA & ID;

WJVA-1580, South Bend, Ind. w/ID & 4:56pm, out after ABC Sports. WQKK-1600, Warrer Robbins,

Gee\_A, 5:10pm w/PSA for Jaycees o WWRL (heb, even a one-watter could get past WWRL!), WPIK-730,

Alexandria, Va. 4:447pm w/c/w; WARS-780, 4:56-5pm, w/s WABC mess; WAIT-820 Chi-Town, #3 most
wanted, 5:28-5:30 w/BFL & ID's, & my second Delaware station, WDOV-1410, Dover, w NX, WX, SX,

5:03-5:06pm today. I sure would like a TA - only one so far, Germany-576 this season. Oh

sure, for N.Y.C. great - not so - WMCA was off! MARK CONNELLY - how do you do it? Better

location? 73's de KAZEMZ.

THE HOST WITH THE MOST

RAY ARRUDA \_ 47 Burt Street \_ Acushnet, Massachusetts \_ 02743

Our Thanksgiving GTG 11/25 in "The Lower Deck" went off real well with the following in attendance: ELLIOT STRAUS & BOB STONIER, N.J., CHRIS HANSEN, N.Y.C., BRYAN LEE,

Conn., CRAIG HEALY & NEIL KAZAROSS, R.I., Mr. Reginald Remy, PAUL REMY, GLENN COOPER, ERNIE

COOPER, JOHN KAPINOS, TOM FARMERIE from Mass., and of course, Arlene, Misty, & HOCKET. Thanks

for making it a great day & I hope everyone enjoyed themselves as much as I enjoyed hosting

this shindig. After the GTG, I took a rare MM SP on 11/26 & did not DX which is the excuse

for a DX\_less Musing! I have chosen the petter "P" for the second contest & have had the

time to log close to 40 stations (mostly during weekend 11/24\_25) as entries for that contest.

Did anyone from the Midwest pick "C"? Veries are back from WINH\_U 50. WKKI\_1, 50. TEST, WITS\_

1510, WMST\_1530, & WGSR\_1570. Merry Christmas & Happy New Year filled with anything but

static & TVI! 73.

STEPHEN FRANCIS - 1620 Loige Street - Alcoa, Tennesses - 37701 \*\*\*\*\*\*\*\*\* Two new semis from the same county are adorning the daytime dial here. WXQK-970 Spring City, Tenn. was first noticed 9/10 in WWIT mull w/c/w & Ai NX. They had different calls then - WELA or the like - which were announced as temporary and used only at the top of the hour. "Your Q for good listening" is now their slogan. The other is WREA-1520 Dayton, Tenn. (home of the Clarence Darrow - William Jennings Bryan "monkey trial" of the 1920's), they're rr am have a fair signal. SM 9/23- Media Luna, Cuba atop in WRVA SP @ 1:30 s/off w/"R. Bayemo" ID by F, then NA. MM 9/24- The new WRLV-1140 Ky. a nowerhouse at 7:15am s/on. 9/29- Unn KZIA-1580 Albuquerque a big surprise @ 9 s/off, nice being able to hear this once-difficult state several times a week now. MM 10/1- Unn WYFA-1580 TEST in fair @ 1:10 w/old rr u/KEDM & that perpetual TT. 10/2- CMJT-700 very weak u/WIW @ 3:30 am w/La Voz de Cuba chimes, which I'd had my ears peeled for every hour & half hour all morning. I'd happened across a WIW SP around 3:50 the night before & heard what sounded like a CM, but WLW returned before I could // anything. 13/13- WBEX-1280 Pa. fair @ 6am s/on w/ SSB; WAPF-980 Miss. good @ 7am s/on for AM & FM. 10/24- Per CARL DABELSTEIN's Musings tip, KNAL-1410 Texas weak u/WING 1:05-1:15am on r/c-TT & call letters in code every 90 seconds. no VIDs made it. 10/26- With Cubs already on EST, an unlisted R. Cadena Habana relay on 1100 heard clearly u/WWWE a 7am w/NA & s/on. MM 10/29- A new Cuban Minute Man ticking away u/WGST-920, no Cubes on 920 per CHUX HUTTON's list. HJCZ-690 fair u/CMBC 1:30 w/romantic vocals & taped "La Voz de Colombia" IDs. 11/7- In mild Aurora, yet another unlisted Cuban on 1100 heart, a R. Angulo relay //1110 & 1120, noted in the early evening. 11/10- WDGY-1130 Minneapolis fair 6 5:43pm u/kWkH w/c/w. MM 11/12- 12:49, ID from WHHO-1320 N.Y. at end of their quickie r/c-TT. Their tone makes it in fairly well most months, but never a trace of an ID before now. 11/16- The new WLIC-1540 Tenn. atop @ 5:45 s/off w/brief farewell ditty sung by F. 11/17- WMYB-1450 S.C. L&C & lem w/ID as "The choice of the majority on the Grand Strand", then into NX. Same thing heard \$ 3, so they must be AN now. Not even a weak TT was heard here during the WEXL-1450, WQBO-1080 & KSRA-960 TEST periods, bah. Speaking of bah, it appears KYW is now you-know-what. Quote for the 80°s: "The difference between MM & any other morning is like the difference between night and dusk."

WGCH-1490 WANTS REPORTS; WILL SEND V/Q CHRIS LUCAS - 126 Hemilton Avenue - Apt. 16 - Stemford, Connecticut - 06902 \*\*\*\*\*\*\*\*\* This is the first Muse in a long time for me. I'm 32, single, & have been work ing the evening talk/music shift at MoR WGCH-1490 for 14 months now. We're always anxious to near from DXers, but rarely do, and most we hear from are on the outskirts of our daytime groundwave signal. We've got plenty of QSL cards, so please REPORT! Normal s/off is 11:15 pm, although WGCH is sometimes on later on second Monday and Last Thursday nights with live coverage of Town Meetings. Also, WGCH will be on the air until approximately lam the nights of Christmas Eve and New Year's Eve. I haven't been actively DXing for a while, but I'm getting back into it. Having strung a 2000 or so antenna outside, & competing now in Contest # 2. I'm also armed with an SM-2, which a girl friend surprised me with last Christmas. RXes: Oli Lafayette HE-30, and brand new THF. Recent loggings: 11/20- WHAP-1340 Va. at 1:14 am, WCTC-1450 N.J. 8 5:26pm. 11/21- WADK-1540 R.I. 8 lpm. This one never heard in Danbury, yet is very dominant here, in fact, less WRCP/WPTR QRM here than in Pairfield, where I was an avid teenaged DMer. Also 11/21, WBTX-1470 Va. surprisingly early 6 3:32pm, WALL-1340 N.Y. 9 4:38 pm, WNWS-790 Fla. 8 4:55 pm, & WGGA-550 Ga. 9 5:09 pm. I may have had WGAC-580 Ga. w/ female anchor at 5:30m, as I heard "on GAC", but calls sound too much like (W)"TAG" to be sure. Signal did drop at 5:30, WGAC pattern change time. Also, on MM 11/12 I noted "PRN" pirate radio for New England on 1620 around 1:30cm, fadey but very readable. I was listening on a field strength meter, and inside apartment signal averaged about .06 MV/M, peaking at one point to .11 MV/M. Location given only as a mountaintop in New England. Incidentally, some of the locals here are WSTC-1400 w/170 MV/M, WNBC is 64 MV/M (with horrendous splatter), and WCBS is 54 MV/M. Cousin Bruce Morrow is now owner of WALL-1340, and was on the air when I heard the station 11/21. 73 & good DX!

A NEW IR FOR PINEHURST, N.C. on 550 kHz JACK PARKS - 909 Jefferson Street - Hamlet, North Carolina - 28345 11/21/79 \*\*\*\*\*\*\*\*\* While listening to WIOZ (FM) Southern Pines the evening of Nov. 19th there was a news announcement that on Nov. 9th the FCC had granted a CP for a new AM station on 550 kHs to serve the Pinehurst-Southern Pines area, to be located on Bwy. \$5 between Aberdeen and Pinehurst, near Pinehurst, the station to be operated by the owners of WIOZ (FM) & the expected completion late is January 1980, the announcer said. WEEB-990 Southern Pines (day timer) is a semi-local here, heavily Chief by WNOX Knoxville early mornings & late aftermons. advertises as serving the Southern Pines, Pinehurst, & Aberdeen areas. On 550 kHz. WDBM. Statesville, can be received here during the day & Pinehurst is about the same distance from States ville as is Hamlet so that is why the new station will have to be directional. For those of you who like to keep your Pomestic Logs up-to-date WARZ-1010 Albemarle, N.C. did not change to WWWX; WABZ-FM did. The announcer on WABZ just stated that soon they will affiliate with CBS. WLNC-1300 Laurinburg, N.C. is already with NBC, so these networks are affiliating with daytime only stations as ABC & Mutual have long been doing. Quantity replaces quality again as it has done in programming, hi. I have recently acquired an Atwater-Kent console, battery-operator ratio (circa 1926) & have had it restored to operating condition. The cabinet is in very good shape considering its age, but I am considering refinishing. 73 to all.

(39

KARL JETER - 3590-C Clubhouse Circle East - Decatur, Georgia - 30032 11/24/79 It's been a while since I graced these pages (hi) so I decided to write in while I was busy typing reception reports. Yes, that would lead one to believe I have heard some DX1 Right! It seemed like old times 11/23 eve when I logged FOUR newies in the span of 30 minutes. For some strange reason, I decided to tackle the lower part of the band, and reaped a harvest in what I thought was a sterile area; starting > 5:15pm, WTVN-610 was in good o/u WSGN w/Sports program. Then & 5:26, down to 600 amid WPLO-590 slop. I bagged WIRB-600 w/car dealer & furniture store ads before fading out to WREC. Back to 610 and more WTVN, w NX, traffic report, WX, mx 5:35-5:37pm. Then, mineears heard a quick "WIP" slip through 3 5:38 pm for #3. Finally, a very strong WRUS-610 noted w/local MX, ads, and a 5:44pm s/off to finish the cavalcade! Whew! Otherness: 4VEH-1035 excellent 11/17 & 6pm w/IS, ID beginning EE programming, and "Today's Question" program. Nice catch on 11/11 when WPMP-1580 heard 5:50pm to 6 s/off w/mx, bank ads. Also 11/11 R. Paradiss-1265 good 7pm and later @ 9:54pm w/usual REL stuff. Only two veries so far in the 11th month: WHOMI-1220 w/v/1 & the new WACQ-1130 w/v/1, both heard in October. I found out through Masrs CHUCK HUTTON & ROY WILSON that Fort Gordon, near Augusta, Ga, is operating a low-power station on 640 kHz - call is "WSG." Something on 640 is noted here in daytime, but nothing definite yet. Back to veries, the milestone of 900 veries is about two away now, then on to the big 1,000. Loggings presently stand at about 1,350 now. To finish out this Muse, I'd like to mention that extensive work on the reprints has been done, converting all to a standard 82 x 11" size, plus many new ones have been added. Also, so me have been completely retyped - all this with the tremendous help of our fearless IDXD Editor, CHUCK HUTTON. I am also glad to say I will be continuing as head of article reprints now, as problems with getting copies, etc. have been resolved, and servicewill improve. So until the "SOLID SOUTH" rises once again in these pages, 73's.

#### NOT MUCH DOING

CHUCK HUTTON - 1035 Latham Road - Decatur, Georgia - 30033

Not really much to Muse about but I owe Hefty Blooper one. This season has been the poorest in memory for both TA's and IA's. It's easy to make that judgement when you just don't see much happening between the U.S. stations. A lot more fun can be had up on 10 meters, where things are so good it defies description. We won't go into that. I recently bought a Sony ICF-5900 and, like DAN PHILLIPS, think it is a pretty nice little radio. For \$150 you get a sensitive little portable with 5 kHz readout on the SW bands, plus AM & FM. It also sees some use in the DX shack for checking SW parallels quickly, & as a WWV checker. Ever try spinning a 390A up to 15 mHz for a quick WWV check? I see myself becoming seriously interested in advancing to the solid state arena when I think about certain aspects of the 390A. DX-wise: Only a few new catches so far this season, one domestic and two foreigns. WIEL-1400 was heard with an outstanding signal a few weeks ago, a station that had never been heard by Mr. 1200 domestics KARL JETER) or myself. There it was, on top & very loud one night but not heard since. The Veinteseis-1240 outlet in Cuba slipped down to 1239 early in the Fall to provide one catch, with R. Jaruce-1390 making it at sunset for the other. Not a whole lot to show for the efforts so far. A handful of mornings I've been up to make an attempt for DU's but have heard only a few weak carriers with fragmentary audio at best on two occasions. It looks bleak for putting anything in the log book, at least for right now. Maybe signals will improve as the sunspots die off but that means a long wait. Put two little ceramic filters in mine and KARL JETER's TRF's and it really helps the radio. Those who haven't done this ought to do it - it is simple and the results are well worth it.

WE WELCOME GORDON & HOPE HE WILL MUSE OFTEN: GORDON BYRD Jr. - 1410 West Sligh Avenue - Tampa, Florida - 53604 Time for my first-ever Muse. I'm a student at the University of South Florida and do my DXing with an unmodified Realistic TRF coupled to the phone line through a homemade coil (better than the Realistic's coupling, hi). Also, I edit and publish The Skywave Bulletin, which carries program information for nighttime AM listeners, & write a column on MW listening in the Review of International Broadcasting. I end up having to do a lot of program listening as opposed to DXing, which leads to conflicts; should I try for the Missouri daytimer or tune in Radio Cayman's 5:58pm program preview? I seem to have a pipeline into Missouri lately, KBOA-830 heard on 11/23 3 5:33pm with Missouri net MX, folo by local announcements & commercials for wood-burning stoves and Burger Queen, then into jingle, soul mx, out for a while, then back for s/off, giving station location as intersection of two highways. I heard KQYX-1560 at 5:45pm s/off on 11/22, but not enough for a report. Also KMOX-1120 has been stronger than usual, sometimes slopping WBT. Befor I go, let me recommend that anyone who can hear KAAY-1090 tune in their new talk show from 8pm to lam ELT on Mon.-Fri. nights. So new in fact, that they haven't even given it a name yet! Slightly zany Dick Price keeps things rolling without the aid of a delay box. meaning that anything that goes in the phone goes out over the air, including telephone hijinks, crude noises and the occasional profanity. To join in, call 433-0059 in Little Rock, long distance 501-664-6397. Hurry before they turn normal: 73.

AND WE WELCOME JOHN ALSO & ALSO HOPE HE'LL MUSE OFTEN:

JOHN M. KAPINOS - 86 South Quinsigamond Avenue - Shrewsbury, Massachusetts - 01545 11/26/79

Well, here's the "pollution" I promised Ernie at the New England gathering at Rocket Ray's yesterday. I'm a "retread" to the hobby, having been inactive for the better part of 20 years, since my High School days. I've been reactive in BCB since the Spring, having joined NkC then. Equipment here is a Gilfer modified FRG-7 with digital

(Kapinos, con'd.) Readout, an SP-600 (slightly ailing) with a Torrestronics Digital and the newest addition, a 390A. A Radio West amplified loop is on order. No DX of note worth reporting here, as I still haven't reheard most of the "clears". I am starting from scratch, even though my previous location was 50 miles from here & I kept all of the old veries. Enough for now, more later when there's more to say.

#### DEPLORES PRESENT AN SITUATION

DARKYL BELANGER - Box 495 - Swan River, Manitoba - HOL 120

11/21/79

This will probably not make your Canadian section in time considering the post office situation here. It's another of my annual Musings as it seems the DX is tapering off and the ANers are increasing rapidly. I don't have time for much DX but when I do it is enough to make me cry. The few open frequencies I had last year are fewer in number this year and the number of AN stations is increasing to a point where it is just not worthwhile to listen. Most conspicuous of the AN stations are the Canadians. Only new station heard this year has been KLMO-1060 on Nov. 1 '79 at approximately 10:30am EST (morning) while delivering newspapers to a nearby town (12 miles away). They had stock & farm reports, mx, WX for Denver. CFCN fade-in 10:45-11 killed chance for copying. I tried for KSRA-960-TEST but no go as AN CFAC pinned the meter w/a/w mx. I heard a R. Tropical ID on 1200 or so same date, 1:30 CoT but think it is a Venezuelan with a slogan change. Only news I have concerns "Sun Valley Radio" which will be operating on 1530 w/10,000D, 1,000 N by the end of 1980. XR is located between Winkler & Morden, four miles S of Hwy. 3. They survived opposition from Golden West proadcasting Ltd., the parent company of R. Southern Manitoba in Altona. CFRY in Portage la Prairie also filed an intervention. Now only about five fairly strong stations in this area Goodbye DXt Other bit of info concerns Winnipeg Jets hockey games - a small radio net has been set up w/CJOB as anchor and others, CJRB, CJRL & CKCK-620 Regina all carrying Jet away games might make iteasier IDing of these stations. About it for now, 73 de DB.

HE WENT TO PAUL MOUNT'S GET-TOGETHER

JOHN D. BUEHLER - 1716 Heatherdowns Boulevard - Toledo, Ohio - 43614 11/25/79 Verie in the mail this weekend from WKXL-1450 Concord, N.H., New Hampshire #1 for me. According to the v 1, the CE had received only 11 reports in the first week after their 11/12/79 TEST. That is a very small number of reports considering all the NhCers located in the Eastern states. Nov. 23rd & 21th were spent at PAUL MOUNT's Nelsonville GTG. NRC members present were DOM JARUBOWSKI, PAUL & myself. 11/23 we tried some SSS DX on Dom's R-300 and my SM-2. 1580 yielded KLTR Blackwell Okla. w/s/off 6:30pm fair u/QRM from electrical transformers 30 feet from the back door of Paul's pad. 6:12pm we heard Paul Harvey MX on what I'm sure was KAMI Cozad, Neb. I logged them 11/19 as detailed in DDXD. 6:59pm KZIA Albuquerque N.M. was another almost-logged station, fair/poor signal w/s/off. No call letters or details were heard, but traces of SSB made it. They are the only 1580 station w/ 7pm November s/off. I had a chance to look over Paul's new IRCA Almanac. This booklet has a wealth of information for all BCB DXers. Good job, BILL HARDY and others! I can't wait until mine gets here. I sent out four letters to prospective CPC TESTers. If any of them come through with an affirmative answer, Louisville HQ will be the first to know. (No, John - YOU will be, hit -ERC) My effort for Contest #2 will be limited to 24 hours MM 11/26 and SSS. 'Been so busy, I just remembered that it's going on now. Until next time best of DX.

HE LOGGED A NEW COUNTRY & A NEW STATE

GERALD H. BARKOW - 29 Sedgefield Drive - Morris Plains, New Jersey - 07950 11/25/79

Since my last report I've logged a new country & a new state. 11/5- R.

Paradise, St. Kitts-1265 with excellent signal from 11:52pm to 12:4/2am s/off with religious mx. I probably could have gotten this one on my car radio. 11/9- Semi-local WBRW-1170 w/ET w/TT & mx at 2:05 being clobbered by WWWA. MM 11/12 I didn't hear the WKKL-1/:50-TEST; another WMOO-1550 ET/mx 1:10, 1570 with CKIM off, two testers noted & 1:40, one w TT & the other playing Beatles' records with no ID's heard, then I switched to 1530 & 2:00 and heard WTTI w/ET/mx to past 2:30. 11/18 I logged WMYB-1/:50 & 1:05 with two minute strong signal over semi-local WCTC & many others, then they faded into oblivion, not enough for a report. MM 11/19 I spent another three hours at the dials and logged a new state in S.D., KKAA-1560 w ET & ID at 1:30, then WQXR came on with ET & 1:33. WOR-710 was off this AM but I could only hear a Spanish speaking station & 2:30, probably an LA. 11/19 SSs brought in WTGR-1520 with ID as "The Peoples' Station" & 5pm o/WKBW. Seems like so far this Fall the La's have really been booming in. Almost every night WBAL, 3WE, NOWO & WTIC are being destroyed by the La's. That's it.

HE ALSO DID NOT HEAR KSRA-960-TEST

DAN SHEEDY - Box 31 - Encinitas, Calfornia - 920 24

DX for the past few weeks looks like this: 11/4- KGR8-900 7:15pm, KZUL-1380 s'off (no SSB) 4 7:30rm, KOL0-920 7:40pm, KST-1600 7:45pm. 11/1'-gave up KFAX-1100 w/JJ folk mx & rr from 2:30-3am. 11/19- CKDM-730 s/off 1:04am w/GSQ into 0'C; XEDX/CBh-1010 trading off at 1:30am, KXEN-1010 noted IDing as "Golden Gospel Giant" a la KBBX-1600 \$1:45am, KKH1-1550 2:10 am, KXLY-920 2:30am, couple interesting but as usualunID TTs on 1500 & 980 (ho hum), looking for KSRA-960 TEST dredged up KAYK/KBBL-960 \$3:05, no sign of KSRA, rats. I finished off the AM w/KGNC-710 & XESPC-790 w/both KMPC & KABC off. 11/22- KVEN-1450 beating local KOWN s 6pm. I've beepable to loop KOWN pretty well lately (or is it I just didn't try very hard before?). Oh, a short note to Mr. KUDLEMEYER: "The broad on the phone" at kadio West is a fine young lady named Patti who also reads this bulletin. 11/23- CM...-82 u/NBAP \$1 am - I thought it was the HJ, but I was wrong (once a year, I can afford it), KAAP-1400 2:20pm, & unn KWRk-1370 w/syndicated religion - thassit - C U at 1A-801 73.

O.K., Texans and Mountaineers - your issue is next! Provincetown Deadline is Mon. Dec. 24!

JOSEPH W. BRAUNER - R.D. 1 - Box 153 - Punxsutawney, Pennsylvania - 15767 11/25/79 CX continue interesting but not very productive. Even with WNOE or the FFC overriding KYW, 1060 in the early period of SSS, KCMO-810 topping WGY # 5:15pm and WHO-1040 stronger than WBZ & near equal to KDKA at 5pm, daytimers just don't want to show. KAAY-1090 often overrides WBAL & on 11/24 WVCG-1080 was in full charge at 5:70 power cut. All unn, of course. Theentire band group on the old A2515 has gone dead except forthe 540-1600 one, fortunate: A few interesting calls have been heard. KGIk-960 f/c-TT in fair under WFIR 'noise' on 11/4 w/TT heard 1:05 to 1:09am, new. WPRZ-1330 clear as a local 5:20 to 5:30 s/ off on 11/5, first time with new call. WOKB-1600 weak 3 5:30pm, s/off, it seemed. Also first time forthis call. BIG event, a really new one, on 11/15, local pulled carrier at 5:04pm. Right away a good ID from WYNC-1540 Yanceyville, N.C. who stayed atop to 5:15pm s/off, three call and site IDs in 11 minutes. Then WTGF took over briefly for another 'newey' on call change. WRSM ended the 1540 party, this one is heard often. Lots of unn's as usual, like WJVA in like a local on 1580 w/5:30pm s/off. That's it from here. Happy Holidays and lots of DX to all.

HE'S A SATURDAY NIGHT D.J. PAUL MOUNT - 352 West Columbus Street - Nelsonville, Chio - 45764 614-753-3280 10/6/79 (received 12/3/79 -ERC) Thanks to KIRK SCHNEIDER, FRANK MERRILL, & GARY SIEGEL for phone calls; everyoneelse owes me, hi. I correctly guessed that Frank had 98 new stations, that number chosen by speaking from WIGN-FM-98. 9'22- UnID-1510 s/off 5:30pm has letters "W" & "C" in FM call, heard in car in Logan at Hocking Mall. I saw JOHN ZONDLO's article in CB magazine about FM/TV DX, what a plug for WTFDA he got int I was not up MM 9/24. CKLW carries "The Weekly Top 30" & 8pm Sundays. During the pennant drive Reds stations were carrying Astros games after Cincinnati's game was over for the night. In school, "Communications Systems" class topics such as Noise; S/N Ratio; Field Intensity; Refraction, Diffraction. & Reflection of Radiated Waves; Modes of Propagation . sky wave, ground wave and looks at the layers above the Earth and their characteristics day and night - all made it by far my favorite class at college - with future topics to include Transmission Line, Antennas, Receivers, & Transmitters. 9/29- On Ohio State FB net: WIMA-1150 Lima, WUBE-1230 Cincinnati, WSLR -1350 Akron. 9/29- I was planning on going to Wickliffe, NE of Cleveland, to visit John Sally andmaybe GEORGE GREENE. However, my car didn't make it up the first hill and having joined AAA (puts me in FIVE clubs now, hi) the day before was no help after all. The car needed some minor repairs, such as a new transmission so back to the poor house & walking to school during BB playoffs. WGIC-1500 Xenia good when WLGN's on 250w, 6-6:05pm. AT-40 adds KATO KFRO. Sat. 10/6 I was given the 6-lopm air shift on WLGN-FM-98.3/WLGN-1510 for Saturday nights so I'm there every Saturday night now. 73. (That'll keep you out of trouble, hi!

HE'S PULLING IN SEVERAL FOREIGNERS DOUG ALLEN - 1118 Millington Road - Schenectady, New York - 12305 11/26/79 W2CRS First Muse of the season! I have moved from an apartment to a house and am set up om all amateur bands 160-432 mHz. I'm DXingwith SPR-4, 150 feet of wire, and Palomar Loop. The new location is much quieter than the city apartment, but I am closer to infamous WPTR which really does a job on the high end. WGY is also much stronger here even though I'm a couple of miles further away from it! I ended last season with 687 heard including 38 states and 38 countries. Totals to date are 739, 34, & 40. New countries are Guadeloupe which was dominating 640 theevening of October 30 and R. Grenada which surfaced above TVI birdy Nov. 15 long enough to hear clear ID & s/off. R. ABC, R. Horizonte, & R. Perija are new ones on 540. R. Cayman-1205 must be using higher power as they are heard nightly here. Several new Cubans noted, R. Bayamo // on 1140 & 1150, R. Liberacion on 650 / 640 and R. Surcos (?) w/Cuban NX, but no Surcos ID on 1430. Best domestic this Fall was SSS KRLW, Walnut Ridge, Ark. at 6:01pm s/off on 1320, Nov. 14. I have had two enjoyable visits from NEIL KAZAROSS who studies at my Alma Mater, Union College here in Schenectady. Till when? 73. (Till he graduates, hi -ERC)

eAS THE SUN GOES DOWN, MY SONY GOES ONe

ED MITKUS - 8001 landmark Circle - Tampa, Florida - 37615

Happy Holidays, fellow NRC Members. Total stations are now standing at 2751

The month of November has landed 28 newies. Last MM 11/26 I netted WTII-1530 Ga. on test, & WWIL on 11/90 - 501 miles distant. Sunset 11/28 landed WWGM local-like, then KQYX in Joplin with strong copy, and underneath them was KDDA, Dumas, Ark. weak but readable. For those interested, I have obtained a pattern for WPIA-910 Flant City - map is at .5 mv/m contour (see last Muse). SASE at above address lands you one. The NRC lives in Tampa - I am presently locking into making a beginner's DX tape, spotlighting formats, networks, class 1-1 stations, etc. 73's & good DX from 75° Tampa!

GORDON BYRD Jr. - 1410 West Sligh - Tampa, Florida - 33604

Note: As regards my previous Musing, I think KQYX s/off might have been 6:15;
I wasn't looking at a clock at the time, and my watch is out for repairs. 73.

UP\_COMING SPECIAL AREA ISSUES OF MUSINGS Deadline Date Masthead Date Area M.S.T. Zone states/provinces, and TEXAS Monday, December 24 January 7, 1980 January 14, 1980 Va. - N.C. - S.C. - Ga. - Fla. - Ala. - Miss. -Tenn. - Ky. - La. - Ark. - Okla. "The Solid South" Monday, December 31 Monday, January 7 January 21, 1980 Mich. - W. Va. - Mo - Ohio - Minn. - Ind. January 28, 1980 Monday, January 14 Everyone outside Canada and the 48 February 4, 1980 Md.Delaware - Pennsylvania - D.C. - New Jersey - N.Y. Monday, January 21 February 11 1980 Monday, January 28 Everybody who forgot to get in with his area!

JOHN SAMPSON - 1714 South 84th Street - Omaha, Nebraska - 08124

This is my Musing for the Nebraska, etc. issue - I hope it arrives in time. Some recent DXing has been done here - daytime DX included KDLS-1310 & KGMT-1310 - using the loop to get KOIL splatter down. I also logged & reported KECK-1530 (unbelievably difficult here due to KDSN, a pattern mull & blockage from the West due to a hill in our back yard), KWSL-1470 (also difficult due to a horrible KUIL/KFAB mix), new KRZJ (1190 in Beloit, Kansas) & KNLV-1060. One twilight session on 11/17 netted WAMD-1190, KCMP-1010, KTWO-1030, & KLMO-1060. I also logged MVFC-740 after CBL's s/off that night, dominating 740. Recent veries include KDLS KJMT KChO KVFC KSAC & KFKU. While on a trip to Chicago over Thanksgiving, I heard the Iowa Highway Dep't. TIS station on 1610 near Davenport again. They are audible on the auto radio (during the day) at least 20 miles East - no calls given, just the continuous recording. They apparently use a six foot whip in back of the first West-bound rest stop on I-80 in lowa & under good CX should get out. I have tried for them from Omaha - no luck, so far. Before leaving New Jersey, I had STEVE BOHAC fix up my HQ-180 - it works great now, Stevet My hardy vote for Steve's RX-fixing to anyone who has problems - I inquired out here this Summer concerning communications HX repair - I found no one in the Omaha area who even touches them. All for now. 73.

MOTHEALL MEMORIES
CHAPTER CXXVI - WFIL - Philadelphia's Pioneer

-by PETE KEMP It began on Saturday morning, March 18, 1922. Radio Station WFI sent out its first signal from a department store owned by Strawbridge & Clothier. Along with Gimbel Brothers and John Wanamaker, Department stores which had also received their licenses that month, the new station sparked a lot of public interest in the new medium of radio. When Lit Brothers established their station, WLIT, they operated on a shared time basis on 560 kHz. The two stations programmed news, weather, music, boxing, band concerts and sports scores. Soon, networks brought in out of town programs and both WFI and WLIT joined the NBC net as charter members. In February 1935 the two stations began operating under one call. WFIL. Two years later the studios moved to the Widener Building. With the forties many new changes occured. WFIL acquired an FM station, which became the first commercial station in the U.S. to have separate programming. Network affiliations with Mutual and NBC-Blue were rearranged and they became an ABC net affiliate. In 1946 WFIL was purchased by Triangle Publications. WFIL has had many stars pass through its studios: Bert Parks, Ed McMahon, Henry Morgan, Eddie Fisher, Gene Rayburn, and on the TV side Dick Clark and his American Bandstand. In addition to its many "firsts" WFIL has the first four-way broadcaster in the nation, using AM, FM, TV, and FAX modes of operation. NEXT ISSUE: MORT MEEHAN WITH A SHORT "HISTORY OUT OF THE PAST".

NEAT 1850E: MORT MEEHAN WITH A SHORT "HISTORY OUT OF THE PAST".

ANYBODY INTERESTED IN BEING THE BACK-UP, or STAND-BY, MUSINGS EDITOR? IF SO, PLEASE COMMUNICATE WITH YOUR EDITOR, ADDRESS DIRECTLY BELOW.

GET THOSE MUSINGS IN THE MAILS, LADS \_ AND WE SUGGEST MAILING THEM A COUPLE DAYS EARLIER THAN USUAL, AS THE MAILS ARE NOW GUTTED WITH CHRISTMAS CARDS AND LETTERS TAKE LONGER TO REACH THEIR DIESTINATION IN THESE DAYS. PLEASE REMEMBER TO DOUBLE SPACE, PARTICULARLY THOSE OF YOU WHO WRITE BY HAND ON LINED PAPER. SOMEONE SAID THAT YE EDITOR ASKS MUSERS TO DOUBLE SPACE AND THEN DOES THE SECTION IN SINGLE SPACING. WE'D LOVE TO SEND IT OUT DOUBLE-SPACED, BUT WE HAVE TO THINK OF THE COSTS OF DOING SUCH, FOR OBVIOUSLY, IT WOULD REQUIRE TWICE AS MANY PAGES FOR THE MUSINGS SECTION: AND A VERY MERRY CHRISTMAS TO ALL.

WHO'S THE NON-IDING TTEK ON 710 Kc/s.?

ERNEST R. COOPER - 5 Anthony Street - Provincetown, Massachusetts - 02657 617-487-9337 12/4/79

Only one verie in, but 'twas an FM-er to make that total 26. DX this week went like so: 11/27 - Somebody weak on 544a kHz seemingly delivering a speech in SS 3 12:40am, and gone and off the air by 12:54. Unn WSYR-570 heard o'u WMCA @ 1:00 with inspirational message & then s/off @ 1:03 w/SSB. On the other end of the spectrum, CKIM was off, and 1570 belonged to CFOR XERF. There's somebody about 400 cycles above 1380 causing that pitched het there, 1:30. Unn WINZ-940 apparently the one with Herbert W. Armstrong's "The World Tomorrow" (but it was "today" here, hi). An unID SS, apparently a Colombian, on 1560, very weak, 1:46, mentioning RCN. Weird buzzes filled the airwayes on 1280 @ 2:15. I was away for a courle of days then, & back at the dials on Friday 11/30 & I spent the entire two hours DX time sitting on 710 kHz listening to a steady TT just u NOA with the antenna at WOR's weak spot, rary a word was spoken. He was here again on MM 12/3 doing the same routine. 12/1- TTer on 11.90 s 1:46, again, no IDs, and 1530's CC was atop WCKY again this morning. There was a TTer u/ FVA. 111,0 - 2:32-2:48, another tongue-tied engineer running this test. Unn WTMA-1250 easily aton this channel # 2:53am. No DX SM 12/2 as I went up to Orleans for the WVLC-1170-TEST. Sorry. gang - WWVA Mt me and you down by staying on, but we were on with our TEST & we got the grand total of three phone calls, and ALL werefrom one member, whom I thank, BICHARD PISTEK, of Chicago. MM 12/3- 290, clear & very moony. Noted on w/Kentucky Wilcoats EKE from Anchorage. on hPAD-1560, WCKY-1530 & WHAS-840, no others heard. Hoorsy - WPTR-1540 was off along with EXEL, leaving ZNS1 in the clear all AM (after 2, that is). Also off today were KYW, wills. CYIM. WTIC. & CJMS-1280. BI.L COLLMAN celled; he too heard the 710 TTer, & he felt it had to te either WEGG-N.C. or WQBX-Ve. by its volume there. I phoned both, no reply at either station so it must have beer somebody else. WIAM-11.70 was on AN, just what we need, snother Niler. ir WIIC's place were ERLD & h. Universal, Maracey, Venezuela, on whom I took a report. Back to 710. & n. Capital came on around 4 at atout the same volume as the previous TTer. & I'm wondering if they could have been sending out the tone - if so it would be the first time I've heard such from an LA. At SES, I was amazed at the sock from WCXI-1130 o/u WNEW as early as 4:100m. When WKEW went cirectional & 4:25, they wiped out Detroit. MERKY CHRISTMAS. All!

#### VOICES FROM AMERICA'S HEARTLAND ILLINOIS - KANSAS - WISCONSIN - NEBRASKA - and IOWA MUSERS

SUNRISE - SUNSET - AND EARLY MORNING TOO

NEIL G. ZANK - 623 Lynerest Drive - Lincoln, Nebraska - 68510 I hope that this Musing makes the deadline for feature issue including Nebraska. Some DX has been pulled off the band since last I spoke. Let's see what there has been. 11/3 SRS - Unn WJOE-1080 Port St. Joe, Fla. 7am s/on, into c/w mx. 11/6- SRS also, WKAC-1080 Athens, Ala. s/on & 7:15, into c/w mx. 11/11- UnID on 800 & SSS with CBC "Cross Country Check-up" 6:01-6:40pm (CBQ or CFOB?), CKIN & CHAB heard also on the fringes. MM 11/12 I noted unn KEDD-1550 Dodge City, Kan. ETing w/TT & very complete IDs, fighting WMOO ET. 11/18- UnID Wyoming station on 1240 w/postgame show on Cowboy Football Net after Wyoming-Hawaii game 3:35-3:50am, I suspect strongy it was KFBC Chevenne. MW 11/19- Local KIMS noted off for the first time in coon's age and rock mx showed up with IDs for WABB-1480 Mobile, Ala. 1:35-2am: KCUE-1250 Red Wing, Minn. noted on for local emergency (fire at Knudson Trucking Co.) 2:40-2:45am, umm; KRMS-1150 Osage Beach, Mo. @ SSS just tuned onto s/off @ 6pm. 11/2 SSS\_ KBHS\_590 Hot Springs, Ark. surprised me in mull of WOW 5:29-6:15pm with c/w mx, spots & Ai NX. 11/24- New station on the air - KRZJ -1190 Beloit, Kan. dominating frequency all afternoon. 11/28- WSMI-1540 Litchfield, Ill. on f/c-TT 1:02 1:12am w/ID at start & finish, fair to good signal but severe KXEL ORM. ROLLAND LINDBIADE heard this last month on fourth Wed. so must be a r/c. New veries in my mail have been: WMOO-1550, KMMiZ-1140, KRSL-990 & WKGX-1080. Stations heard now at 1,190, but veries will have to have a recount to determine current total. The bulletins have looked a little thin so far this season. I hope that more of you can contribute to Musings and the rest. It is your Club. See you all down the dial.

DXING TIME IS SHORT

WILLIAM R. HALE -1451-B Faith Drive - Rantoul, Illinois - 61866 I haven't got much DA material to report, as I haven't had time to hit the dials lately. Some of my latest catches include: 10/18-6:50-7:02am ELT. WTAR-790 Norfolk. Va. w/CBS Morning Sports/Trafficopter Report/Spot for a computer store/NX on the hour (local, not CBS), clear ID = 6am. 10/26-7:32pm WCFC-940 Houston, wiss. w/an announcement more or less "We now have to change power and directional pattern. Reception will be restricted in certain areas and better in certain directions from Houston." Something about Ewy. 15, and mention of WCPC-FM. He also stated something to the effect that WCFC serves more people than any other station in Mississippi. That's quite a claim for a station in a town of 3,000. 10/29-6:45-6:48pm- -1570 or1580 s/off "Tune to FM serving you 24 hours a day." Dixie, folo by SSB. ??? on this one. 10/29-6:45-6:48pm, CFOR-1570 contest, singing CFOR rr mx. 10/30-6:45am- 1570-1580? Ann reading letter from Congressman Cottonpicker, fading, no sign of ID. 6:48, WTOD-1560 Toledo ad for Poly-Glo car finish, mention of 4811 Jackman Road, Miracle Mile Shopping Center, Toledo. 10/31-6:55am, KMPL-1520 Sikeston, Mo., Mo. net about Gov. Cheesedale, spot or promo (probably promo) mention of phone #, 239-1520. November has been a non-DX month for me. Just too many irons in the fire. I read where WMAC-670 has gotten out of their White Sox contract. No word on whatstation will be taking over, hopefully a clear channel. The WMAQ management didn't like Harry Caray and since Bill Veeck insisted on keeping Caray, no more WMAQ. Another Chicago radio note. I read in the Trib where WCFL's news\_talk format is costing the parent Mutual Company 400 thousand smackers a month written in RED. Maybe a change coming there. That's about all except to say hello to all the other DXers from Ill., Iowa, Wis., Kan. & Neb. who Mused this special edition. 73.

PICKS UP DX IN HIS PICKUP TRUCK GARY HOUDEK - Munden, Kansas - 66959

Monday morning & 4:18am KMOX was off the air and testing with tones & music. The card from KMOX is signed but the signature is unreadable. Back on July 30 5:43am, KLIF-1190 Dallas

was broadcasting a helicopter traffic report. I thought this was a regular schedule until I heard that KLIF was broadcasting 50,000w test. After 5:58am there was an ID, then the signal was gone. Oct. 8 5:11am I heard TT, then ID, "This is KLC1\_1470 lake Charles Ia. on the air for testing." The signal was fair. On Oct. 12 - 9:51pm I was listening to the World Series on WWL\_870. The game was stopped because of rain & the network turned the programming back to the station. But the station just had silence for a while, then CBS said there would be news and before the baseball game would resume that evening CBS would let the stations know. Then WWL cut off CBS & started their own programming. Oct. 28 I was listening to thepickup truck radio = 8:05pm to world KX, then ID, KNIN-990 Wichita Fals, Tex. Then the signal was gone.
Nov. 19- KIVI-560 Beaumont, Tex. 5:45-6am with c/w mx then KTWO Springfield, Mo. signed on at 6am. Finally I want to thank LOU BUEHLER for picking me up at the bus station and his son Mike for taking me back to the station during the St. louis convention.

Lately the only verie is a card from KMOX-1120 for a report on August 6. That

DX HAS BEEN ROLLING IN IOWA STEPHEN J. McINTIKE - 2225 Searle Street - Des Moines, Towa - 50317

Much new DX has been heard here in the past month, so here goes. 10/22\_ A rare SSS session netted two goodies, both on 1580, WANB Pa. 7:38 & WAXU Ky. 6:45. 10/29 -A new Iowan KLEH-1290 finally caught 6:29pm. 10/30- SSS again & another newie KAGE-1380 Minn. = 6:30. 11/7- Yet another new Iowa station was heard in KIBA-1370 Albia = 6pm s/off. 11/10-Hunting for the score of the Razorbeck game on KAAY, I was surprised to hear WCKA Ill. s/off & 5:14. 11 11 brought the first new split of the season in TIW-775 w R. Uno ID a 1:51am. MM 11/12- A rare session made possible by Vet's Day. WHB-710 was off & maybe WOk too as I heard KGNC Tex. W/Larry King = 3:28. Then I finally heard KFRU-14:00 Mo. 4:15. 11/17- KXJK-950 Ark. s off past nulled KIGA slop, 5:59. 11/19- Up for the KSRA TEST, I heard instead KAKZ ex-KOOL

SINCE DAVE VISITED & EXEL IN ILLINOIS - WE'LL PUT HIM IN HERE!

DAVE YOCIS - 85 Vesner Street - Fairfield, Connecticut - 06130 203-335-3370 11/22 79 -or- 502 West McLonel - Mol - East Lansing, Mich. 48824 517-353-1503

Since a trir home would be too much time and money, time was taken to visit relatives in Glendale Heights, Ill. for Thanksgiving weekerd, and, of course, I brought the TkF along: Superb sso on 11/22, perhaps the best I've ever poted, too bad I wasn't more familiar with CX in the area or I might have gotten some really good catches. When I left the dials KLTh-1580 Okla. w/1,000w was booming in with an incredible signal, this at 6.28pm. Next AM (11/23) KKHI-1550 Calif. came in, much to the dismay of MARK STRICKERT, with whom I had a lengthy phone chat, who has never heard them. Beginners luck, I suppose, hi. Also Denver on 950 & 910, ho hum. 11/ 26. Back to East lansing and school, ugh. CKst-1050 Man. per MARK STRICKERT tip in FF way atop XEG/CHUM for a few minutes, enough for ID# 11:59pm Sunday night. Couple of r/cs in WCBG & WJDY, then batteries started to fade; plugging in the TRF brought in more QRN than electricity, and spare batteries were deader than the ones I had been using, so to bed. 11/27: WJVA-1580 South Bend, w/s/off = 5:30pm. Totals in Michigan since arrival, 75 days: 309 34d/5/9. 73

VISITS THE EVANSTON STATIONS

MARK STRICKERT - 5900 North Washtenaw - Chicago, Illinois - 50659 I actually got some SSS DX done - twice in four nights yet! I raced home from din-din on Turkey Day (11/22) and heard TEN new stations in nine different states from Ga. to Colo., details to appear in Rocket Ray's column. Speaking of Ray, I had a nice chat courtesy of New England Bell (makes me wish I worked for Ill. Bell, hi). Then, Sun. 11/25, I heard yet more at NORM GEUDER's antenna farm/ham shack. I dropped in on all the Evanston stations on 11/17, all two of them. The guy at WPTZ-1330/WOJC-105.1 knew less than nothing, not even where the stickers were stashed! Does anyone know if WPRZ, when it was WEAW. was ever nondirectional? There's a single tower, with the old calls on it, behind the building. WONX-1590 four blocks East, has a single rusty tower and more acknowledeable staff. They found a site for the night directional XR "a mile South of present site" and "hope" to be on w/2.5kw DA-N (U-2 -ERC) by 6/1/80, and are waiting for WAWA-1590 West Allis Wis. & WFVR-1580 Aurora, Ill. to get approval on their proposed frequency shifts so that "One-I" can get their proposed 5kw day oneration going (using the same pattern day & night). On order is a Harris MW-5 solid state XR, decent but I've heard they're susceptible to electrical storms. Their Saturday boardman knew what DXing was, only wish he watched that board better because, as I suspected, the needle is too far into the red too often. I didn't get around to asking "Why the silly 'One-X' slogan?", though knowing their management (who a few years back took this small North suburban station, which despite poor reception as close as the Loop actually was in the ratings book, & canceled any show that had showed signs of the most minute popularity ), it was perhaps just a ploy to further confuse the few remaining listeners. Merry Christmas, Happy Gmu Year, Happy Chammah, and 73's till the next decade. (Doesn't the next decade begin on 1/1/81, Mark? -EEC)

ERNIE THAWS OUT AFTER HIS TRIP TO ICEIAND EKNEST J. WESOLOWSKI - 1116 Pasadena Avenue - Omaha, Nebraska - 68107

Hello from Nebraskaland. First of all, I want to thank those in the St. Louis/St. Charles Mo. area for a very fire Convention. I really enjoyed it! I will be looking to meeting everyone again in nine months at LOS ANGELES. If anyone is interested in making a five day trip by rented car after the Convention in California, please write. Since the Convention this year, I made an enjoyable trip to ICELAND. DX was very poor the first five days due to the Aurora. Local stations there operate daytime only but leave the carrier on all night. All programs are // to DM & FM with the two on the BCB. The Mavy Broadcasting station at the NATO base at Keflavik, operates on 1485 kHz, 24 hours a day with 250 watts. Full ID and ownership info is given at 0005 GMT along with our beautiful SSB. Back here in Omaha, I haven't been listening due mostly to lack of interest. I have logged the new KMMZ-1140 in Graybull, Wyo. at their ISS. Another call change locally was KOWH-660 to KCRO. Beloit, Kan. is now heard daytime on 1190. I want to welcome JOHN SAMPSON back to Omaha. SKIP DABBLETEIN's visit for Thanksgiving brought back memories of the early days of DXing in the 60's. Merry Christmas and the best DX to all in the new decade of the 80's. It looks like we'll be completely changing the BCB during the next ten years to lower power, 9 kHz separation, and many un-heard of ideas. LONG LIVE OUR BCB! 73's and Peace.

WXCL-1350's BEEN SOLD JOHN CLEMMER - 2937 West Gilbert - Peoria, Illinois - 61604

In a move that really surprised me (and a lot of other people too) local WXCL was sold along w/WZ: 0 (FM) last week. The three owners of WXCL/WZRO apparently just want to relax and retire. The three previously owned WMAY in springfield, Ill. The buyer of WXCL WZhO is a Baton houge paper; they own WJBU & an FM there and KhGV in Texas. AM & TV. I guess the sale price will be at least two million; could be as high as four million. Fot bad. The three bought WXCL in '65 and took about the lowest rated station and made it to one of the majors in the market. In doing so they increased the value slightly. WXCL is profitable. New owners say no charge in format/personnel. I doubt a charge in calls. Some good DX lately. KVSA at s/off on 11/10, 1220, u/WGAF. WGAF is a super pest. I finally bagged: KZIA = 7pm s/off on 11/7, N.W. #2. Klack Col. was ir or 11/1h around 6:30pm. 11/19 found three new ones: WKEH-1520 W/KOMA off, WHHY-1440 ofmess, and KKAA Aberdeen S.D. W/ET. Unn WM00 super strong on ET. Besides KZIA one otherwery nice catch: WDAY-970 Fargo, N.D. o/semi-local WMAY & 5:55pm. From what I understand WDAY is a very rare catch, at least around this territory. Season's Greetings. See you after finals. 73 & good Dx.

REMEMBER THE DEADLINE IS PACK TO EVERY MORDAY. THE NEXT SUCH DEADLINE IS FOR THE MOUNTAIN TIME ZONE AND TEXAS MEMBERS, SO LET'S HEAR FROM YOU IN THOSE CATEGORIEST PLEASE DOUBLE SPACET

A brief intro from a new member of NRC: I am 16 yearsold & I have been DXing for about four years, although I only started seriously in the Summer of 1978. My receiver is a Realistic TRF, with no external antennas. I am primarily a domestic DXer, but I do try for new foreign countries and splits. After a very slow late Summer early Fall, I have been picking up again. Recent DX includes: 11/16, a fantaztic SSS session beginning w/ KLTR-1580 Blackwell, Okla. very good & s/off. No CBJ, so I stuck around. Thirty minutes later, e 7pm, in came KZIA-1580 Albuquerque, w/s/off. State #37 & my 500th station. At 7:23, my most-wanted, KNIX-1580 Phoenix, Ariz. made it through for state #38. The Bel-Air Drive-In popped on a moment later. KIMN-950 Derver was logged @ 9:38pm to top off a great night. More recently, KNIR-1360 New Iberia caught ETing 11/22 @ 1:17 w/tones & ID's. 11/23- 1:2iam. KLZ-560 Denver was caught w/WIND on. 11/24- 11:49pm, CFCL Timmins, Ont. on 620 w/2F IDs, finally something u/WTMJ. 11/27- WREN-1250 Topeka, Kan. finally logged, as well as R. Paradise on 1265 for country #9. 11/30- 1:05am, WSUI-910 Iowa City caught bombing in w's/off. That's all for now, have a Merry Christmas and the best of DX during the holiday season. 73s. I hope that this will be the first of many Muses from Brookfield. (We ALL do, Michaelt -ERC)

HIS VERIE PERCENTAGE IS WELL OVER 90%1

MARTY WRIGHT - 1913 Jeanette Lane #7 - Springfield, Illinois - 62702 Lots of good DX lately, mostly at SSS. I have listed what's been heard in DDXD. Most unusual CX the past week. I thought things were pretty Auroral until finding such strange things as CBJ-1580 and WAMY-1580 fighting it out at SSS, & CFGM-1320 battling w/ KWHN-1320. How do you explain something like that? I have had a bit of bad luck. Last week we had a very large fire in Springfield & I spent several hours reporting from the scene. The next day I had some chest pains and went to a Doctor. Seems a bit of heart damage so I am off work for a while and taking it easy. I'm feeling OK though and getting at the dial a bit more. I received my 534th werie today - would you believe from KPAR-1190 for the 1978 TEST? It was good to meet the members attending the St. Louis Convention. I enjoyed you all and I'm looking forward to LOS ANGELES. Despite gloomy predictions that written veries are obsolete I have continued to get good response - 534 of 558 over six years isn't bad. I still believe a properly written report will get response eventually. I have verified a large number of reports for WCVS and the reports are generally good from our members, but I have received some real duds. The main thing I stress is neatness - make it look like you are making some attempt at presenting your report with the station's interest in mind as well as your own. A correct report poorly written, or sent on yellow linednotebook paper can discourage veries. I believe firmly in the personal letter report - I look with disfavor on the report form, or the mimeographed letter with blanks to fill in. I'm in the process of trying to arrange some TESTs, with station owners who are friends in various places. Watch for my results which I hope will be good. Thanks RICHARD PISTER & JOHN CLEMMER for recent calls and letters. Have a good season, good friends.

PLENTY OF EXCITING DX FOR CARL CARL W. DABELSTEIN - 8209 West 78th Street - Overland Park, Fansas - 66204

Well, the DX season has so far not gotten off the ground as well as I had hoped, but a few catches have made their way into my den since my last Muse. On 10 15, I found WRHC-1550 Coral Gables, Fla. ETing @ 2:40. I stuck on 1080 on the morning of 10/24 and heard several calls, some new. First, unn RYMO-1080 in East Prairie, Mo. w/a f/c-TT 6:40. They announced this as a r/c. WEEP in Pittsburgh was heard to s/on 3 7. WVCG in Coral Gables surfaced briefly \$ 7:10 with their "Morning Report." WKGX in Lenoir, N.C. came in well for several minutes @ 7:36. Unn WJOE signed on @ 7:45. The morning of 11/12 brought dozens of unID TTs, but a few calls were copied. KVEO-1530 in Cheyenne heard with RS = 1:15. Old friend WTTI-1530 ETing @ 1:20. An ID from KPSO-1260 Falfurrias, Tex. with female announcer on ET # 2. I noticed WVMI-570 Biloxi running c/w AN and so took a log on them. 11/19 brought much-wanted KRSY-1420 (ex-KOOO) in Omaha with the Rosary @ 5:50. They actually gave a s/off announcement 3 5:45 & then went off right after the Rosary was finished. 11/21 brought KKXL-1/40 in Grand Forks, N.D. & 1:05 and then KIDN-1350 in Pueblo & 1:15 through the talk show on KRNT. 11/24 brought three s/offs on 11/40 & 6:30. These included KNAB in Burlington, Colo., KORC in Mineral Wells, Tex. & KATT in Oklahoma City. Much-wanted KMMZ-11140 in Greybull, Wyo. was heard with their s/off 3 6:45. A few veries have come this way recently, v/ls from WWWQ-1430, KJLA-1190, WABT-1000, WRHC-1550, WKGX-1080 & KGIR-960 (ex-KFVS). V/fs received from KCRO\_660 (ex\_KOWH) & WVMI-570. Total veries is now at 2,027. I was in the old hometown for Thanksgiving and was able to get over and visit ERNIE WESOLOWSKI. Also I was able to visit with ROLLAND LINDBIADE and DAVE MARGRITZ via land line. With not too much else, I'll say 73's.

#### THE VERIES ARE COMING IN

DAVID MARGRITZ - 9710 Louis Drive - Omaha, Nebraska - 6811/4

Greetings from Omaha. Allow me to re-introduce myself. I'm 17 &I joined the NRC in June of this year. I've been AM DXing for about two years & I am also a member of the NASWA. I use a Realistic DX-160 & a TRF. I have ordered a DXer's Special Loop from Radio West & hope to receive it soon. My totals are 532 heard & 191 verified. ERNEST WESOLOWSKI & KOLIAND LINDBIADE both contacted me soon after I joined & their fine help has been much appreciated. Recent veries include KMMZ KIKS KLTR KWMB KARZ & KXPO. KRZJ-1190. Beloit, Kan. was noted here for the first time on 11/24. Other new loggings: on 1220. KOFO KZEE & KBNO noted @ 6:15, 6:30 & 6:45pm EST, respectively. Also WKUN, WLIJ, & KWED were logged on 1580 kHz. If anyone has any advice on how to verify KNIX, I'd appreciate it if you'd contact me. That's it for now - 73s and take care.

PLEASE DON'T FORGET TO SEND REPORTS OR THANK-YOUS TO ALL STATIONS RUNNING SPECIAL TESTS:

VERIE SIGNERS CREDITS A - Ray Arruda F - n.m. Fill Stone 1330 WFEC 1 Jack h. Fulmer, M B - Steve Fonder G - Neil Zank 1340 Kwil p u/u C - Wayne Heinen H - Tom Maki KKIT P "Jim" D - Norman Maguirel - Star Morss CKVT A. Tassel, CE, CKVK-710 E - Walt Sharp J - Ernie Cooper CKMG Rejean ST. Jear, CE CFBQ p koger Adair, E 570 CBML p Katherine Lauer, Aud. Pel. & KFDN 1 Warren Hasse, O B. Turpeen, Supr. CBNH Pat0'Brien, Tech Mgr Same as above 1350 WGAD Troy Pennington, CE 610 WAYS Scott Slade, PD Donald F. Egert, VP KDIO KCSR pu Robert Hinze 1370 WMYD 1m Duffy Egan, DoE 600 WVAR P Craig Bury, E Desmond Thomas KGEN 1p KCLS Ken Brown 1380 WTOB 1 Jay Epstein, SM Same as CBML-570 710 CBMF 1400 CBMD See CBML-570 800 KQCV Gary Killer, GM CKSJ Rejean St. Jean, CE 830 WCCO q1 Barbara Jo Bergen Chopyak, S H KBJM p Wayne D. Tisdale, CM 850 KOA 9 CINL p u/u D. O. Holmberry 900 WKJK 1 John R. Morris, GM CKFI. p Robert Davesu WHSM lmb Clarence L. Campbell, SM 1410 CIGO p k. Brian Ribren KJJJ qu 1430 KRGI pu WBBB q William Blackburn, CE WMNC p Joseph Cooper, GM CFLS Normond Blondeau 140 CJOI p Henry Briq Milton Thurlow, CE 1450 CBND p Pat O'Brien, Tech Mgr WGST WKY CBMA p u/u See CBML\_570 G. Skutle, CE CHRT p CJCA Colette Gauvin, S WHSC p WFNC 1m Weyher Dawson, AM D. B. Gyles, M CBM K. Levier WGNC P Patrick McSwain, SM 960 KNDN Homer G. Pirkey, M WTSA q1 Joel F. O'Brien, PD Mrs. Doris C. Dohogne, M 1460 WAKS 1 KGIR James Butts, M Domald Franz, CE KOAO 1470 CHOW f Larry Holbran, E VIJMX Frank A. Jenne, TD KLCL pu u/u. CE Same as CBML-570 CBMB 1480 KSDR p Jeffery Scott Schimding CBME ditto James de la Hunt KEHG p 1060 WCOK Hersey Shumate, CE 1490 CBLA P Wilder Lewis KYV. u/u CJMC p Roger Vallee Susan Moneypenny, Cp M WHNI CFWB p R Weems Michael Runnrll, CE 1070 WIEC q David A. Gillard, CE KENK lm konald Haney, CE CBDJ p John William Ardgrave, T 1080 WOAP Arthur Kinsey KENE p Lee D. Arbob. CE WEWO 1 Stephen M. Poole, CE CKLR p Rejean St. Jean, CE Harold Ballard, CE 1500 WCZY 1m Craig B. Roberts, CE Phil Jensen, PD 1100 KREX u1 WEAC 1 Craig S. Turner, CE A. L. Anderson 1130 KBMR CKAY p M. Mykto 1140 KMAZ Steven Warner, M 1510 WITS a Richard Jolls, CE 1150 KWBZ 1 Don Bishop, Op M 1520 KMAV p Austin G. Kramer, GM 1170 KOWO 1m Ron W. Geines, OM 1530 KXXV ph Michael J. Leaver, WB7DON F Rae Berex CFIX n WRXV 1 Benton H. Weiss, TD 1190 KJLA KSMM 1m Michael G. Iverson, OM Steven K. Moreen, CE WOWO a 1540 WZAL 1 Ed Hoard, GM 1220 KDDR p I. A. Branson, VP WCOX q DenzelKing, CE 1230 WKLK u/u 1550 WBSC q Richard K. "u/u", WNNC David Lingafeldt, GM WMOO f Wilbur Goforth, GM KINO Loy Engelhardt, SM Don Roder, CE WAAY f KRSY p Herbert Trix, PD CBE q M. Jones Same as CBML-570 CBMH 1560 WPAD 1 Edward B. Fitts, GM CJTT p S. Parent Richard Odegaard. DoE 1570 CK10 1m CJLP p Robert Daveau WOBS P John W. Smith, CE CFIN p M. Autoin 1580 KPIK 1b Jeff Taylor CBON Ghislaine Ethier WRDI 1 Walt W. Sharp, A. TechCons E p, 1 Jules Verne 1240 CIRB F.I 1590 WDCI 1 Ronald Malone KMCL James McCall. 0 1600 WJZA p KAMQ 1h A. J. McKinney, CE, W5UkX KERX 1 Clifton W. Glasgow, M., CE D CJRW p John Derry 1250 CBGA Claude Suger F We have a pretty good amount of v/s still on 1260 WGWR ul E. F. Swicegood, GM B hand, and when we have a full page-worth of William J. Kiewel. M then, we'll shoot 'em along to you. he urge KROX Darrel Gander, Ch Tech F all Diers to VEHIFY their catches - have KDUZ C something to look back at on those rainy days u/u, M 1270 KDHI pu D in the distent future when you are retired 1280 KFRN Frederick C. Whiteman. M A and bored for something to do! Please send Claude Bouchard CJMS q C them in double-spaced and with the frequires Ken Keating 1290 KOWB lu A mentioned, and use our abbreviations for tyre Michael C. Lareau, GM 1300 WOUD 9 D of verie and for the position of the verie u/u, CE 1210 KCXE P D signer. This column car help others obtain S. Blair 1320 KRDD P Halph L. Van Der linden, DoE E long-sought veries - please joir in and send william Walters, GM H your recent v/s ir. Thank you. WHHO 1 KXYZ. P