



DX NEWS

*the magazine of the
National Radio Club*

— SINCE 1933 —

Volume 56, No. 16 - Monday, January 23, 1989 (ISSN 0737-1659)

DX Tests ...

January 23, Monday - 2:29 a - 2:58 am EST: WVNA-1590, including Morse ID's. V/s: James Alan - Box 477 - Tusculmba, AL 35674. (Wayne Heinen, NRC)
Your test could be here next week. Let Wayne and Jeff send a test request letter for you. See p. 15 for more details.

Inside ...

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From the editor ...

Details, details ... sometimes I guess I'm too subtle. At any rate the half-dozen or so letters sent to my old address were delayed by three or four days. So, listen up!

Don't send mail to my old address. Use either the home address or P. O. box listed on page 24. Thank you.

I feel much better. While I'm at it, I might mention that mangled magazines have decreased since the past month; in fact, I've received only one request for replacement of *DX News* in the past four weeks, including during the much-feared Christmas rush time. A tip of the hat to the USPS.

However, if you need a replacement copy of *DXN*, send a note; if the cover is missing, give key details from an inside page. And, I'm sorry, but don't expect me to return phone calls very often; neither I (nor Mike) nor the club can afford a high phone bill. Just leave your message on the machine, in the allotted 20 seconds, if you prefer to phone rather than write.

As always, the NRC can always use backup typists/editors in case something happens (God forbid) to one of the editors. Apple compatibility is preferred, but access to an ordinary manual typewriter is quite acceptable. Write to Mike or myself if you'd be interested in helping out on short-term or long-term projects.

NRC's SuperLoop is nearing completion and

will be available in two versions, novice and professional, according to Fred Vobbe. Hold off your requests for information for now; we'll bring you full details when it's ready.

DXChange ... Wanted: Cassette or 8-track recordings of high school, Indian reservation, AFRN, TIS, or "talking house" stations. Will listen to and return and reimburse for shipping. Chris Cuomo - 670 Third Ave. - Verona, PA 15147, (412) 828-6376, 5-10 pm EST. Argentina's ADXL offers a catalog (for US\$1.00) of items, including a C60 cassette with ID's, jingles, s/off/on, of Peruvian and Chilean FM stations for US\$11.00, and a year's subscription to their bulletin is US\$20: ADXL - P. O. Box 406 - 2000 Rosario - ARGENTINA.

DX Time Machine

From the pages of *DX News*

Forty years ago ... from the January 15, 1949 issue, courtesy of "The Old Timer": 46 tests listed... Hal Wagner heard HJDK at 5-9 ... Fred Anderson reported that KTOK would be going to 1000 kcs. on April 1 ... Mel Oliver, of Houston, TX, reported a verie from KULA for his sixth Hawaiian ... Joe Becker asked if WING had quit being AN ... Stan Morss received a verie from KQRS-WY to make all states veried twice. He needed just one more WY to make it all veried three times ... John Brierley got a new HQ-129-X and was leading the foreign contest with 44.5 points.

Twenty-five years ago ... from the January 25, 1964 issue: Ernest J. Wesolowski, Omaha, NE reported January 13 as his best morning of the season, hearing CBN-640 St. Johns, Nfld., in the clear at 4 am, plus on 1410 WSNE, WHAG, KQV ... Bob Pietsch, San Francisco, CA heard KLYQ-980 on 1-6 at a 3:45 am f/c, plus VOA-1040 1-2 from Sugar Loaf, FL, and KLVI-560 at 7:40 am.

Ten years ago ... from the January 22, 1979 issue: Dick Nelson, Simi Valley, CA heard a local pirate, KDNF-840, on New Year's Day ... and Bill Townshend, Washington, DC heard perennial New York pirate WFAT-1620 on the same day ... Bob Foxworth noted excellent high-end TA openings on the mornings of 12-18/19/20, no sign of Tahiti-738 ... Publisher Ted Fleischaker was still looking for applications for charge cards ... Harry W. Jones, Vienna, VA noted R. Jumbo-545 back on the air with strong signals ... Bill Hardy, Aberdeen, WA logged a new domestic, KSUB-590.

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

AM SWITCH

Jerry Starr

c/o WHOT Radio, 4040 Simon Road, Youngstown, OH 44512

William Hale

2160 Farm To Market Road, Johnson City, NY 13790

NEUTR WAVE RAMBLINGS

CALL LETTER CHANGES

Old call:	New call:	Old call:	New call:
1120 WWOU FL Destin	WBZR	1390 WEED NC Rocky Mount	WEWD
1220 WNNR CT Hamden	WXCT	1450 KATR CO Greeley	KGRE
1260 KAFX TX Diboll	KCFX	WSPB FL Sarasota	WWKY
1270 WORL FL Eatonville	WBZS	WWHT SC Goose Creek	WXCH
WYAK SC Surfside Beach	WXMB	1470 WVBS NC Burgaw	WXBG
1340 KMKM TX Lubbock	KFMX*	1490 WLXR WI La Crosse	WLFN

*KMKM-1340 was set aside and never used, station remains KFMX

APPLICATIONS FOR NEW STATIONS

None

GRANTS FOR NEW STATIONS

- 990 FL Miami: 5000/5000 U3 (ends a long multi-applicant battle for this frequency)
- 1030 IN Union City: 1000 D3 (see WTRJ comments below in Otherness)
- 1240 MS Southaven: 580/580 U1

APPLICATIONS FROM EXISTING FACILITIES

- 790 WAEB PA Allentown: day power to 3800 watts
- 890 WLJD VA Falmouth: antenna to D1 (new CP not on the air)
- 1120 WUST DC Washington: power to 20000 watts (3000 CH)
- 1130 WEEO PA Waynesboro: power to 5000 watts
- 1260 WBUD NJ Trenton: night power to 1700 watts
- 1270 WFHM NJ Vineland: reduce powers to 360/210 watts

GRANTS TO EXISTING FACILITIES

- 660 *New ON Red Lake: reduce night power to 650 watts
- 810 WBLW GA Royston: reduce power to 239 watts, increase antenna height
- 900 KKRT WA Wenatchee: relocate XR
- 1260 WFTW FL Fort Walton Beach: reduce power to 1520 watts, relocate XR
- 1490 KZAO AR Dardanelle: night power to 1000 watts
- 1500 KRCK CA Burbank: powers to 50000/14000 watts, relocate XR (has been silent)

OTHERNESS

- 700 KSEV TX Tomball: silent as KTBT is back ON THE AIR with News/Biz Talk
- 710 CHYR ON Leamington: despite conflicting reports that they are/are not using their 730 kHz night, this appears to be the story per the station: They are again 710/730 and have NOT yet applied to move to 710 at night yet. They are attempting to get an FM frequency allocated and, if successful, will most likely delete the AM operation altogether. If no FM is forthcoming, THEN they will apply to move nights to 710.
- 740 WLVG MA Cambridge: application for 2500 D3 has been DISMISSED
- 840 WKDE MD Denton: previously reported testing, is now ON THE AIR
- 1090 KTNX CA Oakhurst: new station is ON THE AIR
- 1370 KCHY WY Cheyenne: despite previous reports, this station is still being heard on 1370 kHz so has NOT yet moved to 1530 as previously reported.
- 1450 KUUB MT Bozeman: silent as KXXL is back ON THE AIR
- WCLM VA Highland Springs: silent as WRGF is back ON THE AIR
- 1480 WLEE VA Richmond: station is SILENT however, they still turn on the XR for WBBL's few hours on Sundays (both stations shared the same XR/antenna)
- 1510 WTRJ OH Troy: the saga may have come to an end. After granting WTRJ a move to 1030 kHz, the FCC was petitioned and reconsidered their initial decision and instead granted 1030 kHz to Union City, IN (see above). WTRJ's 1510 kHz CP was never built. It is unknown at this point if the 1510 kHz CP is still viable. More on this when the smoke clears.

THANKS to members Dave Schmidt, Bill Hardy and Charles Reh for their contributions!

73 and Good DX, *Dave & BKF*

Jerry Starr & Buffalo K. Foonman

- My apologies to William Townshend, who I corrected last week, about his logging of the WASG test. He caught the code ID as WASZ. Hank Holbrook also heard the CID as WASZ.
- Effective immediately, any logging which does not include the date & time will not be included in DDXD-E. These items are an important part of the logging, and determine what part of day you heard the station, as well as what day. The only exception is if it falls into the SPECIAL category and is a new station on-the-air, station gone silent, etc. Also, please, please, please follow the format seen here. Some weeks I type in literally a hundred or more loggings, and if they are "formatted", it makes the job a lot more enjoyable. And remember...24 hour clock, convert (if necessary) to Eastern Time, include all pertinent details (but be brief), divide DX into the categories, and print neatly or type. Thank!
- Dave Braun writes to say he heard WANW-1580 in Washington, IN signing off with SSB at 2200 back in November. Since they don't have a PSSA, does anybody know what gives with them. Maybe Operator error??
- Has Cabin Fever hit? Have the Midwinter Blahs set in? Does your back hurt from shovelling snow? (Like mine, hence I need to see a good Chiropractor). Just what's your excuse for not reporting your DX?? Well, inquiring DX minds want to know what you've been hearing. Especially if you received a RX from Santa. So jot it down, send it in, and everyone will read all about it.

SPECIAL

- 840 WKDI MD DENTON - 12/27 1st day on RB with AC/OLD; C-Quan stereo; weak here with WVPO still good in null (DS-DE)
- WKDI MD DENTON - is now on the air as of late December; QSLd on test in Oct; strong here days with ROK & POP mx; in @ (HH-MD4)
- 880 WFKJ PA CASHTOWN - 12/18 1045 fair with REL mx, ID @ 1045+more mx; hrd later in week with REL talk; a daytime regular in the area (DB-VA)
- WFKJ PA CASHTOWN - 12/23 1254-1438 new stan on air with CBN prgram, IDs @ :00; 1405 local prgram with many IDs & Christmas mx; S/O (?-WRH) gives power @ 1kw SR+SS only; signs off with Lord's Prayer; slogan is Jesus is Lord Ministries Int'l (HH-MD2)
- 1330 WESR VA ONLEY - 12/21 1300 this regular here still using these CLS; all REL (DB-VA)
- 1350 WIOU IN KOKOMO - 12/28 2006 into Talknet; add this to your logs (RW-IN)
- 1410 WCFY IN LAFAYETTE - sked is 0800-2400; no SSB with sign-on, just a brief message from Steve Spehager, then into Insight for Living; is live in PM's with little talk, mostly soft Christian mx; nice with 85 watts (RW-IN)
- 1440 KXAM TX HELOTES - has turned in license to FCC; was up for sale but no buyers (AB-TX)
- 1490 W DAN IL DANVILLE - 12/28 is back to C&W mx with live DJs, methinks; was Talknet (RW-IN)

UNIDS AND UNIDS TOO

- 1380 UNID ?? - 12/31 1830 atop briefly with NewsTalk 1360 ID (LMC-NY)
- 1410 UNID ?? - 12/21 1702 fair with Christmas mx, ID which sounded like WEMI, and ads, but could not hear any content of the ads (DB-VA)
- 1420 UNID ?? - 1/2 0122 someone with LK; too much WDOV slop to hear any details; none of the regulars here are listed with King (DB-DE)
- 1530 UNID ?? - 12/21 1807 someone with songs from The Messiah in WCKY's null; gone @ 1815 (DB-VA)
- 1580 UNID ?? - 12/21 1835 fair with repeated Hail Mary's; no sign of WQXR (DB-VA)

DX/EQUIPMENT TESTS

- 550 WASG AL ATMORE - 12/19 0243-0327 NRC Test heard with CIDs (sent as WASZ, sted @) and tone; fairly good thru Jumble (HH-MD2)
- 970 WITF AL TROY - 12/12 test not heard (HH-MD)
- 1010 WPKY AL DORA - 12/5 test not heard (HH-MD)
- 1480 WBET MA BROCKTON - 1/2 0100-30 fairly good on DX-IDs, C&W IDs, TT, QRM from CKRB (HH-MD5)

WBET MA BROCKTON - 1/2 0100-30 1 kHz tone good; CID fair; VID barely audible; bagged WKOK @ 0100 (RJT-NC)
 WBET MA BROCKTON - 1/2 0113 caught end of anncnt in conjunction with the National Radio Club, ID, then TT; fair over WCHB; not hrd at all @ 0119 ✓ (DB-DE)

TIS & OTHER

1610 TIS VA CHINCOTEAGUE NAT'L WILDLIFE REFUGE - 12/31 0127-0235 usually audible but seldom readable; QRM from below (HH-MD4)
 1610 TIS VA ALLEGHENY PORTAGE RAILROAD & HISTORIC SITE - 12/31 0127-0235 good most of time and atop channel with info on the RR and park; QRM from above (HH-MD4)

PIRATES & OTHER ILLEGAL STUFF

1620 WJDI NY - 12/31-1/1 2325-0006 excellent level conducting an equipment maintenance test; said they were 1000 watts; played OLD & did some comic ads; asked for comments, and many IDs such as New York State, WJDI, WJDI, on the top of your AM dial, the voice of New York State & WJDI with a power output of 1000 clear watts on 16-20; called themselves Your friend in New York; sounded like a local (RAD-PA)
 WJDI NY STATICTOWN? - 1/1 0023-0056 sign-off equipment maint; test 1Kw in clear; strong, frequent IDs & mx by Grateful Dead & others; The Voice of New York State; anyone have address (HH-MD4)
 WJDI NY - 1/5 2312 with ROK mx and frequent IDs; The Voice of New York State conducting an equipment test with 1000 clear watts on 1620 kHz; L&C, no fading (DV-NY)

MIDNIGHT TO MIDDAY

570 KLDD TX DALLAS - 12/28 0400 with OLD; fair in WWNC null; K-Oldies, All Oldies all the time; TX #8 (RJT-NC)
 580 CHLC PQ HAUTERIVE - 1/1 0130-0207 occasionally atop channel with deep fading; believed to this in FF with New Years celebration-fiddle tunes, talk & laughter; happy people! (HH-MD4)
 730 WFMC NC GOLDSBORO - 12/29 0838 with Take Five REL pgm, and Top 100 C&W survey of 1988 pgm (KVJ-GA)
 740 CBL ON TORONTO - 12/29 0821 good with nx, traffic, wx, & a Today in History segment (KVJ-GA)
 940 WHIX IL MOUNT VERNON - 12/26 0100 good over Cuban with Jim Bohannon Show, promo with Jim B. inviting you to begin your morning with America In The Morning on WHIX, Mount Vernon; also heard in Dover on 1/2 @ 0100 with LK (DB-VA)
 1010 KHLT AR LITTLE ROCK - 1/2 0059 good with ending on National Music Survey, ID:KHLT & KHLT-FM; no sign of WINS...SP? (DB-DE)
 1070 KHMO MO HANNIBAL - 12/19 0758 ad for Bell Telephone for extra phone for teens for Christmas; It's 7 O'Clock on 1070 AM KHMO in Hannibal (JB-TX)
 1090 KAAV AR LITTLE ROCK - 1/2 0101 fair with sign-off with Lord's Prayer, ment of license expiration on 8/1/89, then brief REL mx; only unID FF on frequency > sign-off (DB-DE)
 WBAL MD BALTIMORE - 1/2 0040 noted with OC only (DB-DE)
 1280 WSAL IN LOGANSPOUT - 12/28 0550 above the jumble all night with soft AC, live DJ; so may be NSP (RW-IN)
 1380 WHOT OH CAMPBELL - 1/2 0029 fair with Journey song Open Arms; many Hot FM 101 IDs (DB-DE)
 1340 WYCB DC WASHINGTON - 12/14 0808-37 good, with GOS & Christmas mx, traffic & wx reports; hope they'll QSL this time after many tries; WHID nulled with loop (HH-MD2)
 WROD FL DAYTONA BEACH - 12/28 0027-0100 all alone with rebroadcast of PH @ 0030, then MoYL format; very good (RJT-NC)
 1360 WSAI OH CINCINNATI - 1/2 0026 good with OLD, ID, PSA for Greater Cincinnati Alzheimer's Chapter (DB-DE)
 1420 WKCV VA WARRENTON - 12/23 0857 fair with C&W mx, local ad, ID; no sign of CKPT (MS-ON)
 1510 WAYT IN WABASH - 12/28 hrd in morning with C&W mx, then noon ID (RW-IN)
 1520 KOMA OK OKLAHOMA CITY - 12/28 0145-0249 XLNT with OLD; ID:Oklahoma's Oldies Station, KOMA; rarely hrd here on night pattern (someone forgot to switch it tonight?) (RJT-NC)

MIDDAY TO MIDNIGHT

630 WAVU AL ALBERTVILLE - 12/28 2117 end of Auburn Univ BKB; 2019 ID:All hit mx on the oldies stn, WAVU (RJT-NC)

680 WBLX AL FAIRHOPE - 12/22 1743 with UC, rep mx, the McDonald's Check-in Line; 660-BLX-AM (KVJ-GA)
 670 KWXI AR GLENWOOD - 12/22 1755-1800 with nx promo, ment of NBC nx & Ark Radio Net; sign-off with female announcer (KVJ-GA)
 690 WYIS PA PHOENIXVILLE - 1/1 1207-1322 good signals, but in foreign languages; seemed to be mostly in SS with ads for Philadelphia companies; folk mx, I guess (HH-MD3)
 740 KTRH TX HOUSTON - 12/27 2218 over KRMG with Houston Rockets BKB; rarely hrd except during KRMG SP (RJT-NC)
 760 WCHP NY CHAMPLAIN - 12/18 1815 poor with sign-off with mention of 0730 sign-on (LMC-NY)
 770 KJCB LA LAFAYETTE - 12/27 1835 very brief with several good CL IDs, then gone; TDH #550 (RJT-NC)
 780 WZZX AL LINEVILLE - 12/31 1739 noted very weak in WBBM null with full-data sign-off (CK-OH)
 880 KOSE AR OSCEOLA - 12/31 1741 gobs of ads for Osceola merchants during halftime of Creighton vs Arkansas State BKB; still there @ 1800, but fainter (CK-OH)
 890 WHNC NC HENDERSON - 12/28 1640 with CHR, ABC Nx (KVJ-GA)
 940 WHAZ GA MACON - 1/3 1735 good with EZL mx by Bobby Vinton, Elvis; stock report; new (LMC-NY)
 WGFY MA WEBSTER - 12/31 1555 fair under CBM with song Rise; 94 GFP ID (LMC-NY)
 960 WEAV NY PLATTSBURGH - 1/1 1825 fair with Top Hits of '88 (LMC-NY)
 980 WITY IL DANVILLE - 12/28 2030 good in WSIX/WONE null with Lou Henson tele-talk show (RW-IN)
 1080 WXBK AL ALBERTVILLE - 12/31 1837 temporarily atop with ad for let Alabama Bank in Albertville, Piggly Wiggly grocery, others (CK-OH)
 1120 WUST DC WASHINGTON - 1/3 1717 fair with sign-off, no SSB (LMC-NY)
 1160 WTYN NC TRYON - 12/28 1359 local nx, AM-1160, OLD, ad for Peppermint Shop in Tryon (KVJ-GA)
 1220 WXRA NY SYRACUSE - 1/1 1853 fair with AC, Listening in the Office promo; new (LMC-NY)
 1250 WZOB AL FT PAYNE - 12/27 2300 very good in WTMA null with The very best in country-your number 1 country-WZOB Ft Payne, Ala; 122 watts? (RJT-NC)
 WTMA SC CHARLESTON - 12/27 2353 very good in WZOB null with C&W mx & The low country AM 1250 WTMA Charleston; SNN Nx @ 100 (RJT-NC)
 1260 WCHV VA CHARLOTTESVILLE - 1/4 1707 poor with ID, local nx; new (LMC-NY)
 1280 WGBF IN EVANSVILLE - 12/14 1854 poor+fair with contest promo for The biggest contest ever to hit the Midwest and it's right here in Evansville's; eating disorders PSA, wx, ROK OLD (MS-ON)
 CJMS PQ MONTREAL - 12/28 2040 loud and over all with AOR mx; in FF (RW-IN)
 1290 WHIO OH DAYTON - 12/30 1701 briefly dominant with local nx headlines, traffic report, Accu-wx (LMC-NY)
 WNLB VA ROCKY MOUNT - 12/22 1830 hrd only end of ID...Rocky Mount then VA Network Nx (DB-VA)
 1330 WBTH VA DANVILLE - 12/22 1509 fair in WESR null with local & NC nx+Stevie Wonder song (DB-VA)
 1350 WRAP VA NORFOLK - 1/4 1825 fair with dance mx, nightclub ad, WRAP Rap Attack Turn Up & Jam slogan (LMC-NY) (Yes, Laura, they swapped with 850 about Oct or Nov of '87-WRH)
 1360 WIXZ PA MC KEESPORT - 1/3 1830 over WDRC with nx, traffic report, C&W mx (LMC-NY)
 1380 WTOB NC WINSTON-SALEM - 12/21 1859 NC Network Nx, ID+nat'l nx; much WH2Q slop (DB-VA)
 1390 WRSC PA STATE COLLEGE - 12/15 1825 poor in big mess with ad for Downtown State College; Sportsline show (LMC-NY)
 1400 WBAT IN MARION - 12/26 1835 above the mess with tele-talk and soft AC; later, just above the channel with live DJ, is AN, as hrd B4 0600 (RW-IN)
 1410 WING OH DAYTON - 12/21 1830 All oldies all the time, ID+NBC Nx (DB-VA)
 1420 WLNA NY PEEKSKILL - 12/12 1700 fair with ID & wx; mixed with CKPT (MS-ON)
 WVOT NC WILSON - 12/21 1728 good with NC sps on NC News Net+Gold 14 News, including item on WPTF's tower application; ending nx with I am ? Wilson, Voice of Today (DB-VA)
 WHK OH CLEVELAND - 12/30 1730 Business Radio 1420, biz nx with Judy Thompson (KVJ-GA)
 1430 CJCL ON TORONTO - 1/5 1844 xint with two mentions of Mississauga in a nx story; blasting thru during a 15 or so second period while local WENE was going to night pattern (WRH-NY)

1440 WCHB MI INKSTER - 12/28 2100 AM's best WCHB Inkster-Detroit ID, then gone, as if testing; had been in/out for 2 years; excellent (RW-IN)
 WRRO OH WARREN - 12/28 2106 out of A1 Nx with WRRO jx, then ROK OLD (RW-IN)
 WCDL PA CARBONDALE - 12/22 1615 ad for Andrews Jewelers in downtown Carbondale+OLD (DB-VA)
 WAJR WV MORGANTON - 12/30 1615 with C&W mx, Accuweather, ad for Solomon's Pizza (KVJ-GA)
 1450 KGFF OK SHAWNEE - 1/3 1737 ID:1450 KGFF; ad for a party Friday nite @ Mathews, ad for Shawnee Medical Center for home health care; KCTI nulled (JB-TX)
 KISW OK WOODWARD - 1/3 1730 with wx with female; And that's the wx on KISW+interview with the governor of Okla about jobs coming to that area+ad for a Woodward company; KCTI nulled (JB-TX)
 1470 WJDY MD SALISBURY - 12/30 1840 UC format, ad for local bar, ment of ...the only source... (KVJ-GA)
 WKKW PA ALLENTOWN - 12/29 1700 fair with legal ID:The Lehigh Valley's First Radio Stn, WKKW, Allentown (LMC-NY)
 WBTX VA BROADWAY-TIMBERVILLE - 12/30 1628 with ABC Nx, ad for Chevy dir in Harrisonburg (KVJ-GA)
 WTZE VA TAZEWELL - 12/21 1613 fair with ads mentioning Tazewell, ID+C&W mx (DB-VA)
 1480 WSAR MA FALL RIVER - 12/29 1700 fair with local nx; new (LMC-NY)
 WISL PA SHAMOKIN - 1/3 1540 poor with ad for tire dealer in Shamokin; new (LMC-NY)
 1490 WBCB PA LEVITTOWN - 12/29 1718 poor under WKNY with PSA with a mention of Bucks County; new (LMC-NY)
 1550 WBSC SC BENNETTSVILLE - 12/15 1648 fair with Christmas greetings from local colleges, ID (MS-ON)
 WKBA VA VINTON - 12/14 1648 good with promos for Olde Time Gospel Hour & other programs heard exclusively in SE Virginia on Christian Radio KBA (MS-ON)
 1570 WILO IN FRANKFORT - 12/28 1930 noted with Wv-Lo country jx, but is off satellite; C&W in daytime also, so add to log (RW-IN)
 1580 WAMJ IN SOUTH BEND - 12/17 2322 fair with Michael Jackson Talk Radio 1580 ID (DB-VA)
 1600 WAYC PA BEDFORD - 1/3 1608 fair under WIXY with song Lotta Love (LMC-NY)

REPORTERS:

DS-DE Dave Schmidt//New Castle, DE//HQ180 + SM-2
 AB-TX Artie Bigley//San Antonio, TX//Superadio
 RW-IN Roger Winsor//Monticello, IN//Superadio II
 MS-ON Morris Sorensen//Port Carling, ON//HQ-150 with SM-2 or ICF-2010 barefoot
 DB-DE Dave Braun//Dover, DE//R-2000 + Palomar Loop
 DB-VA Dave Braun//Falls Church, VA//R-2000 + Palomar Loop
 RAD-PA Richard D'Angelo//Wyoaming, PA//Icom R-70 + Alpha Delta SWL Sloper Ant
 HH-MD1 Hank Holbrook//Dunkirk, MD//SP-600 + Colegrove Loop
 HH-MD2 Hank Holbrook//Dunkirk, MD//SP-400 + 150' wire south
 HH-MD3 Hank Holbrook//Dunkirk, MD//SP-600 JX-14 + 150' wire
 HH-MD4 Hank Holbrook//Dunkirk, MD//SP-600 JX-14 + Colegrove Loop
 CK-OH Chuck Kaufman//Lebanon, OH//RF-2900
 LMC-NY Laura McCusker//Ravens, NY//GE World Monitor
 DV-NY Don Voorhies//Oswego, NY//FR68800 + LW
 JB-TX Jim Boehm//San Antonio, TX//R71A + 4' Box loop
 RJT-NC Robert Tiara//Hendersonville, NC//R-5000 + many LWA or 24" Ferrite Loop
 KVJ-GA Karl Jeter//Stone Mountain, GA//
 WRH-NY Bill Hale//Johnson City, NY//Delco ETR

SOME ABBREVIATIONS & SPECIAL SYMBOLS USED IN DDxD-E

TT: test tones OC: open carrier TC: time check QRM: interference QTH: location
 SID: singing ID CID: code ID JX: jingle lcl: local lgl: legal mx: music nx: news
 wx: weather sps: sports HS: high school FB: football BB: baseball HKY: hockey
 BKB: basketball >: after <: before =: equal with or equal to :00: on the hour
 |: parallel with +: to or into *: stereo SS: Spanish FF: French EE: English
 POL: political GOS: gospel REL: religion or religious AC: adult contemporary
 BB: big band OLD: oldies ROK: rock 'n' roll CHR: contemporary hit radio
 ContChr: contemporary Christian C&W: country & western EZL: easy listening UC:
 urban contemporary tkt: talk LK: Larry King BW: Bruce Williams PH: Paul Harvey
 AP: Associated Press Radio UPI: United Press International MBS: Mutual
 Broadcasting System USRN: United Stns Radio Net NPR: National Public Radio
 MRN: Motor Racing Net MCRN: Music Country Radio Net IRN: Interstate Radio Net
 SRS: sunrise SRS: sunrise skip SS: sunset SSS: sunset skip LSS: local sunset
 SSB: Star Spangled Banner

79, Bill

DOMESTIC DX DIGEST - WEST

①

Nancy Hardy

2301 Pacific Avenue, Aberdeen, WA 98520

DDXD-West deadlines are Saturdays. Let's hear from you!

****SPECIAL****

1370 KSHY WY CHEYENNE - 12/28 1700 this station has not made the move to 1530 kHz. KSHY is dominant on 1370 during daytime hours. (JT) Still here, despite the logging in issue 56/13 that they had moved to 1530. Daytime log here. (W-CO)
 1510 KPNN AZ MESA - 12/29 s/off 1915. Business Radio Net. Ex-KJAA. (JT)
 1530 KSHY WY FOX FARM - Re KSHY logging; unless they were testing, no sign of them in Metro area. (WH-CO)

DX TEST

550 WASG AL ATMORE - DX test logged nicely with code ID's and tone. KOY & KUSA were nulled with loop, KLZ-560 slop phased out 12/19 at 0235. (WH-CO) 12/19 0253 0053-0055 call letters continuously in Morse code at estimated 7-8 words per minute under KOY & KCRS. (DA-CO) (Did you forget to convert a couple of the times to Eastern?--NH)

MIDDAY TO MIDNIGHT

670 KWNK CA SIMI VALLEY - Format change noted 1/2/89. Had been AdCon, now news-talk. Phone call to station on 1/3/89 verified this. (MR)
 790 KPVC TX LUBBOCK - 12/8 2302 AZ State & Texas BKB, spots for Bank of the West. (DA-CO)
 900 KGRB CA W. COVINA - 11/30 2038 "KGRB 900 & KBOB 98.3." (DA-CO)
 930 KAPF AZ FLAGSTAFF - 12/28 fair at 1911, faded at 1915. "93 KAPF Country." AZ #39. (JT-CO)
 940 KPRE CA FRESNO - 12/1 2040 "Your country favorites from the 60's, 70's and 80's, 940 KPRE." (DA-CO)
 990 KBBQ CA SANTA BARBARA - Ex-KKSB. I called the station & receptionist told me they are 500 watts at nite now with pattern shaped like a heart. Nite pattern goes toward the ocean so as not to interfere with KKIS, Canadian station & Mexican stations on the same freq. KBBQ now 5kw days. (MR-CA)
 1080 KRPX UT PRICE - 12/29 s/off at 1900. (JT-CO)
 1100 KPAX CA SAN FRANCISCO - 11/30 2117 briefly over KVEE with traffic reports for S.F., San Mateo, and Oakland. (DA-CO)
 1110 KYKK NM HUMBLE CITY - 12/28 s/off 1845. (JT-CO)
 1120 KLIM CO LIMON - 12/28 1831 "K-L-I-M, Limon CO has come to the end of another broadcast day." (JT-CO)
 1130 KSDO CA SAN DIEGO - 11/30 2142 "KSDO sports" & "San Diego's award winning news station," spot for Laredo cowboy boots. (DA-CO)
 1230 KLAV NV LAS VEGAS - 11/30 2204 woman giving Las Vegas weather, my best GY DX at 580 miles. (DA-CO)
 1290 KCUB AZ TUCSON - 11/30 2238 Palo Verde hospital spot, weather, K-Cub ID to C&W. (DA-CO)
 1340 KCEN NM AZTEC - 11/30 2055 spot for "Fiesta Grande" in Farmington. (DA)
 1400 KCZN CA SANTA PAULA - 1/2 noted format change. They were country, now simulcast with KZTR 95.9 FM with AOR oldies format. KZTR is in Cama Rillo, CA. (MR-CA)
 KGVL TX GREENVILLE - 12/27 1905 area weather, then into music & soon lost in jumble. New, TX #87. (W-CO)
 1500 KHTT CA SAN JOSE - 12/1 1902 no ID or news on hour, ID "More solid gold--KHTT" at 1902. (DA-CO)
 1530 KXTD OK WAGONER - 12/28 s/off 1817. (JT-CO)
 1570 KNDY KS MARYSVILLE - 12/1 2200 C&W to legal ID & ABC News. Power?(DA)

MIDNIGHT TO MIDDAY

540 CBK SK WATROUS - 12/30 s/off 0210 with Canadian Nat. Anthem. (JT-CO)
 550 KBOW MT BUTTE - 12/28 0820 sports scores, Montana news, local spots. Fair w/ KLZ-560 splatter. (W-CO)
 KCRS TX MIDLAND - 12/19 0301 "Your country station in West Texas, KCRS" into country music. (DA-CO)
 590 KRSO CA SAN BERNADINO - 12/10 0303 weather, ID, into light music. (DA)
 660 WFAN NY NEW YORK - 12/12 0305 football, NHL scores, "Sportsradio WFAN." (DA-CO)
 670 KWXI AR GLENWOOD - 12/29 s/on 0815. Faded 0820. (JT-CO)
 900 XKAP TX FLOYDADA - 12/1 0739 spot for State Farm Image in Floydada & local community events. Was this 250 watts or 6 watts??(DA)

Chuck Hutton

1237 Lanier Blvd., Atlanta, GA 30306

Times are GMT (UTC), for ELT subtract 4 hours. (404) 973-2755 Before 2300 ELT

- 960 KPMY UT PROVO - 12/12 0439 local weather & KZOL? 96.1, o/u KOOL.(DA)
- 990 CBW MB WINNIPEG - 12/30 s/off 0210 with Canadian Nat. Anthem.(JT-CO)
- 1000 KVSD CA VISTA - Legal ID into talk. (DA-CO) (Date & time?--NH)
- KOMO WA SEATTLE - 12/5 0000 briefly surfaced at hour to ABC News, mixing with Radio Mil. No KTOK! (DA-CO)
- 1010 KXEG AZ TOLLESON - 12/12 0330 "The Christian voice of the valley," spot for New Life Ministries. (DA-CO)
- KPSL CA THOUSAND PALMS - 12/10 1132 alone on freq. Local spots and "The desert's only classical music station." (DA-CO)
- 1080 KRPX UT PRICE - 12/9 1000. EZL to 1002 then news read from AP, local news, weather, finally ID at 1008. (DA-CO)
- 1110 KRLA CA PASADENA - 12/12 0238 two legal IDs. (DA-CO)
- 1140 KCMJ CA PALM SPRINGS - 12/15 "1140 KCMJ" at half hour under KS00. (DA-CO) (Time?--NH)
- 1190 KBCO CO BOULDER - Weird s/on 12/29 0800. They just turned it on about this time, two announcers spoke after news, and "It's 6am at KBCO AM & PM." (WH-CO)
- 1200 CKDA BC VICTORIA - 12/12 0505 WQAI off. "Super 1200 CKDA" and "It's 8 degrees at KDA," o/u three unID SS stations. (DA-CO)
- 1210 KGYN OK GUYMON - 1/2 s/off w/SSB 0102. (JT-CO)
- KREW WA SUNNYSIDE - 12/30 s/off w/SSB 0110. (JT-CO)
- 1260 KOIT CA SAN FRANCISCO - 12/12 0457 "News on KOIT, San Francisco."(DA)
- KPOW WY POWELL - 12/28 0759 s/on annc by man. Pair. (ØW-CO)
- 1300 WKXI MS JACKSON - 12/7 0000-0010 male DJ with strong southern black accent, local spots and "on WKXI." State #36. (DA-CO)
- 1320 KWHN AR FT. SMITH - 12/12 0346 "KMAG 99.1" to C&W. (DA-CO)
- KEMX UT SALT LAKE CITY - 12/12 0252 "I'm Herb Jepko, thanks Salt Lake for being here." (DA-CO)
- 1330 KFAC CA LOS ANGELES - 12/30 fair with classical music. "At 92.3, KFAC FM & AM, Los Angeles." Still hasn't changed to KKWV.(JT)
- KOVE WY LANDER - 12/28 0856 sports scores, ID & temp (-15°F); 0900 CBS News. Fair o/u KVKM/KPH QRM. (ØW-CO)
- 1340 KDEN CO DENVER - 1/2 MM s/off for maint. 0200. (JT-CO)
- 1420 KTAN AZ SIERRA VISTA - 12/19 0145 "Merry Christmas Arizona," local weather. (DA-CO)
- 1460 KENO NV LAS VEGAS - 12/28 1015 oldies music, program notes, casino ads. Fair on peaks but losing by 1055. (ØW-CO)
- 1480 KLMS NE LINCOLN - 12/1 0023 ID & ad for Jiffy Lube. (DA-CO)
- 1500 KABR NM ALAMO COMMUNITY - 12/9 0924 community events, IDs to C&W. Under KSTP. (DA-CO)
- 1550 KAKS TX CANYON - 12/1 0800 legal ID on hour. (DA-CO)

REPORTERS

DA-CO/Doug Allen, Woodland Park, CO/TS 430-S, 160 meter dipole, and 1000' NE-SW and 600' SE-NW Beverages
 WH-CO/Wayne Heinen, Aurora, CO/Radio West TRF
 MR-CA/Mike Riordan, Goleta, CA/GE Superadio II, Panasonic RFB-300
 JT-CO/Jeff Tynan, Parker, CO/Sony 2002 with JT-5 loop
 ØW-CO/John Wilkins, Wheat Ridge, CO/R-1000, R-390A, 2½' loop

Radio Roundup ... by Pete Kemp

Greetings, all! Bill Green, ex-WLAP morning man has been hired by KCR-710 and will be teamed with Sherrie Belyx. WOP (early personality Mark Scott has been shown the door, as his "SIXE" just didn't fit in with WOP's ways. KOK has recently been sold, and their main program line (and has just been a successful) from what little I've heard. WYAN in the City of Brotherly Love, has given the gate to Urenty employees. In yet another industry sect cutting move, and will be switching format from Urban contemporary to Gospel/Talk. WYAN in Annapolis has become an affiliate of the Maryland State Network. Congratulations to Wayne Heinen on his Computer-Assisted Dyer article. With the huge growth of home computer market, I am sure that most automobiles will find a place for their owners to track back of their linear exploits eventually. A class with the PC not only does the computer perform the administrative tasks with ease, but you should also consider a modem too. Many telephone BBS have areas catering to radio and related subjects. I have seen several on a few occasions to find messages awaiting me from a number of fellow BBSers, sharing QSL addresses and radio related subjects, although NOTHING will ever replace The DX News! Hope that everyone had a pleasant Holiday Season, with thoughts of rare DX in the future. To much for now.

- 171 MOROCCO 12/17 0555-0645 carrier with tone and s/on at 0700 with anthem, news and popular music. In Arabic and FF. Strongest stn on LW or MW, ex 173 KHz. (Holbrook)
- 177 EAST GERMANY 12/16 0631-0705 popular music and annc in GG, fairly good and then fading, very weak by 0705. (Holbrook)
- 216 MONACO Radio Monte Carlo 12/13 0647-0721 good signals fading after 0700. About gone by 0721. A lot of talking by many people in FF with an occasional pop tune. Seemed to have a lot of commercials. QRM from beacon CLB in Carolina Beach, NC on 216 with 2 kw. (Holbrook)
- 825 BELIZE Radio One noted here (ex 830) on 12/29 12/20 and 12/31 between 1100-1200 with a wide variety of programming including African chanting and drums w/male anncr in African language, EE c&w mx w/man in EE, black gospel mx, and local nx in EE. ID's as "Belize Radio One" and "The Caribbean Beat in the Heart of Central America". Fuzzy, distorted audio. (DeLorenzo)

Marc DeLorenzo - Warner Robins, GA GE World Monitor, SM1
 Hank Holbrook - Dunkirk, MD SP400, 150' LW

- 630 UNID 11/29 0331 heard with R. America IDs, ads and mentions of Comayaguella, CST TC's and instrumental mx o/WLAP. Did Tegucigalpa on 610 move here? (Forth) I believe this is not 610 moved but rather another station, but don't have any way to be sure - Chuck
- 650 CUBA Santiago de Cuba R. Rebelde CMJC 12/11 0830 good with CMBB splatter with WSM off with Latino music, many IDs between songs // 640 and 710. (Bueneman)
- 700 JAMAICA JBC Radio One Montego Bay 12/7 2335-2400+ good w/educational math program. 2400 ID w/frequency data for AM and FM relays. (Smith)
- 750 JAMAICA JBC Radio West, Port Maria 12/7 2335-2400+ good w/uc (? Chuck) to 2400 then contest promo and ID, abck into uc punctuated by recipes! (Smith)
- 800 NETHERLANDS ANTILLES TWR Bonaire 12/7 2200-2220+ extremely loud w/end of Jack Van Impe broadcast. (Smith)
- 825 BELIZE R. Belize 11/13 0306 very good with religious type crusade, off frequency (normal frequency is 1130) or moved here from 830? Is R. Paradise on the RB network? (Bueneman) Definitely Belize here, seems slightly distorted so I guess they are having tx problems - Chuck
- 830 CUBA 12/24 2212 very, very strong signal. No question of what this is! R. Taino with fast kind of Spanish music. (Wyllie) 12/23 0002 heard w/conversation between male and female anncr in SS, newscast. Later hrd 0259 w/R. Taino and Tour Radio ID in EE and music. Very good signal, WCCO not audible. (Forth) 11/9 0225 local like with traces of WCCO with instrumental music, SS IDs, promos // 1160, not heard much lately on 830. (Bueneman)
- 960 CUBA CM.. Cienfuegos 12/24 2219 weak but good signal behind mess of stations. Pips really come through the mess. (Wyllie)
- 1040 CUBA R. Moscow Relay 11/10 2354 fair to poor in WHO null over WHBO with Science and Engineering program, EZL music, frequency schedule, off at 2359. (Bueneman)
- 1100 CUBA CM.. 12/17 0725 and 12/24 2235 news and ticks every second but minute pips not there instead had chimes on the minute and no RR code ID at all. Why does this sound so different than other Radio Relej's? (Wyllie) (I don't know, there have always been a few different flavors of Relej - Chuck) 12/23 0241 good o/WWWE w/standard Relej format // 760 which was heard at the same time. Which city is this from? (Forth) I don't know - it is new it seems - Chuck

Eric Bueneman - Woodstock, GA DX200, SM2
 Karl Forth - Chicago, IL R70, HQ160, loop, LW
 Doug Smith - Dxing at Wrightsville Beach, NC ICF2010
 William Wyllie - Franklin, MA Realistic 2200

Station Profile

Tony Fitzherbert

356 Jackman Avenue, Fairfield, CT 06430

Join us at 950 on your AM dial.



WXLW, broadcasting for over forty years, presents "mainline" teaching and preaching programs - plus sports, and, on Saturday afternoons, a shopping program, where an amazing spectrum of products and services are sold over the air.

WXLW began operations as a 1000 watt non directional daytime station on August 18, 1948. WXLW (the call has no intended meaning) originally was assigned 1590 khz, and attempted to carve out a share of the market with a middle of the road format. During its early years, General Manager Robert Enoch operated the station. At different times in the 1950's and early 1960's, WXLW was affiliated with the CBS and Mutual networks, primarily for news.

WXLW has always been at its present site, at 3003 Kessler Drive., N. Drive. Originally the station operated from a smaller building, and the original tower stood where the present control room is located. A former police radio transmitter shunt fed the antenna. The first studio was located downtown in the Indianapolis Athletic Club building, but the studios were soon moved to the Kessler Boulevard property.

Over the years, WXLW changed owners several times, and, in the face of the competitors' popular rock format, the station tried to maintain uniqueness by programming big band music, and a middle of the road format. The station also set up its own news service, arming reporters with portable units. These reporters hurried to the scene of breaking news events, and go on the air from accidents, fires, and other news. However, partly because of the popularity of rock on full time station in Indianapolis, and because of WXLW's daytime status, no format succeeded.

In 1955, WXLW moved from 1590 khz to the better dial position of 950 khz. (1590 later went to WGEE, now WNTS). The station increased power to 5000 watts, directional south. Three in-line 260 foot high towers were built at Georgetown Road and 56th Street, north of the community of Speedway, and the studio building was enlarged.

The station was sold to Shirk, Inc., and Bill Poorman took over as president of WXLW. He continued to experiment with the programming, running everything from heavy rock to mellow middle of the road music. Eight years ago, Louisville Christian broadcaster Ed Sears joined Shirk, serving as VP and General manager. The format was changed to religion - a decision greeted with enthusiasm by radio ministries, as WXLW offered the best dial position and strongest signal of the Indianapolis Christian broadcasters.

Today WXLW broadcasts from 6AM to 10PM, using 5000 watts power during the day, a 500 watt PSA, and 117 watts at night. The 117 watt signal covers Indianapolis very clearly, and there is thought of going on the air all night using the 117 watts. The same pattern is used all the time, and according to Chief Engineer Jeb Reuter (who has been at the station for several decades), the furthest reception reports he has received have been sent from Louisiana and South Carolina.

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And since there is more than enough room to squeeze this in, here's Jim Renfrew's San Diego DX report from Christmas vacation.

- 540 MEXICO XEWA San Luis Potosi with ballads, no ID on hour, but call letter ID at 0205 12/27.
- 650 MEXICO Los Grandes Exitos de Los Mochis" (the best ID that I could get, no slogan or calls), but lots of local ads (a zapateria is where you buy zapatos - shoes!) 0100-0500 1/3.
- 700 JAMAICA JBC Radio One with reggae Xmas mx and several promos 1105-1125 12/24.
- 750 JAMAICA JBC Radio One // to 700.
- 790 MEXICO R. Mexicana, Mexicali BCN with mx and IDs u/KABC 0240 12/27.
- 821 MEXICO XEYX "8-20 YX Gran Musical" Mexicali BCN off frequency w/100 hits of 1988, ads for Westmoreland, CA.
- 830 CUBA R. Taino (see 1040) weaker, only heard after 0205 1/3.
- 830 MEXICO "La Grande de Sinaloa" loud and clear with s/off NA 0155 1/3.
- 1040 CUBA R. Taino loud and clear with music and tourist activities in SS 0120-0200 then EE from 0200 1/3. // 830 and 1160.
- 1050 MEXICO XED La Gran D, Mexicali BCN dominated 1050 day and night.
- 1100 COLOMBIA R. Reloj with some ticking sounds and good ID, WWWE nulled 1130 12/24.
- 1150 MEXICO XERM Mexicali BCN w/mx and several IDs 0245-0255 12/27.
- 1160 CUBA R. Taino, see 1040.
- 1190 MEXICO XEMBC R. Variedades, Mexicali BCN w/ID u/Anaheim 0257 12/27.
- 1370 MEXICO XE?? R. Nirteno, ?? 0300 12/27 heard many IDs this night and following nights, but I couldn't catch the location. WRH doesn't show this slogan in use on this freq.
- 1380 MEXICO XEKT Tecate BCN was silent 2010 12/26 but back on 12/27.

Radio Roundup ... by Pete Kemp

Television comes to Radio? The popular gameshow Jeopardy will be making its debut of radio in March. The show is scheduled for syndication to Oldies, News/talk and Adult Contemporary formatted stations.

WOR in the Big Apple has had the famed Gambling family dynasty for many years, but now WNEW has followed suit announcing that Jeffrey B. Williams, son of the legendary William B. Williams, has joined the station taking over the reins of the Milkman Matinee overnight on weekends.

CBS has signed on to purchase WWJ in Detroit.

Alan Burke, a popular TV issue/discussion show in the mid 60's, a la Morton Downey, is returning to radio in Philadelphia on WCAU in the 9-noon spot.

Recently WFBR switched from a Talk to oldies format, with many on-air personalities being given the gate. Some of them didn't have to walk too far, as Joe Lombardo, Frank Lumber, Tom Marr and Ken Maylath have signed on at WCBM.

WHBQ talkmaster John DeCleux has moved on to WJNT in Jackson, MS. WHBQ is now programming oldies.

WOHO in Toledo, is now programming country music, and no longer simulcasts its sister stations - WWWM-TV/AM.

Noah Adams is returning to All Things Considered on National Public Radio.

The FCC has reversed its decision to allow limited on-air adult programming during the overnight hours. Decency standards will remain the same 24/hrs a day. The National Association of Broadcasters will undoubtedly fight this decision.

For you trivia nuts, Danny Bonaduce, formerly of the TV's Partridge Family fame, has surfaced in Philadelphia as a DJ on WEGX-FM.

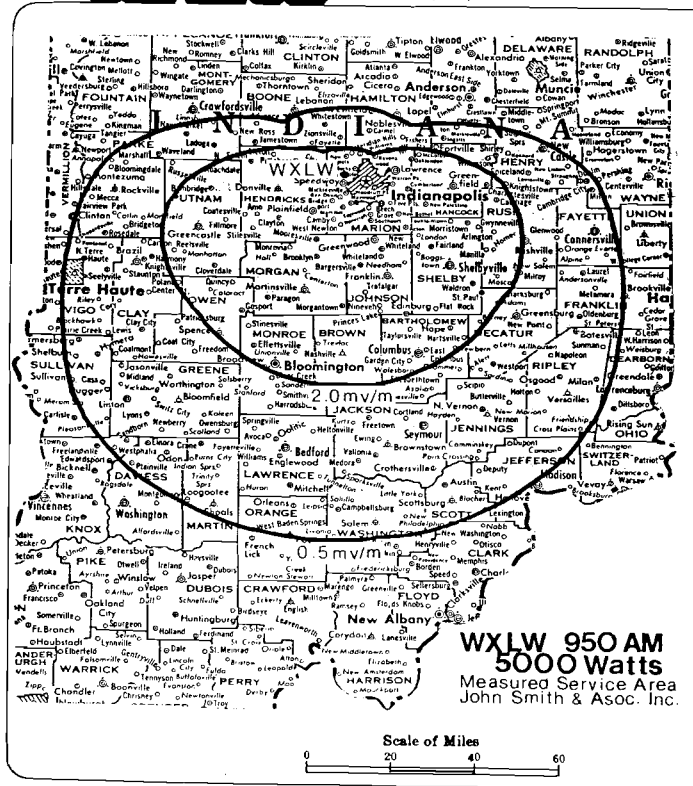
Recent RADAR reports that radio listeners split 76% to 24%. FM to AM, with about 24,000,000 people listening at on average during any 15 minute segment.

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Join us at 950 on your AM dial.



3003 Kessler Blvd., N. Drive
P.O. Box 22300
Indianapolis, Indiana 46222
Ph. (317) 925-6494



WXLW recently invested \$100,000 in all new broadcasting equipment, including a Harris solid state transmitter, new production equipment, and a new control board, and the station will rehabilitate the physical plant including a new control room and production studio.

WXLW's most popular programs are Focus on the Family, with Dr. James Dobson, Insight for Living, hosted by Chuck Swindoll, and Thru the Bible. Other ministries are heard during the day. A three hour sports talk show featuring local sports is heard in the evening. WXLW focuses on college and high school football and basketball, as well as H.S. Pony League and little league. The station carries White Sox Baseball. No news is aired. One Spanish show is broadcast on Sunday afternoons.

WXLW Radiogram™



950 AM WINNERS

The Radio Shopping Show runs every Saturday from 1PM to 5PM. It replaced an auction show, and WXLW's merchandising includes a "Radiogram". The Radiogram is an envelope of discount coupons mailed to over 90,000 area homes. The shopping show allows local businesses to trade services and merchandise for aid time. In the past, listeners have bid on everything from haircuts and car washes to furnaces, swimming pools, and apartments.

WXLW has over the years left its mark on Indianapolis radio - with its roving reporters broadcasting live from the scene of news events, and, more recently, its religious programming, which is received by a large and dedicated audience.

The editor wishes to extend his appreciation to VP and General Manager Ed Sears for his assistance on this station profile. Reverend Sears also serves as pastor of the Borden Community Church, in Borden, IN., near Louisville, KY. He has served as "temporary" pastor for over 23 years.

SPORTS NETWORKS

Barry S. Finkel

10314 S. Oakley Avenue, Chicago, IL 60643

Here is NHL flagship information from "The Hockey News" 10/21/88, courtesy of Andy Rugg. As with the NBA list of flagship stations, I have no idea which of these stations anchors a network of other stations.

Boston Bruins	1390 WPLM-MA	Bob Wilson, John Bucyk
	99.1 WPLM-MA	
Calgary Flames	770 CHQR-AB	Peter Maher, Doug Barkley
Chicago Black Hawks	780 WBBM-IL	Pat Foley, Dave Tallon
Detroit Red Wings	760 WJR -MI	Bruce Martyn, Paul Woods
Edmonton Oilers	1260 CFRN-AB	Rod Phillips, Gord Garbutt
Hartford Whalers	1080 WHIC-CT	Chuck Kaiton, Andre Lacroix
Los Angeles Kings	570 KLAC-CA	Bob Miller, Nick Nickson (some games)
Minnesota North Stars	980 WAYL-MN	Al Shaver, Tom Reid (home games only), Bruce Gordon
Montreal Canadiens	690 CBF -PQ	Claude Quenneville, Gilles Tremblay, Mario Tremblay
	600 CFCF-PQ	Dick Irvin, Rob Faulds (English)
New Jersey Devils	770 WABC-NY	Chris Moore, Larry Brooks
New York Islanders	97.9 WEVD-NY	Barry Landers
New York Rangers	660 WFAN-NY	Marv Albert, John Kelly, Sal Messina (some games)
Philadelphia Flyers	?	
Pittsburgh Penguins	1020 KOKA-PA	Mike Lange, Paul Steigerwald
Quebec Nordiques	800 CHRC-PQ	Alain Crete, Michel Carrier
Saint Louis Blues	1120 KMOX-MO	Kelly, Bruce Affleck, Wilson
Toronto Maple Leafs	1430 CJCL-ON	Joe Bowen
Vancouver Canucks	980 CKNW-BC	Jim Robson, Larscheid
Washington Capitals	630 WMAL-DC	Ron Weber
Winnipeg Jets	580 CKY -MB	Curt Keilback, Michael Hearn

The Answer Man

Got a question about radio? Send it to Russ Edmunds - 753 Valley Rd. - Blue Bell, PA 19422-2052. No question is a dumb question, and Russ will answer all, from basic to highly technical. Watch for the answer in DX News!

The Boom of Free Radio in Argentina

By Julian Anderson - Buenos Aires, Argentina (via César Objio)

As something unusual in Argentina and certainly in Latin America, our country has experimented during the last three years an incredible boom, in the Unofficial radios area.

Timidly first and with incredible audacity later, hundreds of low powered FM-stations (and some MW-ones as well) have risen all over the country like flowers in Spring. Nowadays, it is supposed that there are about 1,500 FM-pirates in our national territory.

Why Pirates? Well, because our National legislations do not consider low-powered local/community stations, as existing, as in our country Radio-regulations is the same that was active during the last Military-de facto Governments (1976-1983), with the same archaic and restrictive concepts of radio-working.

President Alfonsín's Government, ruling the country as from 1983, is still "studying" the new radio-TV legislations, as surely they'll do for a long, long time to come. During his campaign Mr. Alfonsín promised electors to return radio & TV stations to private hands, but he only returned a few ones, the vast majority have remained under the control of Government's "Interventores" (observers) who direct the programming according to the Government's interests and will.

As Argentina people don't feel they are represented by the nowadays radio-structures, then in 1984 the first FM-Unofficial stations appeared in the FM-dial, mainly inland, far from the Federal Capital, where they could be easily detected by the Secretaría de Comunicaciones (Communications Secretariat), or by the COMFER (Comité Federal de Radiodifusión - Federal Committee of Radio-Broadcasting).

These primary stations were sponsored by privates or Provincial/Municipal opponent Governments, who were unable to take advantage of local stations (under Buenos Aires' control), and were heavily chastised by the previously mentioned State entities.

Nevertheless, many were closed, they re-opened thanks to the help of the communities they are serving. In several cases the owners started legal action against the Government because they said that they weren't breaking the law, as there weren't laws considering the existence of local/community radios'. In many cases, stations originally sponsored by privates were helped or reopened thanks to opponent parties, who were interested in having a way to foster their own ideas.

In 1986, the first stations appeared in the Greater-Buenos Aires area, and I was able to hear a couple of them from my QTH. But it is during 1987 that an incredible amount of these stations appeared all over; you are able to find nearly all types of radio-programming broadcasted by these "young" pirates.

Interested in this phenomena, I started visiting some of these stations, and interviewed many of the Directors or Owners; also I started a regular up-dating band-scanning.

They can be roughly classified in two great groups: a) Those commercially-minded, who have united in ARLIA (Asociación de Radiodifusoras Libres Argentinas - Free Argentina Radiostations Association), and b) The community ones, who have founded "ARCO" (Asociación de Radios Comunitarias - Community Radios Association).

Both Associations have been founded to help associates in their Radio-working against the Secretaría de Comunicaciones and the COMFER.

The first group is mainly formed by businessmen who're interested in obtaining new means of expansion: these stations are generally well equipped, with stereo sound, and they broadcast US/European pop, being very similar to the big 'legal' stations; they're using 1 to 2 Kw transmitters so they are able to cover nearly all the city and surroundings. The advantage they have, is that they are able to get (and offer) cheap propaganda as they don't pay many of the taxes that the legal ones have; personally, I don't care for these stations as they are just a repetition of the usual ones; only Yank Pop continuously, broadcasting programmes generally intended for the youth. Nothing really interesting.

These are the most pursued by the government, as they are using the station to get money (what they do, as they are able to offer advertisement at half the price, without having to pay taxes), and are generally closed and reopened from time to time.

The second group is certainly more interesting; these community or alternative -or experimental- FM stations are generally sponsored by private and can be roughly divided in 4 subgroups:

1) **Religious:** These are not many and are generally sponsored by Evangelists. Adventists of the 7th Day, and in some cases, by the local Catholic church; they are low-powered (from 0.01 to 0.1 Kw) and have religious and light music programmes.

2) **Political:** They are few, too. Generally backed by local municipalities and/or political parties; there are Peronistas (the Nation's opposition party), Communist, and Socialist ones. These usually have general-entertaining programmes, and some are obviously politically-oriented, inviting politicians who belong to each respective party.

3) **Community:** These are the vast majority; they are low-powered, using from 0.01 to 0.1 Kw transmitters, and are generally sponsored by small groups of individuals, generally neighbours, who beam the broadcasting to specific areas or suburbs. It is supposed there are about two hundred of these stations in Buenos Aires and suburbs, they usually cover a radius of 30 to 200 blocks, depending on power and antennas, equipment is simple, and programmes are intended for the common people: housewives, students, workers, etc. Sound may be stereo or not, and speakers are generally ISER or COSAL students, who are training (ISER and COSAL are school for professional speakers), in many cases you can find simple university students or workers, operating the equipment and acting as DJs/speakers.

These stations operate from most anywhere: schools, sporting clubs, neighbourhood associations, private homes, etc. I was producing myself a program on one of these stations, FM Ciudad, which was closed by the government.

As an example of what these stations are, this FM Ciudad was sponsored by a Spanish-language teacher, two philosophy students, and a lady, who owns a folklorical academy. They were helped by the neighbours, who cooperated producing programmes or donating money to help cover the stations expenses; this one as most community radios had some propaganda, generally local, with ads, of the neighbourhood shops.

4) **Local/Commercial ones:** These are also small local stations but somewhat more commercial, broadcasting propaganda, as they use 0.1 to 0.25 Kw transmitters, they are able to cover greater areas, they are not so important as those of the A) group, but they have the same kind of programming; nevertheless, they are locally-oriented as well.

This is a view on how many types of "Free/Community" stations we are able to hear, but the big question is... why are they still operating, why they have not been closed?

Last April, I was preparing my program on FM Ciudad and some chaps from the COMFER arrived. The first thought was: "They are going to close us up". The Inspector who came accompanied by two more men asked for the station's Director, and told him that they were recording many of the programmes of the station, and that in their opinion, we would not be closed down, as all our programmes were community/family oriented, and we were only interested in promoting our own neighbourhood.

After saying this, they wished us good luck and said good-bye. Why didn't they close our station, if they were coming from a State Entity, and there is a force in law which forbids the operation of unofficial stations?

The answer is simple: many of the people of the COMFER and other State entities belong to opposition parties and many people of the ruling party don't agree with Mr. Alfonsín's political conduct in the radio-aspect, so they protect these stations and don't close them down. (Why was FM Ciudad closed down then? Well, a few months later, a new chap joined the station and he was a member of the Communist Party. Communism is a 'bad word' here, so a couple of Communist-oriented programmes did the rest). Believe it or not, things are this way here in Argentina. (Note: I don't agree with the Communist Point of view, but

18 at the same time, I think this is not reason enough to close a radio station).

I don't know how things are going to be in the future if the government will ratify the Broadcasting Law or not, that is to say, whether these low-powered stations will be able to continue operating or not; I'll keep you informed, anyway.

This article does not intend to be complete or extremely exact, it only intends to reflect an existent reality in my country. I have not mentioned anything about some - very few, in fact - AM and TV unofficial stations which sporadically appear here and there; I'll try write something about these if I am able to get the necessary info.

All the very best in DXing from:

JULIAN ANDERSON
Buenos Aires, Argentina.

From Pampas DXing!
November/December 1988.



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NETWORK AND REGIONAL MF AND LF RADIO

Frequency kHz	Power kw	Frequency kHz	Power kw
Radio 1			
Barnstaple	1053 1	Barrow	693 1
Barrow	1053 1	Bewhill	693 1
Bournemouth	1485 2	Bournemouth	909 2
Brighton	1053 2	Dighton	693 1
Brookmans Park	1089 150	Brookmans Park	909 150
Burghhead	1053 20	Burghhead	693 50
Dundee	1053 150	Clevedon	909 50
Enniskillen	1053 1	Droitwich	693 150
Fareham	1089 1	Enniskillen	693 1
Folkestone	1053 1	Exeter	909 1
Hull	1053 1	Fareham	909 1
Lisnagarvey	1089 10	Folkestone	693 1
Londonderry	1053 1	Lisnagarvey	369 10
Moorside Edge	1089 150	Londonderry	909 1
Postwick	1053 10	Moorside Edge	369 200
Redruth	1089 2	Postwick	693 10
Redruth	1089 2	Redruth	693 1
Stagshaw	1053 50	Stagshaw	909 2
Start Point	1053 100	Start Point	693 50
Tywyn	1089 1	Tywyn	990 1
Westerglen	1089 1	Westerglen	309 50
Whitehaven	1089 1	Whitehaven	909 1
Radio 2			
Burghhead	200 50		
Carlisle	1485 1		
Droitwich	200 400		
Fenwick Hill	774 1		
Lisnagarvey	720 10		
London (Lots Road)	720 0.5		
Londonderry	720 0.2		
Newcastle	603 2		
Plymouth	774 1		
Plymouth	1449 2		
Redruth	756 2		
Westerglen	200 50		
Radio 3			
Bournemouth	1197 0.5		
Brighton	1215 1		
Brookmans Park	1215 50		
Burghhead	1215 20		
Newcastle	603 2		
Cambridge	1197 0.2		
Droitwich	1415 10		
Redruth	1197 1		
Fareham	1215 1		
Hull	1215 0.1		
Lisnagarvey	1215 10		
Londonderry	1215 0.25		
Moorside Edge	1215 100		
Newcastle	1215 2		
Plymouth	1215 1		
Redruth	1215 1		
Redruth	1215 2		
Redruth	1215 2		
Tywyn	1197 0.5		
Tywyn	1215 1		
Washford	1215 60		
Westerglen	1215 50		
Radio 4			
Burghhead	200 50		
Carlisle	1485 1		
Droitwich	200 400		
Fenwick Hill	774 1		
Lisnagarvey	720 10		
London (Lots Road)	720 0.5		
Londonderry	720 0.2		
Newcastle	603 2		
Plymouth	774 1		
Plymouth	1449 2		
Redruth	756 2		
Westerglen	200 50		
Radio Scotland			
Burghhead	810 100		
Redruth	810 5		
Redruth	990 1		
Westerglen	810 100		

--via Andy Rugg

Dear Paul

I would like to ask your help in a project John Bryant and I are contemplating for the upcoming Fine Tuning publication Proceedings 89. As an avid BCB dxer I like to dabble in international DX. But since I am living in the midwest along with dozens of other dxers, international DX is more of a challenge. The lack of background information that is up to date is also a problem.

We would like to include an overview article on International BCB DX from the midwest in the 1989 Proceedings volume. I volunteered to put the article together but would need the assistance of other midwesterners who spend alot of time on international targets.

The article as it now appears, would begin with a general introduction aimed at SWLs on the possibilities of international BCB dx from the midwest. It would then either feature short sections on various target areas by other DXers or be a summary of what others hear---depending on the reader response.

The third part would consist of a more or less comprehensive list of stations heard in the last few years. Something like the old IRCA international list but not perhaps with all the data it had; Frequency, station call letters and name, country of course and identifying features in addition to best times to hear it.

I am asking for your help in publicizing this project. I would need the help of any DXer who has information to share. I would like copies of all international DX bandscans heard from the midwest in the last five years that fellow dxers can share. If anyone wants to share strategies or other hints, I would welcome those too.

I define Midwest as the area bound by Manitoba on the north to Oklahoma on the south, Indiana on the east and Colorado on the west. But exceptions can be made if someone just outside this area has a good batch of information to share.

There are dozens of us closet international dxers out there I am sure. Folks like me who rarely submit stuff to the columns but have their own lists at home and work away each season. I would like to assemble this information to stimulate SWLs and others to get into this exciting aspect of Dxing.

I would need the material as soon as possible--by the middle of February at the latest, if I am to meet the publication deadlines. Any help you can give would be appreciated.

Fritz Mellberg
Box 108
Hawarden, Iowa 51023
(712) 552-2458

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OPERATION CUE. Observers watch as explosion two times more powerful than Hiroshima is set off at the Atomic Energy Commission's Nevada Test Site.



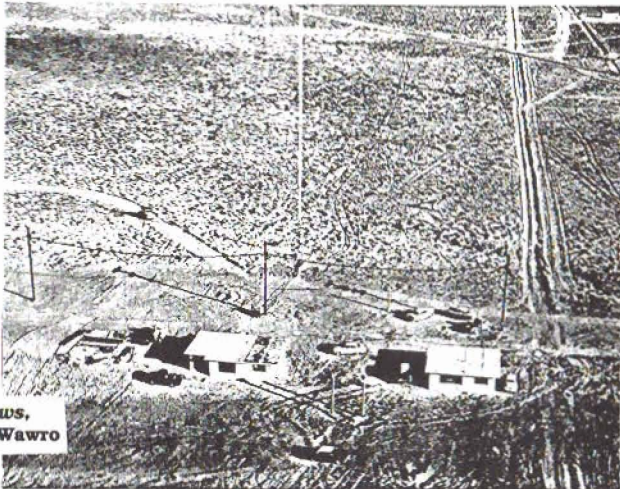
BROADCAST AND COMMUNICATIONS EQUIPMENT WITHSTANDS ATOMIC BLAST

Prepared by E. C. BILL¹
from reports by
R. W. PEARSON²
and
J. E. YOUNG³

What will happen to your broadcast or communications equipment if an atom bomb hits less than a mile away? This is what R. W. Pearson, one of RCA's observers at precisely such an event, reports: "Finally, at 5:40 a.m. Pacific Daylight Time (about 1/2 hour before sunrise) on May 5 the blast was set off—a more awe-inspiring, horrifyingly beautiful sight is seldom seen. (We witnessed the blast from the AEC's Control Point seven and one-half miles distant. About 1500 Civil Defense people were here also.)"

About 7:00 a.m., RCA's Jack Young, together with Ray Williamson (RETMA Project Officer), specially clothed, and properly dosimetered, film bagged, and respirationed, followed the AEC radio activity measuring team into the blast area. They reconnoitered the many buildings to see what had happened to the electronic equipment. At 12:30 p.m. Jack and Ray emerged from the area and reported the following to the other 12 members of the RETMA team:

- The 250-watt AM transmitter and gear appeared undamaged but the pole power lines were blown down, hence no power available to bring the radio back on the air three minutes after the blast as scheduled.
- The car at the 4700-foot line was badly damaged, but the two-way radio appeared undamaged.
- The base station transmitter was blown out of the second story bathroom, and ended up in the ground floor rubble, upside down, and severely dented.



Aerial view of test site showing radio building at right and 150-foot guyed antenna.

from RCA's Broadcast News,
October, 1955, via Wally Wawro



"Over 100 newspaper owners (most of them own radio stations as well) witnessed the RCA station going back on the air in the area where houses were blown to bits. This is bound to leave an impression. We spoke to dozens of these newspapermen after the blast, and they were astounded that the transmitter tubes would even light up, much less send out an intelligible signal."

Shelters Can Be Lifesavers

What will happen to you if you are with your equipment when the bomb goes off? If you have no warning, you'll probably not survive. But if you do have warning, as there are long odds that you will, your chances may not be too bad, in the light of Pearson's observations concerning shelters:

"The simplest and cheapest of shelters, if properly located and built can prevent injury to human beings even at the 4700-

¹ Engineering Products Advertising Dept.
² Products Planning, Engineering Products Division.

³ RCA Broadcast Transmitter Engineering.

foot line. The two-story brick building was completely demolished into a pile of rubble, but a simple 2 x 12-inch plank lean-to, in the cellar and bolted to the floor and wall, protected everything within the shelter. Likewise, an 8-foot square shelter in the basement, made of 3/4-inch corrugated steel, bolted to upright posts, and bolted to a corrugated steel ceiling sheet protected everything inside. (Have the corrugated sheets completely enclose the shelter—do not have one or two cellar foundation walls as part of the shelter.) The shelters will protect one from radiation and from flying or falling debris, and will partially protect against the intense heat even at the 4700-foot line."

Report on Commercial Equipment

The foregoing is the essence of Bob Pearson's summary report. We reprint below portions of the complete statement prepared by him and J. E. Young, RCA Broadcast Transmitter Engineer.

"Early last Fall the Federal Civil Defense Administration (FCDA) requested the Radio-Electronics and Television Manufacturers Association (RETMA) to participate with 14 other national trade associations in an atomic 'open' shot program then being arranged through the Atomic Energy Commission (AEC) to take place at the Nevada Test Site, Mercury, Nevada, early in 1955. The purpose of the entire program was two-fold: (1) to impress upon the average American the horribly devastating effects of atomic weapons on populated areas, and (2) to obtain atomic blast information on many kinds of commercial equipments, structures, homes, etc.

RCA Equipped AM Station and Mobile Communications Setup

"RCA's contribution to this Civil Defense experiment was the services of several engineers plus one each of the following equipments to set up and operate a complete 250-watt AM broadcast station with studio gear:

BTA-250M	.....	Transmitter
76-B-2	.....	Console
BW-11A	.....	Frequency Monitor
BW-60E	.....	Modulation Monitor
HQ-1A	.....	Turntable
RT-11B	.....	Tape Recorder
BA-6A	.....	Limiting Amplifier
SK-46	.....	Desk Microphone
10 inch	.....	Speaker and Cabinet

In addition, a two-car and base station two-way communications system was provided, consisting of:

1 CSP-60A	.....	.60-watt Base Station
2 CMV-2E3	.....	.30-watt Mobile Units
1 CA-1A	.....	Base Station Antenna

"An RCA 5-inch Oscilloscope was also in the test. All equipments were brand new, (except the AM Console) taken from stock, with no additional or special tests of any kind. All of this equipment was in first class operating condition at the time of the blast, thanks to the magnificent work of Howard Shinn and Roy Johnson of the RCA Service Company, Government Division office in San Francisco. Several RETMA-member companies provided components, wire, coaxial cable, antennas and towers which were utilized by RCA as part of the overall project.

RETMA Objectives

"With the preliminary planning work completed, RETMA appointed Ray Williamson of General Electric, and Jack

Young of RCA as Project Officer and Assistant Project Officer respectively, and charged them with the successful accomplishment of RETMA's mission:

- Find out the effects of an atomic blast on commercial electronic equipments,
- Evaluate the damage done to the equipments and estimate the time required to get them back into operation. Operate those that will operate.
- Get the AM transmitter back on the air if it appears feasible to do so in a reasonable time.

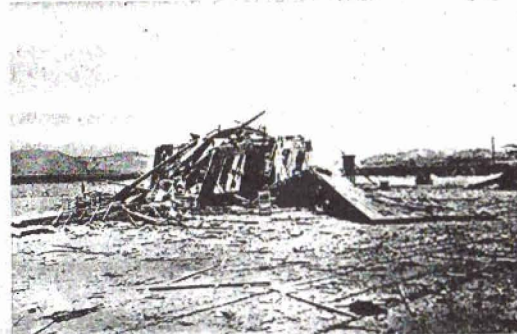
"The full import of this charge did not dawn on us until about five days before D-day when Al Stevenson, FCDA Technical Advisor, called Bob Pearson from the Nevada Test site and frankly pleaded, 'Bob, for gosh sakes, put your AM transmitter back at the 10,500-foot line!—If you don't you'll be picking it up in pieces! You have no idea how badly the buildings and equipments will be damaged at the 4700-foot line!' We gave serious consideration to this suggestion, but we decided to continue with our previous plan—that of placing the equipment as close to ground zero as we could get it housed, then evaluating the blast damage on it as cold-bloodedly as we could. (We'll have to admit that this decision seemed mighty weak after we got out to the AEC's Nevada Test Site and saw the awful destruction left in the wake of other A-blasts, but decision it was, and we let it stand.)

"We'll bet that the RCA Service Company never received a request like this one:

"Please purchase two jalopies in or around the San Francisco area, install and make operable the mobile equipments, and drive (or otherwise get) the jalopies to the Nevada Test Site prior to March 1, 1955?"

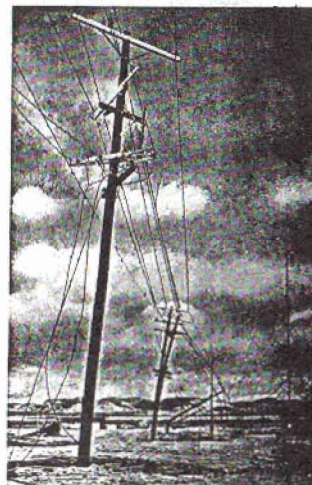
"This was done—a 1941 Plymouth and a 1937 Cadillac, no less.

Brick house after the blast—this building was likewise demolished.



Frame house after the blast—the building was completely demolished.

This is why the power failed. As soon as power could be restored, the transmitter went on-air.



Camp Mercury Test Site

"The Army's Camp Mercury Weather Station at the test site is probably one of the best equipped, best manned in the world. Nevertheless, it sure took an ear beating by all of us each day the shot was postponed. But when the shot did get off, and we saw that the atomic cloud drifted exactly where the scientists wanted it, our faith in meteorologists was more than restored. We would like to be able to predict the exact movements of eight or ten different layers of air up to 45,000 feet altitude.

"About two miles away was the U. S. Army's 'Camp Desert Rock', the home of the world's most fearless soldiers—the atomic fireball had hardly died away before these boys were grinding forward in their tanks, helicopters and armored vehicles. The tanks, fully manned, were only about 3000 feet from ground zero at the time of detonation, but onward they went, guided, we'll bet, by some stunned and dazed soldiers.

Broadcast Equipment Installed in Block House

"As D-day approached, the installation work got feverishly underway. RCA's 250-watt AM transmitter was housed in an expanded shale block, reinforced concrete roof, concrete slab base, ranch-type house. The construction was somewhat improved over the ordinary concrete block house, for here the steel rods in the concrete slab roof were welded to 3-inch upright pipe posts in the corners of the buildings. The bottom ends of these pipes were also welded to the reinforcing rods in the concrete base slab. Thus the roof was mechanically connected to the base. Since the concrete slab roof was about 5 or 6 inches thick, it wasn't without mass—an important observation, because inertia plays a mighty important part in whether or not a structure stays together during an A-blast. A concrete block wall in the house shielded the transmitter from ground zero. The 150-foot guyed antenna by Stationless, Inc., was ready. We ran some RG/117U coax from the transmitter to the antenna. Some of it was a few inches underground, some on the surface, to see what effect pressure and heat would have on it.

"Approximately twenty 100-foot No. 10 copper wire radials from the antenna base formed the ground plane (moist earth was probably 40 to 80 feet down, and we couldn't depend on it). Power lines from the building to a utility pole line across the street were installed. The pole line was fed by an AEC-supplied gasoline engine driven generator in a ditch, 4 or 5 feet deep behind the house next to us (about 100 feet away). Picture this set-up in your mind, because it was this pole line that prevented us from getting back on the air immediately after the blast.

"RCA's console, in full operation, was on a table in front of the transmitter. The turntable was beside this table. There was nothing between ground zero and these items except a steel framed casement window—and venetian blind. On this same table was the RCA 5-inch oscilloscope.

D-Day Approaches

"D-day was Tuesday, April 26. On Saturday the 23rd we went into Las Vegas to get F.C.D.A.'s speech recorded. Who did we find to record it? A radio announcer from Boston—a small world, isn't it? He provided us with a 3½ minute talk on what the test was all about, then 2 minutes of silence. This was repeated over and over again while the transmitter was on the air.

"In the meantime, our jackpots were placed in position. The Plymouth alongside the 250-watt transmitter building, at the 4700-foot line, and the Cadillac beside a similar house on the 10,500-foot line. The base station was installed in the second floor bathroom of a two-story brick veneered concrete block building on the 4700-foot line, but about 300 feet from the 250-watt transmitter building. The base station was hooked up to our antenna on a 100-foot fixed tower about 100 feet across the street. We tested out the base

station and mobile units loud and clear at 35.5 mc.

"We were ready. But Mother Nature had other ideas. The storm center which was supposed to pass through the Test Site on D-2, didn't get there until late on D-1. That meant the winds would be wrong, and if the blast went off we'd cover Las Vegas with some radioactive fall-out. (Of course it wouldn't harm anyone, because everyone would be inside feeding coins to those use-armed handlets.)

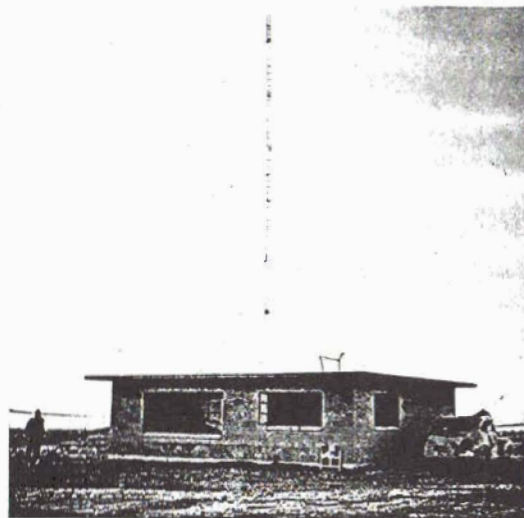
"Each morning at 10:30 a.m. the AEC Test Director and his staff would meet in the Meteorological Building at Camp Mercury to see if they could predict the whims of Mother Nature. If it looked favorable (as it did six times in the next nine days) the Test Director would declare the shot ON for the next morning. This was signaled by the lighting of a flashing blue light high on a pole in the Camp Mercury area. This scientific group would then meet again at 9:30 p.m. to review the situation. Meteorological reports came up from stations just a few miles away, and from stations way out to sea, or up in Canada and Alaska. If these reports, interpreted and plotted on the weather map, were favorable, the blue light continued to flash. If unfavorable, the blue light changed to flashing red (and so did some of our tempers). If this 9:30 p.m. weather briefing looked favorable, dozens and dozens of scientists and engineers would start out to get to their lookout and instrument stations—some as far away as 150 miles. Jack would drive 35 miles to the test site and put the transmitter on the air with its repeat tape program.

D-Day

"D-day finally arrived on May 5th, and 11-hour at 5:10 a.m., Pacific Daylight Saving Time (about one-half hour before sun-up). We looked around us. Whereas 5000 people came out to this hill on April 27th, there were only about 1500 out this morning. The others couldn't wait out the delays, or they lost all their money to the one-armed bandits in Las Vegas and had to go home. (Western Union did a land office business—Blast delayed. Wire me some money at once!) The PA system carried the recorded message from the AM transmitter. It was working very well.

"The announcer said: 'It's H minus one

Concrete block house after the blast—TV antenna is down, windows are blown out, car is badly damaged, mahogany doors become toothpicks, but the house stood up—so did the transmitter.



minute, those with dark glasses put them in place. The others will turn their backs to Ground Zero and close your eyes tight

—30 seconds—15 seconds—10, 9, 8, 7, 6,— (Damn it, I'm all thumbs)—3, 2, 1.—Two or three seconds later I opened my eyes—just a trifle and the reflection of the light from the ground was five to seven times that of the noon-day sun. Incredible but true. The white hot fire-hall was boiling outward and upward, changing color to bright cherry, to red, to brown. That was the Atomic Cloud. A few moments later the stem of the cloud flared up into a brilliant blue as the effects of ionization became visible. The cloud rose rapidly. Probably to 20,000 feet in the first minute, and able to 40,000 by the fourth minute. It started to drift eastward, the top at a much, much faster rate than the bottom. That fireball should have lasted longer than it did. We'd swear it was for only six or seven seconds.

"Look! The clouds at the base of the combustion were churning up like a hurricane, and expanding in all directions across the desert. Let's get a picture of that drone going into the cloud! There's another! Look at—C R A C K!!! Wow! That was the shock wave, and did it startle us? Just like the thunder clap following a bolt of lightning hitting the telephone pole across the street. We had calculated that it should get to us seven and one-half miles away from ground zero in about 30 to 50 seconds. It actually seemed more like half that long. We must have lost track of time.

"Everyone seemed taken by surprise. Some folks said you could see it coming across the desert kicking up the dust before it. We weren't fortunate enough to observe that.

"The PA announcer said: 'We can't get any signal from the AM transmitter. We wondered, did the walls of the building blow out and the roof cave in? Well, we'd have to wait to see.

"The cloud rose higher and higher, its top drifting farther and farther to the east. Reports from jet planes indicated that the top of the cloud was at 42,000 feet where the high velocity winds moved it eastward faster than it could rise higher. It was a rusty brown in color. It reminded one of rusty tin-can dust. At about 7:00 a.m. Jack Young and Ray Williamson put on their special coveralls, booties, and turbans, secured the edges with 2-inch masking tape,

put on their respirators and headed into the blast area. They were preceded by a dozen radiologists who, with mobile radio equipments, Geiger counters and other measuring equipment, started into the area about 6 or 6:30 a.m. to a series of pre-arranged points where radio-activity reports were radioed into the Control Point:

Station 301.2, 25 mr (milli-Roentgens); Station 402.3, 100 mr; Station 301.3, 30 mr, etc.

In about one-half hour the degree of radioactivity was beautifully contoured on maps of the blast site.

Reports Were Unbelievable

"The morning dawdled on. At 12:30 p.m. Ray and Jack emerged. It took us about 15 minutes to get the truth out of them. We couldn't believe their stories. It seemed too incredible. The rest of us arrived at the blast site at 1:10 p.m. It sure is incredible. Roy, Howard and Bob surveyed the situation. The power lines had been blown down, thus separating the house

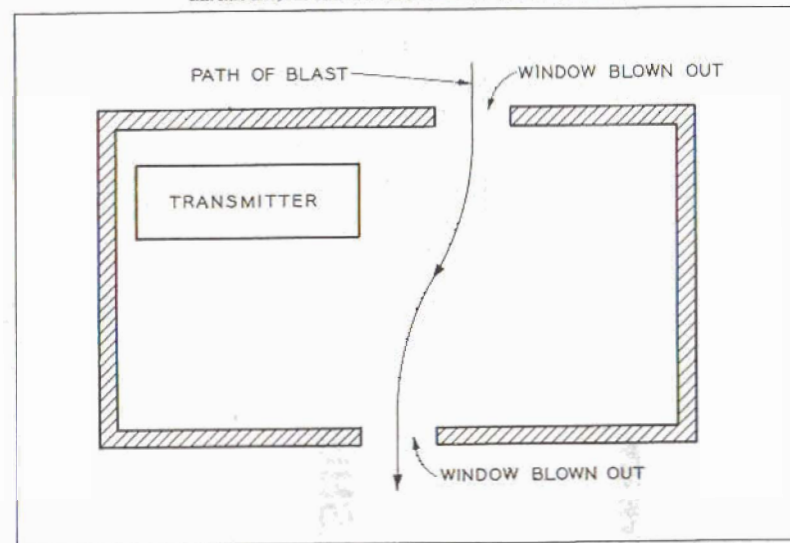
lead-in wires to the transmitter. A couple of swipes with the pliers and the poles were minus some wires. A few shaves with the pocketknife, a few twists of the wrists, then a tape job, and we had two leads from the transmitter, along with the ground to the gas generator. It started up. This took us less than 15 minutes. A quick look at the 150-foot guyed antenna. It was still up, but bowed. We attributed the bow to the fact that the pole lines had fallen on the guy wires thus adding more guying force to some guys than to others. We hurried back into the transmitter room. No broken tubes. No broken meter glasses. In fact, the tube filaments were OK. (Hadn't we just started the generator?) The plate circuit time delay relay was clicking away. The console was lying on the floor, top and bottom wide open on their hinges. All tube filaments were lit. The DB meter light was on. The tape on the tape recorder was moving. No tubes broken in the amplifiers. The frequency monitor unit was operating. (The deviation from 1240 kc was even less

than before the blast.) The modulation monitor meters and tubes were lit up. Then, the 12-inch speaker blared forth: 'This is station KN2MO'—We glanced at the plate meter. YES, we were on the air.

"The room was a shambles. Mannequin pieces all over the floor. Kiddie mannequins slammed up against the wall. The RCA oscilloscope thrown in a corner, right side up. Some kind of shrunken up metal wrapped around wires, table legs, microphones, camera stands, etc. What was the stuff anyway? Then it dawned on us. This was what was left of the venetian blinds. They had started to melt.

"All windows but two were blown to smithereens. The casement frames were blown into all kinds of grotesque shapes and some were blown out altogether. Powdered glass was everywhere and in every-thing. A few expanded shade blocks in the ground zero side of the house were bowed in a couple of inches. A window post made of 2-inch pipe which was lag screwed to a concrete block, split the block in two. The

This shows the transmitter did not take the full force of the explosion. The force of the blast broke through the windows. A wall of concrete block protected the transmitter.



Philippine Mahogany plywood doors had literally burst into small fragments, some the size of toothpicks. The door knobs were lying on the floor all battered up. The ceilings were scorched from the searing heat. The pole line wires and the RG/117U cable above ground had the outer insulation thoroughly cooked and blistered. The No. 10 bare copper wire in the ground-plane radials was scorched almost blue in some spots. But our AM transmitter was on the air for a total of more than eight hours on that afternoon and also on D-day plus one.

"Roy and Howard hurried over to the red brick house—more appropriately to the pile of debris which marked the spot. The house roof was 100 feet away. No brick walls were standing. Parts of the second floor were supported by a couple of 2 x 4 studs, waving in the breeze. The first floor joists were smashed in compression downward, but mannequins in the two shelters in the basement were okay. The boys started digging. They found the RCA mobile base station—half buried, upside down,

in the rubble. They applied 110 volts. Everything worked.

"The boys then used a hammer and crowbar to open up the Plymouth housing the RCA mobile unit. Its roof was caved in and all windows were broken. They pried off the battered trunk cover. The mobile unit was dusty, but undamaged. In a couple of minutes two leads from Howard's car battery were attached to the mobile power input terminals. With Roy at the base station and Howard at the mobile unit, communication was established. Loud and clear. No problems of any kind. Not even with the speaker or the microphone.

"Next we got some voltage to the RCA oscilloscope. It worked. And so our evaluation ended. Over a thousand newspaper men, Civil Defense people and scientists came to see the electronic equipment in operation after the blast."

Essentially, that's the end of Young's and Pearson's report. They observed, and other things not included in the

account above, that electronic equipment fared considerably better in the blast than buildings, heavy safes, trucks and house appliances such as refrigerators, freezers and stoves which most of us think of as pretty stoutly built.

Electronic Equipment Rugged; Easily Protected

What should we do to protect equipment from A-blast? Concrete walls help, and an absence of things like glass and venetian blinds which can turn into high-powered missiles. If a free path around the equipment can be provided for the blast wave, damage will undoubtedly be much reduced. One way of providing such a path is shown in the accompanying illustration. It is obviously not a good idea to park a car beside a brick chimney when the bombs are on the way. At such a moment probably nothing will seem like a very good idea, even that simple shelter in the basement. But it will be considerably better than no shelter at all, as the test has shown.