

# DX News

\*Serving DX'ers since 1933\*

Volume 62, No. 26 - May 22, 1995 (ISSN 0737-1659)



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From the publisher ... No sign of Musings ... but you probably can chalk this one up to mail problems on the eastern seaboard. It's interesting that nearly all of the requests for replacement of lost or damaged issues of DXN are for locations east of the Mississippi.

Speaking of damage prevention, we received some sample pages from the Scott catalog via Gary Houdek, which includes listings of plastic sleeves and storage binders that would work for not only stamps but also verifies, postcards, and those elusive Ekko stamps. Contact Scott Publishing at P.O. Box 828 - Sidney, OH 45365.

Wayne is whipping the Denver NRC convention into shape; check page 47 for registration details. And the WTFDA convention will definitely be near Lake Placid, NY at the Whiteface Chalet August 4-6. Reservations are accepted at 518-946-2207 (800-932-0859 from NJ, NY, and PA only); the weekend package for singles will be \$122; doubles, \$87 per person; triples, \$72 per person; quadruples, \$65 per person. The package includes two nights lodging, breakfast on both Saturday and Sunday mornings, and the Saturday evening banquet. Convention registration will be \$5.00. For more info, contact convention coordinator Tom Bryant-849 Todd Preis Drive - Nashville, TN 37221, or if you know his address, convention host Peter George.

And to complete the convention circuit, the IRCA convention will be held in Boise under the stewardship of Frank Aden, Jr. - 4096 Marcia Place - Boise, ID 83704, or 1-208-377-5346. Hotel reservations should be made by June 14 with the Owyhee Plaza Hotel, 1-800-233-4611, at the rate of \$58 per night single and \$68 double.

**Publication ...** Those WTFDA'ers have been at it lately, as the *USA TV Database, 1995 Edition*, all 319 pages of it, is hot off the press. According to editor Doug Smith, "All data is based on official FCC and CRTC files, updated by DX'ers. This is the only reasonably-priced TV reference that lists LPTV's." Canadian, USA, and some Mexican stations are

included. I don't have a non-member price, so contact Doug at 1385 Old Clarksville Pike - Pleasant View, TN 37146-8098, or 72777.3143@compuserve.com for more info. Tell 'em the NRC sent you.

**Equipment ...** Kiwa Electronics has just announced the "Magic Tuning Eye", which replaces less-sensitive S-meters. The device attaches by a spring-loaded micro clip to many radios' circuit boards. The Magic Tuning Eye is priced at \$249 plus shipping. For more information, contact Kiwa at 612 South 14th Avenue - Yakima, WA 98902 (or 800-398-1146, or KIWA@WOLFE.NET, or HTTP://WWW.WOLFE.NET/~KIWA.

Two other items which may be of some interest to NRC members include the "Short Wave Guide/The Computer Program" (SWG TCP), for the Mac. Demos versions are available on America Online, eWorld, Genie and CompuServe. For more information, contact LeProgram at 410-781-6182. Also, Bill Cheek's *The Ultimate Scanner*, (Cheek's) has just been published at \$29.95 (plus shipping). For more information, call 619-281-2957 or e-mail to indexboox@aol.com.

**DXChange:** Clifford Schnauffer - 444-1B Edger Rd. - Elizabeth, NJ 07202 wants to buy a phasing unit amp; Christian Breton - 497 Belval St. - St. Hilaire, PQ J3H 4X5 is looking for a SONY ICF 2010.

**Welcome to these new members:** Daniel Nauman, Ventura, CA; Jerry Thornton, Knightdale, NC; Jeff Schutte, Chickasha, OK; Raymond W. Brown, St. Paul, MN; John F. Wilson, Hockessin, DE; John Denton, Lawrenceburg, KY; Clifford Schnauffer, Elizabeth, NJ (rejoins); Don English, El Paso, TX; Mike Dorrough, Woodland Hills, CA; Vernon A. Abbott, Schaumburg, IL; Michael Diers, Huntington Station, NY (rejoins after 30 years!); Jeff H. Ross, Flemington, NJ; Edson C. Hendricks, Carlsbad, CA; Jeff Gill, Arlington, MA; Jonathan J. Helis, River Ridge, LA.

And ... we're out of space! #27 should come your way June 19; #28, July 17. 73.

# AM Switch

**Jerry Starr**  
c/o WHOT Radio  
4040 Simon Road  
Youngstown, OH 44512-1320

**Status changes in AM stations, supplied by the FCC and listeners**

## CALL LETTER CHANGES

Old call	New call
620 WSKQ NJ	Newark WXLX
620 CJME SK	Regina CKCK*
710 *New ND	Bismarck KXMR*
730 WCPT VA	Alexandria WBZS
820 WIQT NY	Horseheads WQIX
830 WRFM FL	Hialeah WACC
950 WSYA AL	Montgomery WNZZ
950 WOMX FL	Orlando WZKD
1070 WNWV NY	Plattsburg WZBS
1080 WEEP PA	Pittsburgh WDSY
1090 KINF WA	Seattle KNWX
1160 WMLD GA	East Point WERD
1160 WBND KY	Florence WKYN
1190 KJEM AR	Bentonville KESE
1220 KRGO CA	Fowler KQEQ
1230 WQDW NC	Kinston WLNK
1230 KKBK OR	Gresham KMUZ
1290 KHSL CA	Chico KNSN
1400 KFMS NV	North Las Vegas KKDD
1420 WWEV GA	Decatur WATB
1420 KZMO MO	California KREL
1450 KAYO WA	Aberdeen KBKW
1490 KJYK AZ	Tucson KMXZ
1510 KKHI CA	San Rafael KNOB
1540 WJOS NC	Elkin WIFM
1550 WLUX LA	Baton Rouge WPFC

**Notes:** CKCK-620 change to CJME never took place since a proposed sale never occurred. The grant of KXMR to a "new" station on 710 in Bismarck is very interesting. KBMR 1130 in Bismarck holds a long-standing CP to move to 710 kHz so this really wouldn't be a new station, just a frequency change. One of two things are happening here. Either they will be switching to KXMR when they move to 710 kHz or (more likely) they plan to continue to operate KBMR on 1130 with their present facilities and operate KXMR on 710 kHz as a separate facility. The duopoly rules that would allow them to operate two AM stations in the same market were not in place when KBMR was first granted the move to 710.

## APPLICATIONS / GRANTS FOR NEW STATIONS

None

## APPLICATIONS FROM EXISTING FACILITIES

810 KRGS CO	Rifle: to 690 kHz with 970/12 U1
810 WBYY MI	Rockford: power to 3500 watts
840 KABN AK	Long Island: modify CP to move to this frequency from 830 kHz to reduce powers to 8000/8000
840 CJXX AB	Grande Prairie: day power to 25000 watts
1160 KENS TX	San Antonio: day power to 10000 watts
1220 WOTS FL	Kissimmee: night power to 110 watts
1280 KDOL NV	Henderson: night power to 48 watts
1360 KHNC CO	Johnstown: powers to 5000/690
1410 WMYQ MS	Newton: to 1100 kHz with 1000/87 U1

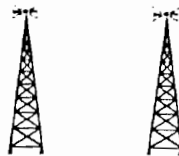
## GRANTS TO EXISTING FACILITIES

550 WAYR FL	Orange Park: night power to 260 watts, no mention of city of license change to Doctors Inlet which was part of the original application. 630 KIAM AK Nenana: powers to 10000/3100
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1 3 7 0 K H Z  
1 0 0 0 0 W A T T S  
D A Y - N I G H T

"SUPERCOUNTRY"



660 KZTU OR  
740 WLWI AL  
1410 KKDD NV  
1420 CJVR SK

1510 KMRF MO  
1560 KZIZ WA

## OTHERNESS

610 KSKE CO

630 CKRC MB

870 KLSQ NV  
880 WPIP NC

## Classic Country



1000 KNDA TX  
1010 KSYG AR

1140 KSLD AK  
1190 KBCO CO  
1200 WGNV NY

1210 CKWA AB  
1340 KAPA WA

1400 KPAG CO

1410 KFMS NV

1420 KREK MO  
1470 WRQQ PA

1490 KBKS CO  
1510 ---- NY

1520 WLUV IL  
1560 KZIZ WA

Junction City: move to this frequency from 650 kHz does indeed include city of license change to Eugene, OR just as we had speculated in the last issue.

Montgomery: powers to 10000/335, still U4

North Las Vegas: to 1400 kHz with 1000/1000 U1

Saskatoon: to 750 kHz with 10000/10000 U4 (this facility was vacated when CJWW moved to 600 kHz, will somebody take over 1420 or will this now become the silent Saskatoon frequency?)

Marshfield: power to 1000 watts

Sumner: add 1000 watts nights, antenna to U2

Vail: silent station is ON THE AIR (note that we typo'd this call as "KSKW" last issue)

Winnipeg: station requests a move to FM and will turn in their AM license when approved (if this happens we predict 630 will not stay empty long)

Laughlin: silent station is ON THE AIR

Winston-Salem: it would appear that the CP for this unbuilt new station may be CANCELLED, it's been around since 1987. The actual wording is "dismissed license to cover for new station" but this is not normal FCC-ese for this action. We also noticed that their application to make changes in the antenna system has also been dismissed. However, in this issue you'll notice their power decrease to 850 watts was just granted which would make it appear this CP is still active. Can a member in the W-S area snoop around and find out exactly what is going on?

Odessa: silent station is ON THE AIR

Little Rock: station will go SILENT in August for good, Group W is purchasing the station with the specific intent of taking it off the air to allow them to improve the signal of their WINS-1010 in New York, NY

Soldotna: station is SILENT

Boulder: 110 watt night power is on

Newburg: the mystery "CP" for this station to move back to 1220 kHz that we mentioned last issue was, as we assumed, a mistake, a correction was published in MSJ. They will stay on 1200 kHz

Slave Lake: station is U1, change Log

Raymond: listed in Issue 24 as being on 1400 kHz, probably a moot point now that their license has been cancelled and call deleted (see Issue 24)

Pagosa Springs: silent station is ON THE AIR (and they have finally admitted they were silent, seems they incurred some lightning damage in late 1994)

North Las Vegas: this is the station whose abandoned antenna system was used by the temporary digital demonstration station KUSA (see Issue 24), as noted above they will be moving to 1400 kHz and will feed their FM tower as a non-directional antenna. They are presently SILENT

California: silent station is ON THE AIR

Farrell: silent station is ON THE AIR (and presently spluttering all the way up into the 160 meter amateur band, evidently they just turned it back on without attending to any of their tech problems, see comments in Issue #25 Otherness)

Boulder: station is SILENT

New York: MSJ reports that Atlantic Records is operating a low-power station that can only be received in the Holland Tunnel that broadcasts short segments of their new releases. The FCC recently ordered them to reduce the power of this station when it was found it could be heard several miles away. This is a carrier current type system that is not supposed to be heard at any point outside the tunnel. Did any member in the NYC area ever hear this one?

Loves Park: 125 watt night power is on

Sumner: CP for 5000/1000 (3300 CH) U2 is on

1570 WGLX OH

Galion: silent since 1992, it would appear that this one is gone for good, the antenna system has been dismantled and the owners express no interest in returning it to the air and will probably just let the AM license expire (they continue to operate on FM as WQLX)

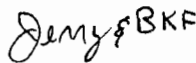
1600 WJQI VA

Chesapeake: station is SILENT

THANKS: SHAWN AXELROD, ED KREJNY, WAYNE HEINEN, FRANCIS SPINDLER, WES BOYD (welcome back to the NRC!), FRED VOBBE, PETER CHEATOZ, SAM BROWN, MARK TUTTLE, RON MUSCO, MIKE HUNT, DONALD RENDA AND MSJ

WOW! It was great to see all the NRCers at the big Dayton, Ohio Hamvention this year. Amongst others we ran into Pat Hartlege, Ed Krejny, Dick Truax, Al Merriman, Ron Bailey and Wes Boyd. Some of these faces we seemed to see ALL THE TIME, probably had something to do with staying at the same hotel. Sort of a Denver preview I guess. (Shouldn't we warn Denver, hi? -piss)

73 and Good DX,



Jerry Starr &amp; Buffalo K. Foonman

### IMUS In The Morning

The "Imus in the Morning" program airs from 5:30 - 10:00 am (eastern time) on the flagship station, WFAN. Some affiliates run the entire show. Most start at 6:00 am. Check your local listings.

Aiken	WAJY - 102.7
Albany	WTRY - 98.3
Albany	WTRY - 98.0
Albuquerque	KRZY - 145.0
Aurora	KYBG - 109.0
Aurora	KYBG - 92.1
Beckley	WCIR - 103.7
Bethesda	WTEM - 57.0
Boston	WEEL - 85.0
Burlington	WCPV - 101.3
Charleston	WXTC - 139.0
Cincinnati	WUBE - 123.0
Claremont	WHDQ - 106.1
Concord	WNHI - 93.3
El Paso	KROD - 60.0
Endicott	WENE - 143.0
Eugene	KDBS - 84.0
Fargo	KQWB - 98.7
Fort Myers	WINK - 124.0
Hagerstown	WARX - 106.9
Hagerstown	WARK - 149.0
Harrisburg	WIMX - 99.3
Harrisburg	WCMB - 146.0

Hillsboro	WRCT 107.7
Ithaca	WIII 99.9
Kalamazoo	WKMI 136.0
Las Vegas	KVBC 84.0
Lynchburg	WLNI 105.9
Myrtle Beach	WRNN 94.5
New York	WFAN 66.0
Norfolk	WJAR 79.0
Portland, OR	KOTK 62.0
Portland, ME	WZAN 97.0
Providence	WWRX 103.7
Rochester, NY	WHTK 128.0
Rochester, NH	WZNN 93.0
Sacramento	KITK 114.0
Salisbury	WTGM 96.0
San Diego	KOGO 60.0
Santa Barbara	KQSB 99.0
Scranton	WKQV 93.7
Sioux City	KKMA 99.5
Tampa	WQYK 101.0
Tucson	KTUC 140.0
Tulsa	KQLL - 143.0
Utica	WXUR - 92.7
West Palm Beach	WBZT - 129.0
Wichita	KFH - 133.0
Wichita	KQAM - 141.0
Worcester	WWIM - 144.0
Youngstown	WRKU - 95.9

[Downloaded from the Internet. Accuracy is not guaranteed. -Bill Hale]



THE  
DX'PEDITION  
HANDBOOK

## The DX'Pedition Handbook...

is simply all you need to plan your next DX'pedition. \$8.95 to NRC members, \$12.95 to non-members. Order from NRC Publications - Box 164 - Mannsville, NY 13661. NY orders, please add sales tax.

## Domestic DX Digest

West: Bill Hale MTFH12A@Prodigy.com

495 Creekview Drive - Meridian, ID 83642-3241

East: Dave Braun 73520,657@compuserve.com

11 Mill Bend Acres - Wyoming, DE 19934-9523

(Division line is  
between East and  
Central time zones)



DX Catches in the U. S. and Canada, with 24-hr. FLT

### DDXD-W

#### MEDIUM WAVE RAMBLINGS

◆ Re: last Issue's "Special" item, taken off the Internet, about XETRA-690 erecting seven new towers and that their 77 kw would be "North America's" most powerful AM station . . . I was corrected by Eric Cooper of Lake Forest, California. He cited XEW and XEWA as being more powerful. No argument here. But, I did say the article was from the *San Diego Tribune*. Write the newspaper, and inform them. Please keep in mind that most, if not all, of these Internet items are what I would call second-hand information, or maybe even "hear-say". I guess I'll have to put a disclaimer after every one of those items . . . or not relay any at all.

★ Besides the address for KUSA-1660 given last issue, Rocky Stone adds two others: Internet 10h@xetron.com or an SASE to: KUSA, 5050 Murphy Canyon Rd, San Diego CA 92123. And Bob Karchevski has yet another address for them: Glynn Walden, Group W Radio / USA Digital who posted on the Internet: For a QSL send E-Mail to waldeng@kyw.groupw.wec.com. But I have been in E-Mail with contact with Mr. Timothy Huster at the Xetron Company, and these are the addresses supplied to me: Xetron Corporation, c/o Timothy W. Huster, 460 West Crescentville Road, Cincinnati, Ohio 45246 or E-Mail to timh@xetron.com. Mr. Huster told me he had requested the log sheets from Las Vegas, and he would be happy to verify any requests if your data matches.

\* We welcome new NRCer Geoffrey Wolfe from Bombala, NSW, Australia to the column this issue. Although mailed to Dave Braun, who forwarded it here, the report from Geoffrey took only 10 days. Some mighty fine catches from "down under". Joe Kureth helped keep me busy by sending in his Graveyard loggings from Southern Pines, North Carolina, circa 1964 to 1971. With the Summer "dog days" coming up, why not go through your logs and update your GY totals. Who knows? You may bag a new record here and there. Thanks to Mike Sanburn for enclosures sent with his loggings. Mark Burns of Terre Haute writes to say that the logging of George Smith of a WYLT-850 Terre Haute (see Issue 24) is baffling, since there is no WYLT or 850 in his hometown. Well, chalk it up to ye editor. Actually, George logged WYLT-850 Raleigh, NC and WTHI-1480 Terre Haute. And I fell asleep at the switch and put 'em together. The correct loggings appear in the 1600-2400 Hours area this time, and my apologies to all. Thanks, Mark. And last, but not least, we thank Jim Boehm and BB McClurkan for newspaper clippings mailed our way, including many concerning the role radio is playing to heal the wounds of the Oklahoma City bomb blast.

◆ The January 5 - March 29 ratings for the Los Angeles market AM stations reported on the Internet are as follows: news station KNX-1070 in at #8 with a 3.7, last time 2.2; talker KFI-640 in 9th with a 3.4 (4.6); in a tie at #13 was talker KABC-790 with a 2.6 (3.2); tied for #15 is another news station, KFVB-980 with a 2.5 (2.5); in at #19 is KKHJ-930 with their Latin format with a 2.2 (1.7); #23 is KWKW-1330, another Latin programmer with a 1.6 (1.5); #24 is NOS station KLAC-570 with a 1.5 (1.7) and in at #25 is oldies outlet KRLA-1110 with a 1.4 (1.5). By the way, the top-rated station was Latin KLVE-107.5 with a 5.2 (3.0). Portland ratings show news-talk KXL-750 on top with an 8.1, up from 7.5. The only other AMer in the top 10 was full-service KEX-1190 with a 6.6, up from 5.8. And finally, from Indianapolis, the only AM station to break the top ten was WIBC-1070 (news/talk) finished 3rd with an 8.7, up from 8.5.

† In addition to the death of Howard Cosell on March 23, another longtime broadcast voice has fallen silent. For anyone who followed the Nitecaps in the late '60s and '70s . . . Herb Jepko died in Salt Lake City, Utah on March 31st. He was 64. If I remember correctly, besides being on KSL, the show was carried on one or two other stations in the east (WBT? WRVA?) to give almost coast-to-coast coverage.

☞ Here are the DDXD-W deadlines for the remainder of the Volume Year: Issue 27 - June 3; Issue 28 - July 1; Issue 29 - July 29; Issue 30 - September 2. These are all Saturday deadlines, for postal delivery. E-Mail reports as late as the following Sunday morning will be picked up, too. See you in next month.

REPORTERS

SA-MB Shawn Axelrod Winnipeg ICOM R-70 w/filter mods and PLAM board + 4' box loop/Quantum Loop/100' lw (2 reports)

BK-CA Bob Karchevski Sunnyvale (karchev@ntmtv.com) Radio Shack 12-655 (TRF) or National NC-183D with SM-1 ferrite loop

GB-FL Gerry Bishop Niceville (73171.2265@compuserve.com or GerryB4991@aol.com) Drake R8

NH-MT Nancy Hardy Billings Icom IC-R71A, Radio West loop

BR-CA Bruce Reynolds San Jose (ereynold@isc.sjsu.edu) Superadio II & Superadio III

MS-CA Mike Rayburn Bellflower Superadio II, Superadio III, SRF-M40W, R-390

RS-MO Rocky Stone Hollister (71533.657@compuserve.com) R-2000 + 200' E-W wire

RO-AK Rod O'Connor Kodiak trusty Superadio I with 4' loop/not-so-trusty ICF-2010 w/50' longwire

DY-CT Dave Yocis Darien unID help

GW-NSW Geoffrey M. Wolfe Bombala Kenwood R-5000 + 300 metre longwire

JB-TX Jim Boehm San Antonio IC-71A + downspout antenna + Radio West Loop

GS-TN George Smith Decherd Superadio II barefoot

NAP-AL Neal Perdue Madison ICF-SW30, McClintock Black Bocks Loop

RD-IA1 Rick Dau Iowa City (rdau@blue.weeg.uiowa.edu) Kenwood R-1000 + RW loop

RD-IA2 Rick Dau Arnolds Park Ford car radio

DE-MO Dennis Elya Jefferson City (76472.2246@compuserve.com) Superadio III barefoot Space reserved for Your Name

Ed-ID Editor Meridian

*Wxxq 105 fm and 1380 am*

SPECIAL

580 KANA MT Anaconda - 3/30 1230 - With rock oldies // **KOBB-1230** (Bozeman, MT). Heard while driving between Anaconda & Bozeman. (NH-MT)

870 KLSQ NV Laughlin / East Las Vegas - **Ex-KOWA is back on, this time in Spanish.** English ID at 2158, 4/12. (BR-CA)

1140 KCSY AK Soldotna - **Ex: KSLD has gone silent.** According to the announcer at sister station KKIS-96.5, KCSY was taken off the air "for good". (RO-AK)

1230 KTRF MN Thief River Falls - 4/7 0600 - Good signal. **New sign-on time** for them. (SA-MB)

KNUZ TX Houston - 4/10 0752 - Concluded the *Dateline Houston Newstime* with AM 1230 K-news. **New play on CLs** since last logged. (JB-TX)

1250 KZDC TX San Antonio - **Changed CLs and format** April 1st to locally-produced programming. Still a Lotus Communications Corp. station. Phone 210-226-6444. Numerous CL mentions - every 2nd or 3rd selection, with DJs voice through speech processor emphasizing low frequencies. Legal ID: *The hardest rock in San Antonio, KZDC AM 1250. Not* // sister station **KZEP-FM 104.5** which broadcasts classic rock. (JB-TX)

1300 KAPL OR Phoenix - **Ex-KDOV** heard 2235 after noting call change in DX News. No format change; still Christian music. Loud to power/pattern change at 2243, when they asked listeners to stand by for a "technical adjustment" and disappeared into a jumble. (BR-CA)

1420 KREL MO California - 4/17 - **Silent station back on** with new owners, with C&W music. Hours are 0700 to 0100 ELT. Address is still same as log. (DE-MO)

1450 KNET TX Palestine - 4/25 2056 - **Oldies music.** End of weather, then *That's your weather, at Oldies 1450 KNET.* When last logged had country format. (JB-TX)

1510 KNOB CA San Rafael - **Ex-KKHI** now is "The Jazz Knob," first heard on 4/9 on trip to the North Bay. Taped in San Jose 4/11 at 2226. Fourth call on this one in three years! (BR-CA)

KUSA Special

1660 KUSA NV Las Vegas - 4/6 2347 - NAB Convention station logged at good level, testing with sporadic pulse. On 4/7 heard music by U2 and Genesis. By Saturday (4/8) they were programming C & W music. Occasional VIDs. (MS-CA)

KUSA NV Las Vegas - 4/7 2240-2300 and 2357-2358 - Loud & clear, ("local" like), with occasional fades just enough to allow noise to seep in. All music until VID "KUSA Las Vegas", then more music. Glynn Walden, Group W Radio posted that KUSA was 2 kw on Friday (4/7). (BK-CA)

KUSA NV Las Vegas - 4/9 - Good to strong, @ 0215 with country music. 0216 ID *This is KUSA, Las Vegas* into another country song. (NH-MT)

KUSA NV Las Vegas - 4/9 2230 - Music from the Doobie Bros, Annie Lennox, Billy Joel, et al. Big signal, but much local static (Florida in the spring time...) Gone around 2250. (GB-FL)

KUSA NV Las Vegas - 4/9 0651 - Good, playing lots of C&W music, and IDs as *KUSA Las Vegas*. (SA-MB)

KUSA NV Las Vegas - 4/11 2205 - In nicely with Rick Dees. (BR-CA)

KUSA NV Las Vegas - 4/12 0320 - 0500 - DAB Test heard here with a clear 6db signal, with Rick Dees' American Top 40 program. Also with ads promoting Digital Broadcasting equipment. This is the first expanded band station I've heard. (GW-NSW) [Technically, KUSA isn't (wasn't) a true "expanded band" station, since it was just there for a few days and solely for promotion of the DAB system. But you can count it as such, anyway, hi - Ed.]

KUSA NV Las Vegas - 4/13 0445-0504 - After wrestling with 2 days of thunderstorms yielding a leaky transformer with an S9 emission, I finally bagged this one. Awoke to continuous pop music then a full ID into s/off, sigs peaking to S9+30!! Thanks to the support from the troops. (RS-MO)

UNIDs and UNID HELP

980 UNID ?? - 4/13 2231 - Fair-to-good signal, playing lots of NOS/adult standards. Mentioned they were stereo. Many non-IDs as *Star 98, the Super Star of Music*. (SA-MB)

830 R. Paradise? St. Kitts - Jon Ellis' TBN unID on 830 kHz would be the former Radio Paradise on St. Kitts, I think - they're pretty regular here with TBN audio // 7510. (DY-CT)

1180 R. Taíno Cuba Villa Maria - UNID heard by KW-WI is this, heard here almost every night. VOA has been heard a couple of times, but the main part of their signal is beamed to Cuba, while Radio Taíno is beamed north using up to 300 kw. Listen for *Taino* IDs in SS and EE. (SA-MB)

DX AND EQUIPMENT TESTS

770 WCGW+ KY Nicholasville - 4/8 - Morse code IDs at 0106, full voice ID from Dennis Wade, CE, at 0136, giving power as 1000 watts. Interference from WABC and a Cuban. (GB-FL)

WCGW- KY Nicholasville - 4/9 0100 - Not heard. (SA-MB) No. (NAP-AL)

780 WWOL- NC Forest City - 4/8 - Test unheard between 0300 and 0335. (GB-FL) Not heard. (SA-MB)

960 KZIM+ MO Cape Girardeau - 4/3 0200 - IRCA test in loud and clear, with numerous VID and CIDs, music from cartoons, *Sesame Street*, and the *Cheers* theme. They either changed patterns, dropped power, or pulled the plug at 0210, as not heard after that. (GB-FL)

1100 KNZZ- CO Grand Junction - 4/15 0300-0330 - Tried, not a "peep". Only KFAQ blasting in, as usual. Disappointing. If they were on 50 kw, I should have received them. KFAQ-1110 blasting in. 0304 Brief, very tight null to ESE, heard female newscaster with possible mention of "Emergency Services" and "Dane" or "Lane County". Possible WWWE, as Lake County is just to their northeast. (RO-AK) Not heard, just WWWE dominating. (GB-FL)

1210 KGYN- OK Guymon - 4/10 0202-0230 - Not a sign. Several stations in a jumble with KDFC-1220 slop, too. Dominant station with religious talk--suspect KPRZ San Marcos, CA. No sign of any tones or Morse code. (BK-CA) Not heard. Only WGMF. (NAP-AL)

1260 WNRKt DE Newark - 4/9 - Tentative code and/or tones heard at 0008, 0059 and 0114. Lots of CFRA interference. (SA-MB)

WNRK? DE Newark - 4/9 0000-0200 - A mess! Several unIDs + WIBV & KITS. At 0042:25 I did hear what sounded like a drum major's whistle and march music for a few seconds. No report sent. (NAP-AL)

WNRK- DE Newark - 4/9 0000-0100 - Test unheard. (GB-FL)

1460 WZEP- FL DeFuniak Springs - 3/20 0400 - Not heard. Only an unID SS station, *Radio Sena*(?). (SA-MB)

1580 KFDF- AR Ft. Smith - 4/15 0200-0245 - Not heard. (GB-FL)

1590 KWEY- OK Weatherford - 4/3 0100 - Test unheard here. (GB-FL) Not heard. Only KVGB. Well, that makes it 100% failure on 1590. Could the good folks in the CPC pick another frequency next year so I can hear a test, HI!!! (SA-MB)

TIS & OTHER STUFF ABOVE 1600

- 1610 KCEB CA Norwalk - 4/3 1430 - Low-powered Cerritos College campus station has moved here from 1560 as of this Spring. Schedule is 0900-1900 local. Noted at fair level with scene from movie Pulp Fiction, and modern rock music. (MS-CA)
- KNEC996 CA Los Angeles - 4/6 2207 - Occasional IDs as This is CalTrans Highway Advisory Radio KNEC996, 1610 on your dial. No other programming noted. (MS-CA)
- KOC745 WY Fort Laramie - 4/16 0547 - Poor, with info on the fort site and other events. (SA-MB)

MIDNIGHT TO 0800 HOURS ELT

- 580 WCHS WV Charleston - 4/23 0401 - *You're listening to the voice of the West Virginia Mountaineers*, WCHS. New. (NAP-AL)
- 600 CJWW SK Saskatoon - 3/19 0145 - Fair, mixing with WMT, playing C&W music and IDs as CJWW and Country 600. New. (SA-MB)
- 850 KOA CO Denver - 4/16 0503 - Nice signal here, with news and ID, then back to talk show. Heard regularly here in Bombala. (GW-NSW)
- 890 KQLX ND Lisbon - 4/22 0708 - Fair, with promo for Twins baseball on KQLX-FM 106.1. (RD-IA1)
- 1030 WNOW NC Mint Hill - 4/5 0745 - Good, with CLs, ad for real estate service, and mention of several REL programs. (GS-TN)
- 1140 KXNO NV North Las Vegas - 3/29 0650 - Good, with a TIS-type programming, with such things as Tipping Tips and listings of the best buffet dinners in the area. IDs as Casino Radio. (SA-MB)
- 1260 WIBV IL Belleville - 4/9 0059 - Station promos, WIBV Belleville-St. Louis. (NAP-AL)
- KTTS MO Springfield - 4/9 0100 - Legal ID, in WIBV null. (NAP-AL)
- 1280 WKST PA New Castle - 4/26 0559 - Fair, with ID as 1280 WKST New Castle. (RD-IA1)
- 1390 KGER CA Long Beach - 4/12 0425 - Heard here with National Anthem and ID just prior to the half-hour. Then resumed its REL programming. (GW-NSW)
- 1400 KYLR TX Huntsville - 4/12 0742-0745 - With commentary. Walker County mentioned (shades of the County Cross-Reference Book). KYLR CLs heard twice. Difficult for me. Powers down to 250 watts at LSS. NEW. (JB-TX)
- 1450 KFTW MO Fredericktown - 4/30 0645 - Good, with sign-on info (Wayne, take note of time!). Cleans up 1400, 1450, and 1490 from Missouri at this QTH. (RD-IA1)
- KOBE NM Las Cruces - 4/28 0305-0307 - Out of jumble with New Mexico news, ad for Tex's Restaurant followed by AM 1450 KOBE and back into jumble. Address is 1832 W. Amador Ave, Las Cruces, NM 88005 (differs from Log). Phone # in Log is good. (JB-TX)
- 1460 WBRN MI Big Rapids - 4/14 0200 - Heard sign off after C&W song. Mentioned power of 5kw/2.5kw. (DE-MO)
- 1490 KQTY TX Borger - 4/28 0358-0400 - Country music, followed by announcer with AM 1490, KQTY Borger legal ID. NEW. (JB-TX)
- 1550 KPIX CA San Francisco - 3/26 0306 - Poor signal here, with heavy QRM from nearby Aussie 2RE-1557. Simulcasts FM, and IDs as 95.7 KPIX. NOS format. (GW-NSW)
- 1570 WSSA GA Morrow - 4/8 0715 - Good, with call-in talk show and promo for Renaissance Festival in Atlanta. (GS-TN)
- 1580 WHLY IN South Bend - 4/15 0200 - With announcer ID WHLY South Bend in nicely timed fade up. (GB-FL)
- WPGC MD Morningside - 4/15 0200 - With studio announcer giving ID as WPGC Morningside-Washington, DC and gospel style format. First log on this long sought station. (GB-FL)
- 1590 WAIK IL Galesburg - 4/8 0659 - Fair, with some fade, with ID, weather and a Toyota ad. (GS-TN)

0800 TO 1600 HOURS ELT

- 580 KKSU KS Manhattan - 4/17 1330 - Fair, with sign-on info and listing of that day's scheduled programming. (RD-IA2)
- 680 CJOB MB Winnipeg - 4/17 1505 - Fair, under KFEQ, with . . . from the CJOB Information Center . . . First Canadian logged in the daytime, but probably won't be the last. (RD-IA2)
- 780 WBBM IL Chicago - 4/17 1428 - Fair, under WJAG, with traffic reports from the Eisenhower and Ryan expressways. (RD-IA2)

- 800 KXIC IA Iowa City - 4/17 1500 - Weak, under KQAD, with CNN News from anchor Chuck Roberts. (RD-IA2)
- 880 WMEQ WI Menomonee - 4/17 1455 - Fair, with CLs. Signal just about dead even with that of KRVN. (RD-IA2)
- 1020 KOTD NE Plattsmouth - 4/17 1130 - Fair, with mention of Plattsmouth. No more interference from KXR. (RD-IA2)
- 1230 KWSN SD Sioux Falls - 4/17 1156 - Good, in KICD splash, with CLs heard during morning talk program, possibly a cooking show. (RD-IA2)
- 1390 KJAM SD Madison - 4/17 1559 - Fair, in three-way tug-of-war with 1390 KJAM Madison, South Dakota ID noted. The other two stations were probably Des Moines and Waite Park, MN. (RD-IA2)
- 1450 KYNT SD Yankton - 4/17 1555 - Fair, under KATE with CLs noted. (RD-IA2)
- 1490 KBIX OK Muskogee - 4/8 0800 - Country music. KBIX Broadcasting to you from north eastern Oklahoma 24 hours-a-day. Into C&W into jumble. (JB-TX)

1600 TO 2400 HOURS ELT

- 850 WYLT NC Raleigh - 3/12 1802 - Good, with mention of Cunningham Golf Course, ID as 850 WYLT Raleigh-Durham, North Carolina. Then into Sunday night sports page. (GS-TN)
- 900 WATV AL Birmingham - 4/4 2056 - Good, with ID as WATV Solid Gold Soul into news. (GS-TN)
- 910 WJCW TN Johnson City - 4/3 2300 - Poor, barely readable, with Wall Street Journal ad, CBS News, and ID as Newstalk 910, WJCW. (GS-TN)
- 950 WQBE WV Charleston - 4/3 2100 - Poor, with ID as 95 WQBE. News and Talknet with Bruce Williams. (GS-TN)
- 1000 WXTN MS Lexington - 4/29 2030 - . . . until tomorrow, when WXTN begins another day of broadcasting . . . (NAP-AL)
- WMUF TN Paris - 4/9 2020 - Country One Thousand, WMUF. (NAP-AL)
- 1030 KIPA TX Corpus Christi - 4/9 2027 - Legal ID, religious music. (NAP-AL)
- 1480 WTHI IN Terre Haute - 3/19 1919 - Poor, with Arkansas-Syracuse basketball game, ad for Heavy Duty Truck Parts. ID at end of game. (GS-TN)
- KKCQ MN Fosston - 4/16 2307 - Fair, with "KKCQ" ID heard. (RD-IA2)
- 1520 KOMA OK Oklahoma City - 3/31 2300 - Excellent signal, as usual, but it seems these days, or should I say nights, they are running religious programming at night more often than their oldies music. When they play oldies, they claim to be All Oldies, All the Time, but that must be when they are programming REL. (SA-MB)
- 1570 WXLN IN New Albany - 4/8 2037 - Ex: WZCC. Good at times, then fade to nothing. Forecast of severe storm warning for south central Indiana. ID: WXLN AM and FM. Inspiration Radio with the best music under Heaven. (GS-TN)
- 1580 WOXR AL Oxford - 4/28 2025 - Good, with general good IDs at 2032. Calhoun County's new WOXR, into NOS music. (GS-TN)

GRAVEYARD DX UPDATE

\* indicates North American record

<u>1230 kHz:</u>						
WXLI	GA	Dublin	Joe Kureth	Southern Pines, NC	273	
WMFR	NC	High Point	Joe Kureth	Southern Pines	63	
<u>1240 kHz:</u>						
WBAX	PA	Wilkes-Barre	Joe Kureth	Southern Pines, NC	461	
<u>1400 kHz:</u>						
WCNF	NC	Weldon	Joe Kureth	Southern Pines, NC	131	
<u>1450 kHz:</u>						
WOCN	FL	Miami Beach	Joe Kureth	Southern Pines, NC	648	
WVON	IL	Cicero	Joe Kureth	Southern Pines, NC	643	
<u>Totals:</u>					<u>1230</u>	<u>1240</u>
Richard Turner	N. Dartmouth, MA				7	4
						<u>1340</u>
						<u>1400</u>
					<u>1450</u>	<u>1490</u>
					6	4
						<u>Total</u>
						28



### ABBREVIATIONS USED IN DDXD

//:parallel to :00: on the hour AC:Adult contemporary AP:Associated Press BBD:big band BRN:Business Radio Net C&W:country & western CCR:contemporary Christian radio CHR:contemporary hit radio CID:code ID CL:call letter EZL:easy listening EE:English FF:French GOS:gospel IRN:Interstate Radio Net LSR:local sunrise LSS:local sunset NBA:National Basketball Assn NFL:National Football League NPR:National Public Radio OC:open carrier POL:political PRI:Public Radio International PSRA:pre-sunrise authority PSSA:post-sunset authority QRM:man-made interference QRN:natural interference QTH:location PRI:Public Radio International REL:religious ROK:rock 'n' roll RS:regular schedule \$:stereo SID:singing ID SRS:sunrise skip SS:Spanish SSB:Star Spangled Banner SSS:sunset skip TC:time check TT:test tones UC:urban contemporary UPI:United Press International

### DDXD-E NEWS AND VIEWS



Welcome to Martin Wishnewitz who lets us in on some TIS' that he heard on a trip back to New York from Florida.

C.R. Bernth asks "NRC Log says WIBG-1020 uses 500 watts daytime only. They blow KDKA away and sound local. Any power change?" Don't think so, they are on an almost all saltwater path to your location, though. That probably keeps the signal up.

Jeff Kitze asks "Did anyone get a QSL from WREN? I wrote but have received nothing back yet." And in response to someone else's question, "off the bird" refers to a satellite feed. Yet another reminder that we need to be careful about too many abbreviations and euphemisms that newer members may not be aware of.

Summer deadlines are June 3, July 1, July 29 and September 2.

### SPECIAL-KUSA

- 1660 KUSA NV Las Vegas - 3/31 - Loud. Also on other times and dates. Classic rock album music, "pink/white" noise, "KUSA" IDs, etc. In at approximately 59+ on almost any radio for state #41 in VA. Sounded more like 100 kw than 10! What a great surprise, almost as good as KTNB-660's DA problems a few years ago. (JK-VA)
- 1660 KUSA NV Las Vegas - 4/8 2308-0010 - Poor signal at tune-in, but fair signal with nice peaks by 0000. Played continuous CW selections with no breaks or IDs. I phoned the Chief Engineer at 702-896-0341, his name is Matthew Lunati, N6DEL. He confirmed it was them. Says 10 kw to a single tower, non-directional. Address for QSLs is KUSA Radio, NAB95-Las Vegas, c/o Matthew Lunati, N6DEL, 5050 Murphy Canyon Road, San Diego, CA, 92123. Station was operated by the same company that owns KUSA in Denver. They transferred the call to the Las Vegas station during the convention. State #45. (RR-ON)
- 1660 KUSA NV Las Vegas - 4/9 2207 - Positive, male-voice ID on this demonstration station. Into Dave Brubeck's *Take Five* then *What a Fool Believes* by Chicago. Even better ID woke me at 2248 while taping their signal. I had forgotten to turn the volume control down on the headphones, hi! (RB-NC)
- 1660 KUSA NV Las Vegas - Not heard on occasional checks 4/9-11 in the 2000 to 2200 time frame. Only thing noted was a carrier via BFO and questionable audio via ECSS on 4/10. Loop bearing was west/northwest. Each day carrier seemed to go off in the 2145-2200 time frame. Except for Anguilla-1610, rest of 1601-1700 range was silent. (MH-NC) (Las Vegas local sunset in April was 2215 - db)
- 1660 KUSA NV Las Vegas - 4/12 0409-0500 - Fair with Rick Dees countdown show interspersed with KUSA IDs and jingles, plus info on digital audio broadcasting. Readability difficult due to nearly continuous static crashes. Quieter and much better 4/19 0020- 0449 with pop music, OC and live IDs by engineer. One was "This is KUSA, broadcasting from the Las Vegas desert". State #47 (first new one since 1976!) and my 100th catch west of 100 degrees longitude. (SF-TN) (Now there's a stat I hadn't checked before! - db)

### SPECIAL

- 590 CJCL ON Toronto - There have been some uncertainties about the calls of this station since its move to 590. "The Fan" has indeed brought their calls down with them - they are still CJCL. I heard a Toronto Maple Leaf player ID them the other day. They do not use their calls very often! (RH-ON)

- 710 WEKC KY Williamsburg - Per verie correct address is P.O. Box 1298, v/s is Tim Johnson, Asst. GM. (EK-OH)
- 730 WBZS VA Alexandria - 5/1 1315 - Alerted to this by my brother, new calls and format, **now business news, with much of it from the Bloomberg network.** Does include a fair share of local stuff also. IDs included "Business Radio 730" and "24 hours a day, Bloomberg Information Radio, WBZS". Very few mentions of call letters. Note also 24 hour schedule. Yet another call change on this one. (DB-DE)
- 740 CBL ON Toronto - 4/3 0500 - If you hear BBD on this frequency at this time, CBC has a BBD program called "The Eye Opener" 0500-0600. (RH-ON)
- 930 WPAT NJ Paterson - Update: Monday - *Broadway Hour* - 1800-1900, Monday-Friday, *Sports Byline USA* 2200-2400. *Sports Time Live* is gone. (JH-NJ)
- 1000 WRTG NC Garner - 3/31 0634-0638 - Logged at sign-on, announced as //WRTP, Chjapel Hill-1530. No longer silent apparently. Report sent to P.O. Box bounced, trying WRTP's address now. (EK-OH)
- 1050 CHUM ON Toronto - 4/27 2230 - Noted running talk show between 2100 and 2300, fed and rebroadcast by tape in the evening here. *Dr. Laura Schlesinger Show* from Los Angeles. (RH-ON)
- 1060 WFLE KY Flemingsburg - 3/30 0620-0632 - In very well, new here. CW, many local ads. Per phone call, correct address is Route 3, #1, Radio Drive, Flemingsburg, 41041. Phone 606-849-4433. (EK-OH)
- 1260 WMIH OH Cleveland - 4/9 0120 - Fair over WNDR, while looking for WNRK test, with local weather, female announcer giving ID as "WMIH, radio for the heart" into Gospel music. Ex-WRDZ, the umpteenth call change for this station, which I have heard many times with many calls. (MB-ON)
- 1280 WJPY DE Seaford - 5/2 1254 - "You've got the Touch, the all new sound of 1280 and 1470, WJDY", then on the hour "The Touch, WJDY Salisbury and WJPY Seaford", a division of O'Connor(?) Broadcasting", UC music. Only top of the hour mention of 1280 calls, ex-WECY. (DB-DE)
- 1350 WNLK CT Norwalk - 4/2 0945 - "The Talk of Fairfield County", **apparent change of format from NOS to TLK. Also noted CNN news rather than ABC.** (CRB-NY)
- 1430 CKYC? ON Toronto - As of 4/22 *Country Music Radio* is still on this frequency. I don't know how much longer they will be broadcasting. I wish they would move along so we can start working here! (RH-ON)
- 1430 CKYC ON Toronto - 4/26 2334 - With CW, and, believe it or not, a call letter ID, dominant. Never heard calls on this one on any frequency. (DY-CT)
- 1440 WKLV VA Blackstone - 3/16 2350 - Now runs *Peoples Radio Network*. IDs as "AM 14-40 WKLV, Blackstone". (JK-VA)
- 1470 WKAP PA Allentown - 5/6 0121 - Promo with call letters heard twice, mostly under UNID CW (CHOW?) and WMMW. Ex-WKAP. (DY-CT)
- 1470 CHOW ON Welland - Has been sold to R.B. Communications, which is owned by the previous owner's wife. The station is expected to continue with its CW format. This per 4/7 and 4/8 articles in *The Welland Tribune*. (RC-ON)
- 1490 WEFG MI Whitehall - 3/25 2235 - Female with "Eagle 97 WEFG...with the greatest hits of the 70's" coming out of *Steely Dan's "FM"*. In the *Log* they are listed as CW, phoned and talked to their PD - they switched to 70's rock 3/1. Change yer logs! (RH-ON)
- 1510 WNLC CT New London - 4/11 1844 - "The Memories station", **apparent format change from NWS to NOS.** (CRB-NY)
- 1570 WOKC FL Okeechobee - Recent QSL shows they are now 700/14 as per CP. A very powerful 14 when I got them! (DT-JAM)

### DX TESTS

- 770 WCGW KY Nicholasville - 4/9 0100-0130 - Possible CW music early, weak TT at 0125 and good code sequence at 0128 in WABC null, or what null I could achieve. The DX gods rewarded me for sitting through a half-hour of *Rush!* (DB-DE) ...Good through static crashes with voice and code IDs, also several KY-themed songs. (SF-TN) ...Heard only one very weak code ID at 0106 although I listened until 0122. (EK-OH) ...Tentative under WABC with no voice announcements, music or TT, just four code IDs noted very weak at specific times. Report sent but may not be enuff for verie...if it was them at all. (RA-MA) ...Not heard under WABC. Not needed as heard on SSS in 1987. (MB-ON) ...Not heard, too much WJR. (JL-OH) ...Not heard, just WABC way atop HJXX. (DY-CT)

KKIT

- 780 **WWOL** NC Forest City - 4/8 0300-0400 - Listened entire hour under WBBM and foreign with no luck, seems like this one would've gotten out well if on. (RA-MA) ...Not heard despite auroral conditions that wiped out WBBM. (MB-ON) ...Not heard under WBBM, UNID SS, lightning QRN. (JL-OH)
- 930 **KWOC** MO Poplar Bluff - 3/13 0200-0230 - Not heard. (DT-JAM)
- 960 **KZIM** MO Cape Girardeau - 3/6 0200-0230 - Not heard. (DT-JAM)
- 960 **KZIM** MO Cape Girardeau - 4/3 0100-0130 - Same results as 3/6 test which was not on, weak periods of what sounded like code IDs under WELI and CHNS but probably time pips or code coming from *Radio Reloj* in Cuba once again...not enough for report. (RA-MA)
- 1210 **KGYN** OK Guymon - 4/10 0200-0230 - Tried but not heard, just WGMP. (RA-MA) ...Only WGMP. (DB-DE)
- 1250 **WKBR** NH Manchester - 3/6 0100-0130 - Not heard. (DT-JAM)
- 1260 **WNRK** DE Newark - 4/9 0000-0200 - Weaker than expected with code IDs, high-pitched "siren" at 0038. (DB-DE) ...Weak but readable, only code ID and "warbling" tones made it, but since I live 7-8 miles from WMIH, 'twas a pleasant surprise. WNDE also in there. (EK-OH) ...Heard a siren (like a police car) high and low tones. Heard a couple "AM 1260" IDs, not sure who. And noted a bit of BBD music at one point. Siren was strong at times. (WW-MA) (The siren sounds like them, the other info sounds like WWDC - db) ...Not heard on frequency dominated by nothing in particular. (MB-ON) ...Not heard, only UNID sports talk. (JL-OH) ...Tried but not heard. WEZE dominated with FF religion (wonder if that threw anybody?), an unID UC:OLD satellite station with 800/227-? phone number for dedications and generic ads 0040-0044 in second place, and WWDC occasionally in there too with NOS. (DY-CT)
- 1330 **WPPI** GA Carrollton - 3/4 0500-0600 - WJNX and UNID with talk, no WPPI. (DT-JAM)
- 1460 **WZEP** FL DeFuniak Springs - 3/20 0400-0445 - Just WCMB and WOL splash. (WPT-DC)
- 1580 **KFDF** AR Van Buren - 3/4 0200-0300 - WSRF and UNID SS, no KFDF. (DT-JAM)
- 1580 **KFDF** AR Van Buren - 4/15 0200-0300 - Only CBF with opera-type music. (DB-DE)

### UNID AND UNID HELP

- 540 **UNID** 4/16 1905-0045 - Weak but steady signal. Nothing but sports talk show. ID was heard at one point but too weak "540-????". Mixing with a SS station that I think was XEWA. (WW-MA)
- 610 **CKTB** ON St. Catharines - I have logged CKTB in either Hindi or similar language, so AR-MA's UNID should be them. (SA-MB)
- 610 **UNID** 4/27 0038 - AA or Middle Eastern sounding music atop WIP, CKTB? (DY-CT) (Probably, see previous - db)
- 680 **UNID** 2209-2210 - Heard many dates as an opening theme *Bert Kaempfert's That Happy Feeling*. Sure this is not a new log, just wondering who it is. (JEK-MD)
- 690 **UNID** 3/6 0007-0021 - Noted IDs as "ESPN Sports Talk" and "This is the Sports Authority, ESPN". Ad for *Goodyear*, *Mariott Hotel*, and *Pontiac*. Strong until 0021 power cut or pattern change. Who is this? (WW-MA) (Either WPDQ or WJOX - db)
- 920 **UNID** 4/23 0638-0700 - Someone with satellite NOS with *Mark Avery*, at 0700 a woman with what sounded like "We're 920 AM, WHTH". Not sure if the two are the same. Is this Mark Avery the same one who was on WJR years ago? (DB-DE)
- 980 **UNID** 4/26 0654 - Someone here with *Imus in the Morning*. Not WWRC, as WTEM carries the show in Washington. Anyone know who this would be? (DB-DE)
- 1030 **UNID** 3/31 0015-0045 - Under WBZ but listenable, although unidentifiable, CW music. First time I've heard something under WBZ in Worcester. Only info to go on was "This is Big Country 99" and an advertisement for the Johnson Mall. (BF-MA) (That would be WBYG-WV, see RC-MDs report in last issue of them loud evening of 3/29 - evidently not powering down - db)
- 1120 **UNID** 4/20 0700 - In and out with FF, strong when in. No Canadians noted on this frequency. (CRB-NY) (Maybe WUST? - db)
- 1300 **UNID** 4/15 2110-2220 - Minor league baseball game, Ravens vs. Thunders, over/under WJFK, then fade out to WJFK. Suspect PA. (RWT-MA)
- 1340 **UNID** 5/3 0107 - Weather, "The talk of the tri-state," into second hour of satellite sports talk show with Tom ?, briefly good and atop. (DY-CT)
- 1400 **UNID** 4/22 2033 - Woman with "...high of 40 degrees in the higher elevations" then faded. NOS heard a little later, if same station probably WICK. (DB-DE)



3003 N. Central Ave.  
Suite 704  
Phoenix, Ariz. 85012

- 1490 **UNID** 3/25 2123 - Coming out of 70's hit *Fly Robin Fly* by *The Silver Convention*, female with call letters "WQID" or WQIZ maybe? Either I'm missing a call change or these folks were running along with their FM calls which aren't in the Log. Or none of the above! Who knows...nothing matches, any ideas anyone? (RH-ON) (Probably WEFQ, as evidenced by your other report of an hour later [see *Special*] - db)
- 1510 **UNID** Regarding DP-PQ's report in 3/20/95 issue, regarding hearing meteorologist Bob Cox. I would say this was WNLC because Cox is a meteorologist for the *New England Weather Service* that originates, I believe, on WTIC. They provide weather for at least several stations in CT and western MA including WICC-Bridgeport and WHYN-Springfield, both of which used to get their weather from *Accu-Weather* out of State College, PA. Come to think of it, so did WTIC. (BF-MA) (Thanks for the help, Bill - db)
- 1570 **WQTW** PA Latrobe - 5/1 0349 - ID "Prime Sports Radio WQTW," fair atop channel. Mystery solved? (DY-CT) (At least another piece of the puzzle - db)

### 0000 to 0800 ELT

- 560 **WFIL** PA Philadelphia - 4/9 0032 - ID repeated clearly several times. Ex-WPHY. (CRB-NY)
- 630 **WLAP** KY Lexington - 4/14 0610 - Poor but good peak for ID. Time check, weather update, promo for afternoon sports call-in program, ID "You're listening to Sports Radio 630, WLAP". (JC-NY)
- WPRO RI Providence - 4/26 0621 - Good in WMAL null with local news, several "AM 6-30 WPRO" mentions, *Accuweather*. First time heard. (DB-DE)
- 670 **WWFE** FL Miami - 3/23 0029-0035 - Popular LA music, ID in EE by female announcer as "WWFE Miami and Hialeah". Poor, interference from UNID SS. (DT-JAM)
- 680 **WPTF** NC Raleigh - 3/23 0036-0120 - Talk show, local ad for *Southern States Garden Center*, promo for WPTF booth at trade show. Poor, interference from UNID SS. (DT-JAM)
- 690 **WTIX** LA New Orleans - 4/10 0259 - National talk show, mention of affiliates, then "This is WTIX...WAS...". First time here. (DB-DE)
- WZAP VA Bristol - 4/1 0659-0705 - Loud with religion, IDs as "From coast to coast, from door to door, broadcasting for Jesus" and "The truck driver's station". QRM from sports station - WJOX or WPDQ? (EK-OH)
- 730 **WWTK** FL Lake Placid - 3/24 0108-0200 - Talk show, CBS news, ID in part "730...WWTK..." poor under XEX. (DT-JAM)
- WMTC KY Vancleve - 3/30 0718-0725 - On top with religion, many mentions of Jackson. (EK-OH)
- CKDM MB Dauphin - 4/6 0640-0645 - A surprise visitor, but unneeded. many ads and PSAs, fairly good signal. (EK-OH)
- 740 **WJTB** MA Cambridge - 4/1 0130-0145 - You could have knocked me over with a feather. Maybe it was an April Fool's joke but I've never heard this easy listening station after sunset, let alone coming in as well as it was this morning. All alone on frequency. (BF-MA)
- 750 **WBMD** MD Baltimore - 4/1 0639-0648 - In well with religion. WSB looped but QRM from another station with religion. (EK-OH)
- 770 **WABC** NY New York - 4/23 0100-0200 - Maybe another silent period everyone was waiting for? Off the air. While off, *Radio Cadena Nacional* (RCN) in almost as good as WABC! Rats, no KKOB. Look for further silent periods? (JK-VA) (You mean RCN was as good as WABC when on or off? I think I saw that there was an expected WABC SP that didn't happen. Don't know if it was this morning or another - db)
- 820 **WNYC** NY New York - 4/26 0639 - *Morning Edition* from NPR, "This is Morning Edition on WNYC AM and FM...", only second time heard since frequency change. (DB-DE)
- 830 **WMMI** MI Shepherd - 4/6 0710 - A surprise, popped up for an ID "WMMI-WCCY". CFJR and WWMO QRM. Noted with oldies later. WKTX sign-on at 0725. (EK-OH)
- WWMO NC Eden - 4/6 0703-0735 - A powerhouse with almost nonstop Gospel. Slow deep QSB allowed WMMI and WKTX in, however. (EK-OH)
- 840 **WKDI** MD Denton - 4/24 0648 - Fair with ID and promo for Sunday religious program. New. (JH-NJ)
- 940 **WKGM** VA Smithfield - 5/3 0030 - *Voice of Liberty* religious program with Norfolk address, ID, good and basically alone. (DY-CT)
- 950 **WWJ** MI Detroit - 4/13 0023 - Poor with ad for *ABC Warehouse* and "WWJ News Radio 950" ID. After the departure of CKBB to FM she is now the pest here. (RH-ON)

- 850 WRMR OH Cleveland - 4/1 2145 - Fair with *Saturday Night Swing* and "Music of Your Life" mentions. BBD music. Live promo by announcer about upcoming *Eddie Fisher* performance at Landerhaven. WJAC in null up and over at times in CJBC slop. (RH-ON)
- WJAC PA Johnstown - 4/1 2133 - ID with BBD show, "You're listening to the greatest hits of all time on WJAC". I think this was either a network feed or pre-recorded program, announcer did not mention call letters, heard only on positioners. Two standards stations fighting it out on one frequency...sounded like the Golden Days of Radio! CJBC splash. (RH-ON)
- 870 WQRX AL Valley Head - 4/13 1956-2012 - Newscast //TV Channel 31 (Huntsville) with Chuck(?) Mecklenburg. Fort Payne mention and "Hot Country 870" ID. AL #56. (JEK-MD)
- 910 CKLY ON Lindsay - 4/8 2230 - Fair with *Telemidia Maple Leaf* hockey then *Country Music Radio Network*, local positioners and call letters. *TSN Sports Radio* promo, *CKLY Lottery Line* promo among others. No downfades but CHML slop. (RH-ON)
- 920 WKRT NY Cortland - 4/16 2030 - Up and over WOKY with "920 WKRT" ID, *Lee Roberts Show*, "British Rock Invasion Weekend", promo for *Beatles Live at the BBC* giveaway (1's, contest winner of CDs was announced. Songs by *Jay end the Techniques, Martha and the Vandellas, Santana, and Peter and Gordon*. New for me. Good jocks, production, good sounding oldies format. (RH-ON)
- WOKY WI Milwaukee - 4/16 2029 - Fair. Up briefly with call letters and *Chanson D'Amour* by *Art and Dotty Todd*. Male announcer, LSS here therefore I would imagine this one was on day power & pattern. (RH-ON)
- 950 WGOV GA Valdosta - 4/9 2033-2050 - Strong with UC music. WWJ looped, and on top easily with little QSB. (EK-OH)
- 970 WFUN OH Ashtabula - 4/2 2008 - Fair-poor with fading and "3WS" QRM. *Cleveland Cavs vs. Denver Nuggets* basketball, ads, mentions of "Cavaliers Radio Network", IDs and promo "Catch all the action right here on WFUN". (JC-NY)
- 980 CFPL ON London - 4/18 2029 - Promo for *Pizza Hut Cruiser* from "AM 98 CFPL", ads for *London Family Clinic, Delaware Speed Park (NASCAR)*, AC format. Station giving away a pool and taking qualifiers. Oldies station in behind, either CKRU or WIRY? Heavy occasional QRM from thunderstorm moving in from my west. Fair with downfades. (RH-ON)
- 990 WWCM MI Ypsilanti - 3/30 1638-1715 - Difficult under WTIG (with baseball). Benefit program. Occasional WCCD slop - only 5 miles away! (EK-OH)
- CKIS PQ Montreal - 4/21 2314 - Many "Oldies 990" IDs, ad for *Bar 38* reopening. Played *The Beauharnais, Donny Osmond's Puppy Love* and CSNY with *Woodstock*. Playing, up their Cancon quotas. Alone, no sign of Rochester on frequency, heavy splash from CFRB. (RH-ON)
- 1000 WRNJ NJ Hackensack - 3/29 1800 - Lead story was about firefighters spending 21 hours fighting a blaze somewhere in the Delaware Valley (I couldn't hear what town), then into ABC news. (BF-MA)
- 1080 WEEP PA Pittsborough - 5/1 2051 - Several "Pittsburgh's Y-108" IDs in WTIC null, fair. (DY-CT)
- 1090 WBZB NC Selma - 4/9 1945 - Sign-off with full info. "with transmitter location near the intersection of routes 321 and 70." (RB-NC)
- 1120 WHOG AL Hobson City - 4/9 2001 - Deep-voiced ID with reverb. Several cities mentioned including Anderson, AL which helped to locate this one since Hobson City is not on my map. Station then disappeared abruptly (probable sign off). (RB-NC)
- WADN MA Concord - 4/3 1848 - Irish/Celtic music until 1900, into folk music and *Sibarna* and. (CRB-NY)
- WDUF VA Duffield - 3/31 1842-1844 - Noted weakly at sign-off with SSB. (EK-OH)
- 1160 WWON MI Fenton - 3/27 2120-2135 - On top, but with severe QSB. Gospel. New here. (EK-OH)
- 1200 WCHB MI Taylor - 4/19 1954-2006 - Good. Ad/PSA for *Project Get*, ID "WCHB, Talk Radio 1200", promo, *NBC* news followed by call-in show. (JC-NY)
- WSML NC Graham - 3/31 1859-1900 - Logged with *Community Calendar*, but then got buried by CFRB. (EK-OH)
- 1230 WENY NY Elmira - 4/4 2046 - ID by woman, apparent news or talk show. Fair-poor. #14 on this NY channel (WPT-DC)
- 1240 WRTA PA Altoona - 3/28 2105 - End of network news, ID by man. Fair. (WPT-DC)
- 1260 WNRK DE Newark - 4/19 1913 - Poor-fair, fading in and out. "Good Time Rock 'n' Roll Oldies, WNRK" ID into *Stones Satisfaction* and *Beatles She Loves You*. (JC-NY)

- WBUD NJ Trenton - 4/24 1950-2008 - Fair with fading and severe QRM. *Elvis Can't Help Falling in Love*, call letters, national news ("Washington News Desk") at 2000, ads, sports, local weather and ID "AM 1260 WBUD" into more music. Signal all but lost by 2010. (JC-NY)
- 1270 WCBC MD Cumberland - 4/8 2106 - Weather, ID, *Rush Limbaugh* promo, fair atop pile. (DY-CT)
- 1310 WDOZ MI Dearborn - 3/29 1737-1750 - In fairly well with kids programming. I have a lot of trouble with WERE-1300. (EK-OH)
- 1320 CJMR ON Mississauga - 3/31 1920-1935 - A powerhouse with WOBL looped. *The Rosary* 1920-1930 then *Song of Ukraine* until tune-out. (EK-OH)
- 1330 WFBC SC Greenville - 4/8 2130 - Generic ads, weather, ID for "1330 Greenville, 910 Spartanburg," and WORD mentions, good over WWRV. (DY-CT)
- WESR VA Onley - 4/22 2205 - "Super Gold 103.3" ID with oldies. Never heard at night before. (JEK-MD)
- 1380 WKDM NY New York - 4/24 2115 - LA music, SS talk by man, fair. Ex-WBNX. (WPT-DC)
- WSYB VT Rutland - 5/3 2013 - *Red Sox* baseball, ads including *Chrysler-Plymouth of New England*, "WSYB 13-80" ID back into game, fair-good in partial WKDM null. (DY-CT)
- 1390 WEED NC Rocky Mount - 4/24 2050 - Stained-Glass Bluegrass (like I used to hear on XERF), ID by man. Fair. (WPT-DC)
- WMZQ VA Arlington - 4/24 2050 - This local noted off the air! Back on by 2135. Shucks on that! (WPT-DC)
- 1410 WLTV AL Mobile - 3/7 2237-2300 - Man preaching, REL. ID as "WLTV, Mobile". Poor, interference from UNID with music. (DT-JAM)
- WDOV DE Dover - 3/30 1730 - A surprise with call letter ID. (EK-OH)
- WDOV DE Dover - 4/20 2135-2150 - Fair-poor with fading and QRM. Post-game show of the *Wilmington Blue Rocks vs. Durham Bulls* Carolina League baseball game. *Bell Atlantic and Radio Works* ads, IDs "News Radio 1410 WDOV...central Delaware's news and information leader". (JC-NY)
- 1430 WXAM KY Buffalo - 3/27 2020 - Noted with call ID. Two CW stations here - couldn't sort 'em out. (EK-OH)
- 1440 WNPVT PA Lansdale - 4/12 2032 - Mention of Bucks County and Philadelphia politicians. First heard in '72 on a test broadcast and only twice on regular schedule since. (JEK-MD)
- WRGM OH Ontario - 4/3 1717-1727 - Finally logged with EZL music. Severe WRRO QRM. (EK-OH)
- 1450 WLEC OH Sandusky - 4/4 2206 - Out of the mess with "370 Cleveland Road in Norwalk...Cavs basketball on AM 1450 WLEC". This was probably a tag for a local sponsor for the game but I didn't get the name. Signal was gone afterwards. (RH-ON)
- 1460 WBRN MI Big Rapids - 3/30 1923-1925 - On top with CW. (EK-OH)
- WCMB PA Harrisburg - 4/6 1900 - In well with *Pit Stop* motor sports program. (EK-OH)
- WKDV VA Manassas - 4/6 1924-1930 - Presumably the station with kids *Radio Aahs* program. Often on top, but severe QRM/QSB. (EK-OH)
- 1480 WRDW GA Augusta - 3/17 2135-2145 - Play-by-play *Atlanta Hawks vs. Chicago Bulls* basketball. ID as "All sports, all day, you are listening to WRDW", fair. (DT-JAM)
- 1490 WOLF NY Syracuse - 3/24 1836 - Heard male announcer with calls only. (RH-ON)
- 1500 WFIF CT Milford - 4/3 1923 - Fair over WTOP. Syndicated religious program *Family Life Today* on motherhood and family roles, book/cassette offers, etc. Address in Little Rock, AR. "WFIF" slogan and ID at 1927. (JC-NY)
- 1530 WMBT PA Shenandoah - 4/23 1905 - Fair-good. Oldies, including *Neil Diamond, Three Dog Night*. ID "We promise you good times and great oldies...WMBT". (JC-NY)
- 1550 WCGR NY Canandaigua - 5/3 2030 - Sign-off announcement, mention 250 watts, schedule LSR-LSS, good. (DY-CT)
- WCLY NC Raleigh - 4/9 2356-2400 - Noted with sign-off. Had religion 'til then. Fair signal, new here. Can't believe 7 watts. (EK-OH)
- WARD PA Pittston - 4/14 1930-1945 - *Scranton vs. Syracuse* minor league baseball game; ID noted at 1941. No sign of CBE until later. (RWT-MA)
- WBSC SC Bennettsville - 5/2 2108 - News, weather, time, obituaries at 2104, promo with mentions of calls and Marlboro County, into *Eric Clapton* off the bird, good. (DY-CT)
- WKBA VA Vinton - 4/6 1956-2000 - A powerhouse with Gospel to sign-off. IDs as "A breath of fresh air" and "Gospel Powerhouse". (EK-OH)



- WVAB VA Virginia Beach - 4/4 1646 - "What do we have to do to be your number one station?" Pretty scratchy on car radio. (CRB-NY)
- 1570 WPGM PA Danville - 4/22 1950-2008 - Fair, peaking over numerous others. Light CHR vocal and instrumental music, IDs, local weather, time check into AP network news and sports. (JC-NY)
- WBUX PA Doylestown - 4/20 2050 - Fair-poor with QRM. ID "Bucks County Connection, WBUX" followed by promo for high school baseball on WBUX into John Fogarty's Centerfield. (JC-NY)
- WQTV PA Latrobe - 3/27 1900-1927 - On top most of the time with PSR sports, many local ads. (HK-OH) (Another PSR on 1570 to confuse things! - db)

### OTHER STUFF

- 525 WEAS GA Savannah - 4/11 1850 - I guess a spur from 900 kHz, S 9 on 900, S 4 to S-5, fairly good, not distorted. Received from Harbor Island (Beaufort, SC). Station 100% both frequencies all day 4/12. (HH-MD3)
- 530 TAS NC - 4/6 1347+ - NC/VA border, "Welcome to North Carolina" traveling on I-855. (HH-MD2)
- 530 TAS NC - 4/7 1033+ - NC/SC border, "Welcome to North Carolina traveling on I-855. Message garbled, sounded like Donald Duck! (HH-MD2)
- 530 TIS NC Greenville - 4/23 1231 - East Carolina University with parking information on campus. Weak-fair on US 17N between Chocowinity and peaking at Williamston Holiday Inn. (HH-MD2)
- 530 WPGU847 NC Wrightsville Beach - 4/23 0956 - Town of Wrightsville Beach, suggestions and regulations for beach users plus activities in area. Good on 17N at 70 turn off. (HH-MD2)
- 610 WNZZ(?) VA Virginia Beach - 4/23 1520 - Ferry at Currituck, NC, fair but QRMed from what appeared to be other TIS stations (Hatteras, NC?) 4/24 0940 - Good at Ramada Inn at Virginia Beach oceanfront. (HH-MD2)
- 1210 KP468(?) NC Charlotte - 4/7 1000 - North Carolina Department of Transportation HAR station. Peaked with fair signal on 1 855, probably on 1 77. NIL-heavy splash from 1220, probably WKMT. (HH-MD2)
- 1610 WPEP712 MD - 4/14 - On I-95 at the DE/MD border reporting travel information. Good signal during the day. (MW-NY)
- 1610 TIS MD - 4/14 - At Exit 57 on I 95 northbound, travel and events outside MD tunnel near rest and service area. Good signal during the day. (MW-NY)
- 1610 TIS MD - 4/14 - Also on I 95 northbound in MD, road construction going on with signing posted to tune in to 1610 for detour info approaching the DE border. (MW-NY)
- 1610 WPAS758t NJ Elizabeth 4/20 2000 Heard references to northern end of the New Jersey Turnpike, Holland Tunnel and New York City. The IRCA lists this TIS on Exit 13A. Is there another EB on the NJ Turnpike further north?(JEK-MD)
- 1610 WNEN589 NC Durham 4/6 1440 Duke University and hospital parking info. Good passing Durham on I 95. (HH-MD2)
- 1610 WNIQ550 NC New Bern 4/23 1100 - North Carolina Department of Transportation, Ferry Division Peaked at US 17/70 junction. Good. (HH-MD2)
- 1677.5 ABC SC Hilton Head Island 4/2 0324-0335 - Medfer beacon // ABC on 1643.5. (HH-MD1)
- 1695 UNID 4/26 2411 Match voice here, not good enough to make anything out, no other clues. (HH-DE)

### REPORTERS

- RA-MA Ray Arruda, Acushnet, MA: SX-122, HQ-180A, Loops
- SA-MB Shawn Avelrod, Winnipeg, MB:
- RB-NC Ron Batley, AA4S, Shelby, NC: Icom IC-765, R390A, seven beverages
- CRB-NY C.R. Bernth, Eastport, NY:
- MB-ON Mike Brooker, Toronto, ON: Panasonics RF-2200, RFB-45
- RC-ON Robin Christoff, Welland, ON:
- JC-NY Jim Clor, Rochester, NY: Drake R-8, Superadio III, longwire, Kiwa Loop
- BF-MA Bill Fother, Worcester, MA: Superadio III, Delco car radio
- SL-TN Steve Francis, Alcoa, TN: Realistic TRF
- JH-NJ John Hanz, Old Bridge, NJ: NRD-525, longwire, ICF-2010
- MH-NC Mike Hardester, Jacksonville, NC: ICOM R-70, Radio West ferrite loop

**KTKT/KLPX**  
2020 W. Grant Road  
Post Office Box 5585  
Tucson, Arizona 85703

- HH-MD1 Hank Holbrook, Dunkirk, MD: Drake R-8, 120' random wire
- HH-MD2 Hank Holbrook, Dunkirk, MD, on trip south to NC, SC and GA: Toyota 1990 AM/FM radio with standard auto whip
- HH-MD3 Hank Holbrook, Dunkirk, MD, on trip south to NC, SC and GA: Realistic DX-400
- RH-ON Russ Horton, Mississauga, ON: Realistic DX-440
- JK-VA Jeff Kitze, Jarratt, VA: Sony FD-555, Panasonic RQ-V60
- EK-OH Ed Krejny, Strongsville, OH:
- JEK-MD Joe Kureth, Uniontown, MD: Hallicrafters SX 99, longwire
- JL-OH Jeffrey Less, Toledo, OH: Panasonic RF-5000A
- RR-ON Robert S. Ross, London, ON: Collins 651S-1, Hammarlund SP600, dipoles, longwires, vertical, homebrew diamond loop
- WPT-DC Bill Townshend, Washington, DC: Sony ICF-2010
- DT-JAM Don Trelford, St. Anns Bay, Jamaica:
- RWT-MA Richard W. Turner, North Dartmouth, MA: Realistic STA-785, Recoton FM200 and Select-A-Tenna Loops
- MW-NY Martin Wishnewitz, Jackson Heights, NY: Toyota car radio
- WW-MA William Wyllie, Franklin, MA: Realistic DX-390
- DY-CT David Yocis, Darien CT: R390A, Kiwa Loop
- DB-DE Dave Braun, Wyoming, DE: R-5000, Quantum Loop

## Radio Roundup

Pete Kemp (KZ1Z) [PeteKZ1Z@AOL.com](mailto:PeteKZ1Z@AOL.com)

P. O. Box 73

Bethel, CT 06801-0073

News of the radio industry, of interest to DX'ers

Greetings all ... The FCC has approved the sale of WOWO to Inner City Broadcasting, despite hundreds of objections. Inner City is expected to reduce WOWO's power and to apply for enhancements to their New York station WLIB, allowing WLIB to go fulltime. In a recent development, Inner City appears to have a deal with Pathfinder Communications to sell off WOWO as soon as they have crippled it. What a sad ending to this once dominate Midwest rocker ... WNVL, Power 1250, is on the air with Urban Contemporary programming ... Don Glaze has left the morning spot on Omaha's WOW for the sunny shores of Ft Walton Beach on WYBZ ... Bloomberg Radio has expanded its News Operation on WBBR, offering digital News Briefs to be made available through cellular telephone services free of charge to users. The users access the system by dialing 1130, their AM frequency ... Trivia addicts take note that there are now 2,247 stations programming country music. That is quite a jump from 81, back in 1961 ... WOR certainly isn't the class station of old. Sports Vet Jim Gordon, who has done the play by play for the New Giants on radio for 13 has never missed a game, until this year when he underwent exploratory surgery. WOR's response dock his pay. Yep, one-way loyalty. The NY Giants Brass have expressed displeasure with WOR's behavior in this matter. The Giants have called their relationship with WOR a "bad marriage" ever since they relocated there, after years on

WNEW ... Mary Turner, Westwood One's Off The Record hostess, has decided to leave the show after a 15 year run ... Out in LA, Spanish music station KWKW has changed format to Spanish Talk ... Pete Rose's sport sports show has jumped ship from KATZ Radio to the SportsFan Radio Network ... Gene Burns left WOR and the WOR Network quite quickly. The rumor mill says he may surface back in Boston on WBZ ... While morning duos are back big on the radio, two males or a male/female combo are clearly the most common. NRCer Greg Henson checks in with the following tidbits from our nation's capitol ... Veteran newscaster Jamie Bragg recently received a Lifetime Achievement Award for his 37 years on WTOP ... WPGC talk show host "Casey" Samson, has been accused by the Securities and Exchange Commission of fraudulently selling 20 million dollars worth of real estate investments to area residents. His brokered show will remain on the air, according to WPGC management. As a side note WPGC has been sold to Infinity Broadcasting ... WWKB is now carrying the Leslie Marshall Show from Major Talk ...

If you would like to contribute to this column, I may be reached at the address above, via CompuServe 72376,2557, InterNet [PeteKZ1Z@AOL.COM](mailto:PeteKZ1Z@AOL.COM), the FIDO system in the Shortwave, Ham or Broadcasting echo areas, The Oracle 1:141/1015, or amateur radio packet, KZ1Z @ K1UOL.CT. So much for now.

# International Jim Renfrew JimRenfrew@Delphi.com

## DX Digest

61 Wilcox Street  
Rochester, NY 14607-3832

Foreign DX Catches. Times are UTC; for ELT, subtract 5 hrs.

### SPECIAL NOTE TO ALL E-MAIL CORRESPONDENTS

Please note my new e-mail address: JimRenfrew@Delphi.com. My old America On-Line address has been discontinued. Please follow the exact format shown below when submitting loggings. If I have to retype or rearrange your stuff it adds hours to the job, hours which I'd rather use for DXing!

### DEADLINES

Up-coming IDXD Sunday deadlines are as follows: JUN 4, JUN 18 (early IDXD deadline), JUL 23 (early IDXD deadline), and SEP 3rd. Some material received a few days after these dates may get in, especially hot tips, but the rest will be held over for the next column.

Welcome to Larry Godwin from IRCA, who adds MT to our list of reporting states and provinces this season. He has an unusual unID on 1660 kHz. You may also want to check out Ray Moore's comments about the possibilities of TP DX from the East Coast.

### TRANS-ATLANTIC DX

Jim

- 189 UNID, MAY 2 0220 - Unusual frequency; only a 10kW Italian and a 500 kW Georgian listed here. I'm supposed to be building an FM in Tblisi soon, but have been held back because electricity only on a few hours a day, I suspect that Dusheti, not being the capital is in worse shape, but then again maybe it avoided the warfare there. I'll try to find out when I get to Moscow next week (no kidding, I work there for the Puls FM net). Station very weak, just snippets of music. [Stutterheim-NY]
- 207 UNID, MAY 2 0255 - Something definitely here, sounded like classical piano, followed by string orchestra, gone from slow fade. [Stutterheim-NY]
- 216 FRANCE, MAY 2 0215 - Absolutely bombing in with classical music. [Stutterheim-NY]
- 234 UNID, MAY 2 0230 - Music, followed by deep voiced announcer in what sounded like Russian, 2nd station under. [Stutterheim-NY]
- 252 IRELAND, MAY 2 0215 - Woman with song in English; undoubtedly Ireland, fair. [Stutterheim-NY]
- 585 SPAIN, RNE-1, Madrid, APR 27 0412 - Talk by man in SS, fair-poor. [Yocis-CT]
- 621 CANARY ISLANDS Santa Cruz de Tenerife, APR 15 0234 - woman in SS; poor to fair. APR 15 2322 - man in SS; through WSKQ/WZON slop. [Connelly\*H-MA]
- 684 SPAIN Sevilla, APR 15 2326 - SS talk & music; good over second station with WRKO phased. [Connelly\*H-MA]
- 765 SENEGAL Dakar, APR 15 2308 - AA or dialect talk at low audio level. [Connelly\*H-MA]
- 774 SPAIN synchros., APR 15 2304 - SS news; excellent. [Connelly\*H-MA]
- 810 SCOTLAND BBC Radio Scotland, synchros, APR 23 0108 - Woman with news, press review at 0109. SIO 333 [Burnell-NF]
- 846 ITALY Rome, APR 15 2301 - bits of II talk; in WEEI slop. [Connelly\*H-MA]
- 855 SPAIN Murcia et al., APR 15 2300 - man in SS, over slow rolling SAH (less than 1 Hz); good with WEEI phased. [Connelly\*H-MA]
- 891 ALGERIA Algiers, APR 15 0140 - AA violins, vocal. APR 15 2256 - AA talk by man; very good. [Connelly\*H-MA]
- 981 ALGERIA Algiers, APR 15 2253 - AA male group vocal; fair to good with WCAP phased. [Connelly\*H-MA]
- 999 SPAIN Madrid, APR 15 2252 - man in SS; good over probable Morocco, slight CKBW splash. [Connelly\*H-MA]
- 1017 GERMANY Sudwestfunk, Mainz, APR 23 0100 - Pips, ID in GG, news. This is a commonly heard 600 kW stn, but I tried in vain to get an ID out of the fragments of a British signal underneath, which according to lists can only be "WABC", Shrewsbury (1.5 kW). SIO 333 [Burnell-NF]
- 1035 ENGLAND Country 10-35, London, APR 23 0049 - Nice ID, ad for mail order CD's, news at 0050. SIO 333 [Burnell-NF]
- 1044 MOROCCO Sebaa-Aioun, APR 15 2250 - Medi Un excellent with dance rock // 1053. [Connelly\*H-MA] R. Medi Un, Sebaa-Aioun, APR 27 0421 - AA talk, fair. [Yocis-CT]
- 1053 MOROCCO Tanger, APR 15 2251 - dance rock // 1044; fair over apparent UK / Spain mix. [Connelly\*H-MA]

- 1062 DENMARK Kalundborg, APR 6 0400 - news by man in Danish, good over other station with talk by woman (likely Italy). [Connelly-MA] APR 23 0257 - Strong, with man in Danish recapping the pop music that I'd heard during the past half hour: Mary Chapin Carpenter, Ace of Base, etc. SIO 444 [Burnell-NF]
- 1107 SPAIN, APR 15 2349 - man in SS; loud, atop Egypt. [Connelly\*H-MA]
- 1116 ITALY Bari et al., APR 6 0414 - II talk by man; over Spain & others. [Connelly-MA]
- 1134 SPAIN, APR 15 2249 - fast SS talk; over other, WBBR phased. [Connelly\*H-MA]
- 1143 SPAIN, APR 15 2350 - man in SS; strong over others, some slop from Irish fiddling on CBI. [Connelly\*H-MA]
- 1152 SPAIN, APR 15 2351 - SS talk; over growl & WMEX slop. [Connelly\*H-MA]
- 1179 CANARY ISLANDS // SPAIN, APR 15 2352 - SS talk. [Connelly\*H-MA]
- 1215 ENGLAND, Virgin R., synchros, APR 27 0431 - EE rock music poking through, fair-poor. [Yocis-CT]
- 1215 SPAIN, COPE synchros, MAY 3 0017 - SS music, fair, no sign of Virgin, first time heard. [Yocis-CT]
- 1278 IRELAND RTE Radio 2, Dublin and Cork, APR 22 2308 - Man talking in EE, mentioning "in the Republic" then pop music. Most other RTE stations were doing better. SIO 233 [Burnell-NF]
- 1305 SPAIN, APR 15 2353 - SS romantic / operatic vocal; excellent. [Connelly\*H-MA]
- 1305 POLAND Polskie Radio, 3 60 kW synchros, APR 22 2344 - Jazz, man in Polish. Found //s with much stronger, and more frequently heard, 1080 and 1206. SIO 232 with Spain phased down. SIO 232 [Burnell-NF]
- 1314 NORWAY Kvitsoy, APR 6 0419 - man & woman in NN; loud, way over Spain. [Connelly-MA]
- 1341 NORTHERN IRELAND Lisnagarvey, APR 6 0420 - EE talk; poor. [Connelly-MA]
- 1359 SPAIN Arganda, APR 9 0345 - man & woman in SS; poor to fair in WLYN slop. [Connelly-MA]
- 1386 tent KENYA KBC, Maralal, APR 23 0157:30 - Very weak with the drum IS, few words by a man (but extremely weak) at 0200 then glimpses of an anthem (choir), more talk at 0201 then a man sang at 0203. I checked for the SW // 4935, but it was also very weak so I could not confirm identity this way. Faded away very soon after, SIO 241. [Burnell-NF]
- 1467 FRANCE Roumoules, APR 15 0340 - religious chorus; in WZOU big-band slop. [Connelly\*H-MA] APR 27 0405 - GG religious song, good. [Yocis-CT]
- 1476 ENGLAND Mercury Extra, Guildford, APR 22 2321 - Back-to-back old pops and C+W music (Abba, Kenny Rogers, Leslie Gore...) with no announcements, but established // to the 1521 Mercury Extra outlet in Reigate, which was weaker. Both 1476 and 1521 faded away around 2335. WRTH says 1476 is 1 kW, but this is incorrect: it's 0.5 kW. SIO 342 [Burnell-NF]
- 1521 SAUDI ARABIA Duba, APR 15 0310 - AA male vocal; fair. [Connelly\*H-MA]
- 1530 VATICAN, APR 11 0343 - Eastern European talk; over/under WSAI. [Connelly-MA]
- 1544 CLANDESTINE (ALGERIA or MOROCCO), APR 15 2240 - man shouting in AA, possibly a religious or political harangue; potent. [Connelly\*H-MA] 1566 TUNISIA Sfax, APR 15 2238 - AA music at low audio level on local-like carrier. Reception was about 40 minutes before local sunset. [Connelly\*H-MA]
- 1575 ITALY Genoa et al., APR 6 0428 - woman in II; over Spain. [Connelly-MA]
- 1575 SPAIN, SER synchros, MAY 3 0054 - Man on phone talking in SS to sympathetic female host, to good peaks. [Yocis-CT]
- 1593 GERMANY Holzkirchen, APR 6 0427 - Slavic talk; to good peak. [Connelly-MA]
- 1602 SPAIN / unID, APR 16 0002 - SS talk mixing with bits of British EE talk. Judging by the southerly propagation at the time, I'm leaning toward Ascension Island rather than a UK local as the EE signal noted in the mix with Spain. [Connelly\*H-MA]
- 1611 VATICAN, APR 15 0315 - Slav-sounding talk by man & woman. [Connelly\*H-MA] APR 27 0407 - Talk by man in unknown language (Latvian listed), strong, better than Anguila-1610. [Yocis-CT]
- Jean speaks: "The weather forecast for Saturday April 22 and Sunday April 23 was for rain and fog with a high of 4 degrees C. My wife, Stephanie, said this was a good sign, and she was right. Although it was indeed cold and miserable just after lunch on Saturday when the family piled into the car in St. John's, it was a beautiful day when we arrived in Cappahayden. We stayed in the room at the Lawlors' (a.k.a. "DX Inn") that we used for the "shack" during the 1993 DXpedition. I set up two wires, but I didn't use coax lead-ins nor did I terminate them, due to lack of time. The lack of lead-ins was a mistake...lots of appliance QRM!! DX conditions were really spotty. Many "very easy" stations were completely inaudible (e.g. Senegal 765, Voice of Nevis 895, Radio Capital 1040, Radio Puerto Cabello 1290, Asas Clube Azores 1566, or ANY CIS station). Even the Saudi on

1521 was very poor. In spite of this a few "new" stations were logged: a ZY on 840, the British Mercury Extra stations on 1476 and 1521 (which I had logged before when this was called County Sound), and, surprise!!, HCJB1 on 690. I had audio, albeit really crummy audio, on 1386 that I think was Kenya, but the SW signal was too weak for me to establish a clear parallel...next time. What else did we catch? My 5-year old son Christopher broke out in spots...chicken pox!!!... and my 1.5-year-old daughter Emily has a nose that runs like a tap. On the way home on Sunday morning, Stephanie started to get a terrible migraine that ended up at the vomiting-and-spending-the-rest-of-the-day stage. Thus, the trip was a modest DX success, but a medical fiasco."

*Alan speaks:* "I am in the process of buying a house here on Chincoteague Island VA, and from what I've seen so far with just a temporary approx 100' LW about 15' off the ground this is going to be a fantastic BCB DX location if I can just keep the noise levels down to a mild roar ... I have no real nighttime locals - closest is 35 miles away - and my closest daytime local is about 25 miles away. I expect to be extremely active this coming season and intend to give Mr. Connelly a run for the money!" (I still have scars from Chincoteague mosquito bites when I was a teenager - Jim)

#### PAN-AMERICAN DX

- 526 BAHAMAS Stella Maris, APR 16 0348 - ZLS beacon; very strong. Signal slopped occasionally by RVC - 532. [Connelly\*H-MA]
- 531.9 TURKS & CAICOS ISLANDS, RVC, APR 1 0800 - WWRV/"RVC" ID, audible most of the 0700-0900 period, but weak. No tone testing or code ID heard, nor mention of Test. [Millar-WA]
- 532 TURKS & CAICOS, R. Visión Cristiana, APR 15 - audible ALL DAY (longest steady groundwave catch at this site - distance approx. 2250 km / 1400 miles): SS music at 1427, wild SS preaching at 1511, etc. Good solid signal on 60 m south wire. [Connelly\*H-MA]
- 535 GRENADA St. George's, APR 15 0158 - soul / doo-wop vocal; to good peaks over RVC - 532 slop. APR 16 0330 - soca party music; to good peaks. [Connelly\*H-MA]
- 540 MEXICO, XEWA Monterrey, APR 16 0412 - SS talk, "X-E-W-A" ID; over others. [Connelly\*H-MA]
- 550 CUBA R. Rebelde, APR 16 0410 - festive big-band SS dance music // 600; good with CFNB nulled. [Connelly\*H-MA]
- 555 ST. KITTS & NEVIS, ZIZ Basseterre, APR 14 0032 - "Islands in the Stream" by Kenny Rogers & Dolly Parton; good. APR 15 0158 - men's chorus, then preaching. APR 16 0050 - excellent with soca & calypso music. APR 16 0331 - Afro-Caribbean soca & reggae music; good. [Connelly\*H-MA]
- 570 CUBA, APR 15 0357 - R. Reloj program; loud, over/under WMCA. [Connelly\*H-MA]
- 580 PUERTO RICO, WKAQ San Juan, APR 15 0055 - fast SS talk, WKAQ ID; way atop Jamaica / WTAG / CJFX / others. [Connelly\*H-MA]
- 582 CUBA, APR 15 0359 - big carrier, poorly modulated by SS talk. [Connelly\*H-MA]
- 600 CUBA Urbano Noris, MAR 29 0125 - LA music, good over WCAO. [Townshend-DC] APR 16 0413 - Strong signal with R. Rebelde ID, parallel to 670 and 710 kHz. [Wyllie-MA] APR 15 0032 - ID "en Rebelde", uptempo jazz // 710; loud. [Connelly\*H-MA]
- 610 COLOMBIA, HJKL Bogotá, APR 15 0230 - RCN network ID, SS talk about Colombia; atop WGIR. [Connelly\*H-MA]
- 630 PUERTO RICO, WSKN San Juan, APR 15 0035 - SS sports mentioning Arecibo and other Puerto Rican cities; excellent over other SS & WPRO. [Connelly\*H-MA]
- 640 CUBA Guanabacoa et al., APR 16 0147 - huge with jazz Latin American vocal // 740. [Connelly\*H-MA] APR 16 0430 - Radio Progreso ID and music, strong at times. [Wyllie-MA]
- 640 GUADELOUPE Arnouville, APR 16 0417 - FF teletalk; good with Cuba nulled. [Connelly\*H-MA]
- 650 COLOMBIA, HJKH Bogotá, APR 15 0236 - SS radio drama / soap opera; like a local, alone on channel. [Connelly\*H-MA]
- 660 unID, APR 16 0154 - Latin American music // 670; way under WFAN. This was different from the Cubans' programs; maybe it was YVNA Coro running // YVLL - 670 Caracas. [Connelly\*H-MA]
- 670 CUBA Arroyo Arena, MAR 29 0128 - LA music (rumbas, etc.) // 600 kHz, good-excellent. [Townshend-DC]
- 670 CUBA / unID, APR 16 0154 - Rebelde // 710 w/ SS talk, ID over/under second station (maybe YVLL ?) that had non-stop SS music // 660. [Connelly\*H-MA]
- 680 CUBA, APR 16 0154 - Rebelde // 670, 710 with SS talk; under WRKO. [Connelly\*H-MA]
- 690 ANGUILLA, MAR 23 0624 - Dr. Gene Scott, swing music, phone instructions, fair. [Trelford-JAM] APR 16 0100 - EE preaching; under CBF, over HJ CZ. [Connelly\*H-MA]

- 690 ECUADOR La Voz de los Andes (HCJB1), Quito, APR 23 0827:30 - Andean flute music, 0828 Ecuadorian anthem (choir), man talk in unID lang (Quecha is listed) mentioning Ecuador, more Andean mx at 0830 (accordion and flutes), fading fast. A // with 3220 was established unequivocally at 0830. Under CBF and an unID EE rel broadcaster, at best SIO 322. [Burnell-NF]
- 700 COLOMBIA, HJ CX Cali, APR 15 0155 - SS talk, Colombia mentions // 810; atop others. APR 16 0157 - festive Latin American music // 5075; evenly mixed with Jamaica. [Connelly\*H-MA]
- 710 CUBA La Julia, MAR 29 0128 - Program parallel to 600 and 670, fair under WOR. [Townshend-DC]
- 740 CUBA Sagua de Tamamo, APR 16 0518 - Came in good after CBL sign-off. SS music and ID as "Radio Progreso ... La Habana". This station not heard here very much. Also noted CHCM in the background. [Wyllie-MA]
- 700 JAMAICA Montego Bay, APR 16 0101 - Jamaican DJ, reggae music; mixed with Colombia & others. APR 16 0305 - talk "now the news on JBC Radio One". [Connelly\*H-MA]
- 710 CUBA La Julia et al., APR 15 0032 - Rebelde ID, SS talk, jazz // 600; under WOR. [Connelly\*H-MA]
- 720 VENEZUELA, YVQE Porlamar, APR 16 0105 - African-influenced Latin American music, then R. Oriente ID; excellent, over CHTN. [Connelly\*H-MA]
- 730t TRINIDAD & TOBAGO, APR 30 0515 - Thought you might be interested in this. If I recall from DX News, Mark tentatively logged this one some time back. Very poor, almost graveyard-like conditions, though the suspected one did peak atop the others a couple of times. Too bad it was only during the music and not the talk segments. At 0515, black pops with a sultry sounding female DJ, mixing pretty badly with Montreal-CKAC, Blind River-CJNR, and an unID American "talk" show station with a very weak XEX under all this. At 0537, I heard "The time is 2:37" she played something like an Isaacs Hayes piece. The time would put it into Atlantic Summer Time zone. I'm thinking it might have been Trinidad (trying for that one for years !!!) but it's awfully sketchy, even for a tentative. Indices that night were 84, 6, and 2 with quiet conditions. [Funkenhauser-ON]
- 740 PUERTO RICO, WIAC San Juan, APR 16 0110-0115 - Puerto Rican folk song with "Borinqueño" references, then female SS announcer mentioned listeners in Bayamón. Great signal, covering the rumble from CHCM, CBL, WJIB, Cuba, Venezuela, Colombia, Brazil, & others. [Connelly\*H-MA]
- 740 CUBA, R. Progreso, APR 15 0147 - nightclub jazz style SS vocal // 640; atop Puerto Rico & Canadians. [Connelly\*H-MA]
- 750 VENEZUELA, YVKS Caracas, APR 15 0211 - Caracas news & SS teletalk; huge, way over other SS with no trace of domestics. APR 15 2328 - R. Caracas R. ID, slamming in. [Connelly\*H-MA]
- 750 JAMAICA Port Maria, APR 16 0302 - dancehall reggae // Jamaica-700. [Connelly\*H-MA]
- 760 CUBA Las Mercedes / Guanabacoa, APR 15 0200 - R. Reloj news & time show over Colombia/WJR/possible WVNE. [Connelly\*H-MA]
- 760 COLOMBIA, HJAJ Barranquilla, APR 15 0425 - // 770 with news items about Santa Marta; over/under Reloj Cuban. [Connelly\*H-MA]
- 770 COLOMBIA, HJXX Bogotá, APR 15 0210 - Colombia news, mowing down WABC. Third station under playing "Wonderland by Night" instrumental may have been the Venezuelan. [Connelly\*H-MA]
- 780 BRITISH VIRGIN ISLANDS, ZBVI Roadtown, APR 15 2331 - Caribbean weather forecast by man in accented EE; briefly good on south wire, over CFDR & Venezuelans. CFDR was alone / loud on the northeast wire. [Connelly\*H-MA]
- 800 NETHERLANDS ANTILLES, PJB Bonaire, APR 16 0118 - R. Transmundial SS religion; over CJAD, others. [Connelly\*H-MA]
- 810 COLOMBIA, HJCY Bogotá, APR 15 0155 - SS talk, Colombia mentions // 700; over/under WGY. APR 15 2348 - CARACOL ID, dominant. [Connelly\*H-MA]
- 810 COLOMBIA Caracol Colombia (HJCY), Bogotá, APR 23 0819 - Program called "Amanecer en America": LA song, man and woman in SS, then report from Medellin. SIO 333 [Burnell-NF]
- 820 UNID APR 15 2345 - Female singing // 1610 Anguilla. What is this? [Kureth-MD] (It's not the old St. Kitts 825 because they moved up to 830 with TBN programming, and yes APR 15 was a great auroral night as reported by many others, but not me because of taxes! - Jim)
- 830 ST. KITTS & NEVIS, TBN Basseterre, APR 14 0024 - "Trinity Broadcasting Network" ID, mailing address in CA; rolling over WCRN. APR 15 0144 - preacher // 7510; excellent.

- APR 15 2333 - EE preaching; way atop WCRN Irish music show. [Connelly\*H-MA]
- 840 BRAZIL Radio Excelsior da Bahia (ZYH447), Salvador, APR 22 2359 - Braz ballad, ad at 0003, "Radio Excelsior da Bahia" jingle, more ballads. Mixing with another ZY with football (likely Radio Bandeirantes). SIO 232 [Burnell-NF]
- 840 HAITI 4VEF Cap-Haitien, APR 14 2356 - FF hymns; rising up way over the others. APR 15 0143 - Creole FF religious program; excellent! APR 15 2333 - man preaching in Creole FF; well over Cuba/Venezuela/Columbia/WHAS mess. [Connelly\*H-MA]
- 860 CUBA, APR 15 0135 - R. Reloj code "RR's" over/under CJBC. APR 15 2337 - Reloj over possible HILR or YVYE. [Connelly\*H-MA]
- 885 MONTSERRAT, ZJB Plymouth, APR 14 0020 - black gospel music & preacher; good. [Connelly\*H-MA]
- 895 ST. KITTS & NEVIS Charlestown, APR 14 0018 - banging in with song "Soca Music Tonight", then "The Sign" by Ace of Base. APR 14 2358 - Caribbean EE talk; good. APR 15 0139 - gospel-influenced soul. APR 15 2255 - soca music; to good peaks. APR 15 2340 - soca & rap music, ad for local concert; S9+20 signal. [Connelly\*H-MA] MAY 3 0049 - Bits of man in Caribbean EE, fair in WCBS-880 slop. [Yocis-CT]
- 940 VENEZUELA, YVNN Punto Fijo, APR 15 0426 - SS big-band music, R. Punto Fijo ID; loud over Reloj Cuban. [Connelly\*H-MA]
- 950 CUBA CMGD Sancti Spiritus, MAR 29 0140 - Pips under LA music, Radio Reloj, talk by man, fair under WCTN. [Townshend-DC]
- 960 COLOMBIA, HJOP Magangue, APR 15 0043 - festive SS music // 5075; slightly over Cuban Reloj & CHNS. [Connelly\*H-MA]
- 1010 COLOMBIA, Barranquilla, MAR 13 0205 - LA pop music, ID as "Radio Reloj", fair. [Trelford-JAM]
- 1020 TURKS & CAICOS, Caribbean Christian R., APR 15 0250 - southern US preacher; over YVRS/KDKA. APR 16 0045 - beautiful with ID, then "Global Voice" religious program originating in Dallas, TX. Monster S9+40 signal, equal in strength to WBZ on 1030. [Connelly\*H-MA]
- 1030 ARGENTINA Radio Del Plata (LS10), Buenos Aires, APR 23 0259 - Classical music, clear ID just before TOH. Fighting it out most of the evening with WBZ, SIO 333. [Burnell-NF]
- 1060 CUBA Baracoa, APR 14 0028 - SS talk with mentions of "Marti" and "Guantanamo"; good, blowing out KYW. [Connelly\*H-MA]
- 1090 HAITI 4VDL Port-au-Prince, MAR 14 1950 - Talk show, ads, ID as "Radio Nationale", good. [Trelford-JAM]
- 1100 BRAZIL K684 Sao Paulo, APR 2 1012-1100 - LA pop music, ID at 1100 as "Radio Globo, Sao Paulo", poor, little interference. [Trelford-JAM]
- 1170 COLOMBIA HJNW Barranquilla, APR 3 0212 - Talk show, ID as CARACOL, mention of Swiss Radio International, fair. [Trelford-JAM]
- 1190 HAITI 4VAF Jeremie, APR 4 0309 - phon-in talk show in FF, fade out before ID, interference. [Trelford-JAM]
- 1205 CAYMAN ISLANDS George Town, APR 15 0254 - Caribbean EE talk fragments; poor. [Connelly\*H-MA]
- 1280 BRAZIL Super Radio Tupi (ZYJ455), Rio de Janeiro, APR 22 2306 - Jingle ID, ad, promo for play-by-play of football (soccer). SIO 343 [Burnell-NF]
- 1290.3 COLOMBIA unID stu, APR 23, 0800 - Possible ID was garbled, coffee ad, then mentioned "RCN en Bogotá", but then seemed to have a sign-on announcement or the beginning of a pgm at 0803:30 "Buenos Días Cinco" then lots of talk. If anyone knows who this is please let me know! Fading; and static made life unpleasant...SIO 332 [Burnell-NF]
- 1430 PUERTO RICO WNEI, Caguas, MAR 19 0840 - LA pop music, ID as "Radio Tiempo", poor under KQJL. [Trelford-JAM]
- 1510 USA, WNRB Boston, MA, APR 15 0335 - usually this has religion in EE, but at this time it was running SS religion with ID as "R. Luz". Back to EE later. I'm mentioning this so others don't get confused. [Connelly\*H-MA]

*Don speaks:* "Had a nice time hosting a DXpedition with Morris Sorenson, his father, and John Grimley of ODXA."

#### TRANS-PACIFIC DX

- 774 AUSTRALIA 3LO Melbourne (assumed), APR 9 1055-1102 - Peaked 1100-1102 with music over the hour into the world news with male studio announcer and woman field correspondent. Definite Aussie accent with DF bearing perfect for Melbourne. Also noted APR 23 1055-57 with man and woman alternating just below intelligibility. This station is an old friend first heard and verified in 1952 on 770 kHz in Massachusetts. Audio noted on eight other mornings between APR 9 and MAY 1. [Moore-FL]

- 1512 AUSTRALIA 2RN Newcastle (assumed), MAY 1 1032-1053 - man and woman talk show. APR 30 1013-1113 - woman monologue, occasional man. Interspersed were several musical selections with soprano vocal (hymns?). Carrier audible until at least 1131, 45 minutes after local sunrise. [Moore-FL]
- 1548 AUSTRALIA 4QD Emerald (assumed), APR 30 1018 - Noted with man speaking. Probably would have been readable audio if I'd stuck with them but concentrated on 1512 kHz instead. [Moore-FL]
- 1660 RUSSIA Radio Mayak, JAN 25 1500 - I heard a station in Russian on approximately 1660 kHz at this time. It gave the Radio Mayak Interval Signal. The 1995 WRTH doesn't list it. Have any of your members reported a Mayak station on 1660? I think it could only be in central Russia as no one in IRCA on the West Coast has reported it - likely not near Japan. I'd love to know the location. [Godwin-MT] (My first thought is that it is a shortwave mixing product peculiar to you particular receiver. If a Russian MW station, wouldn't it be on 1656 or 1665 kHz? But we have had no reports of anything like this. Can anyone help Larry identify this one? Jim)

*Ray speaks:* "TP's very late this spring, but finally started coming in on APR 9 and have been quite good since then. Too bad people in northeast US aren't trying for them because I am sure they would get excellent reception since the atmospheric noise level is at least 15 dB lower there than here in the Keys. The Australian stations have a very distinctive wave-like fading pattern. The signal slowly peaks, slowly fades into a trough and then slowly comes back up to a peak. Typically the spacing is about three minutes from peak to peak and trough to trough. Even a fairly strong signal will fade down to zero in the trough."

#### STATION NEWS

**BRAZIL:** R. Anchieta noted on 1390.4 (APR 14) and R. Resende on 1590.7 (APR 13). [Flosi-BRAZIL]

**COLOMBIA:** Detailed information about network local breaks: Cadena Basica (CARACOL), 2155, 2255, 2355 Mo-Fr, 0056 Tu-Sa, 0156 Tu-Sa (all stations announce CARACOL + city or region), football on Sundays from 2300. Local news on Radio Reloj 1100 Bogotá 2300-2330 Mo-Fr, 1080 Medellin 23-24, 1010 Barranquilla 23-24. Local programs on Radio Deportes 690 Bogotá 23-24, 830 Medellin 23-24. RCN call letters heard Tu-Sa 0024, 0124, 0153, 0224, 0254, 0324, 0354, Su-Mo 2356, 0054, 0154, and 0254. RCN Antena Dos has local ID breaks 5 minutes before the hour and half hour between 1100-2400. [Henrik Klemetz in APR 23 ARC]

**ECUADOR:** "... we will be running the next 690 kHz DX test program on SATURDAY MAY 13 from 0600-0630 UTC. (That would be late on Friday the 12th if your time zone is UTC-7 or more.) This will coincide with a number of mediumwave DXpeditions taking place that same weekend. I don't want to give away the contents of the test program but let's just say if you hear us, you'll probably know it :-). The program will be bilingual (Spanish/English), have unique music and plenty of piercing code. This time, we will be using HCJB's mediumwave standby transmitter which is located in Pifo, the same site at which our shortwave transmitters are located. The output power of the standby transmitter is 25 kw. Although this is half the official output of the regular 690 transmitter on Mount Pichincha, we believe there is a greater chance of DXers hearing this because of the better grounding situation out at Pifo. If you hear the test, or something you suspect as being the test, do write us please! The address for reports is: 690 DX Test c/o Frequency Management HCJB Casilla 17-17-691 Quito Ecuador or via e-mail: rmcvicar@mhs.hcjb.com.ec or FAX: +593 2 447 263. An IRC with your report would be appreciated to help with postage costs. Tapes are welcome but regrettably cannot be returned." [HCJB via e-mail]

**NORWAY:** Last month's item about a planned station on Bear Island has a longer tale behind it. However such a station seems very unlikely according to Bernt Erfjord. [Steve Whitt in MWN APR 1995]

**SAINT-PIERRE ET MIQUELON:** Per recent QSL, RFO 1375, says 5 or 20 kW, schedule: local programs 0630-2300 (M-F), 0700-2300 (Sa), 0700-2200 (Su), 2300-0700 France-Inter (Paris feed). Hours shown in local time, UTC-3 hrs (summers UTC-2 hrs). [Renfrew-NY]

#### UNIDS AND QUERIES

Re Vol 62-24: Braun's 252 at 0607 is almost certainly Ireland, heard here with good signals at times. What Beaton is hearing on 1644/45 and 1651/56 is 2nd order IMD in the R8 from strong shortwave stations. I have the same problem. See Dallas Lankford's many articles about this. If he wants to hear good audio switch the R8 to FM, the audio becomes 100% readable. [Merriman-VA] (Alan and Shawn Axelrod wrote to say that my LO03 on 1620 kHz is a net buoy, probably in Long Island Sound - Jim)

## NEWFOUNDLAND MAY DXpedition

"On the weekend of MAY 13, there will be quite a bit of DXing going on. John Bryant, George Hakiel, Jean Burnell, and (maybe) Neil Kazaross will be in Cappahayden, NF at the famous Lawlors' "DX Inn" and there will also be activity here in the Boston area with Bruce Conti, Tom Beaton, me, and possibly others." [Connelly-MA] (May the waves be with you - Jim)

## CONTRIBUTORS

@Jean Burnell, St. John's NF; DXing at Cappahayden NF, which is about 90 km south of St. John's - site of the Newfoundland DXpeditions of 1991, 1993 and (upcoming) Spring 1995. Equipment: Icom IC-R71A, 1100-foot wire aimed at Europe and a 3000-foot wire aimed at eastern Brazil (neither wire was terminated to ground), and a phasing unit. [jburnell@kean.ucs.mun.ca]

@Mark Connelly (WA1ION), DXing from Harwich, Cape Cod, MA; Drake R8, 50 m northeast wire and 60 m south wire, phased with Mini-MWDX-6 phasing unit; also DXing from Billerica, MA (home); Drake R8, two 37 m. slopers with 50 m floating ground for noise reduction; Mini-MWDX-6 phasing unit; MWT-3 regenerative preselector. [MarkWA1ION@aol.com]

Felipe Flosi, Rio de Janeiro, Brazil; Collins R-390A, coax to "dead" active whip antenna.

@Werner Funkenhauser, London ON; R71A with PLAM & Kiwa Mediumwave Loop.

Larry Godwin, Missoula MT.

Joe Kureth, Uniontown MD; SX-99 and longwire, DX-375.

Alan Merriman, Chincoteague VA; R8 and longwire. Ray Millar, Marysville WA; ICF-2010, 500' wire.

Raymond S. Moore, Key Largo FL; homebuilt receiver, Model 105 35" loop.

@Jim Renfrew, Rochester NY; HQ-180, Radio West loop [JimRenfrew@Delphi.com]

@Matt Stutterheim, Montauk NY; 75' LW, LongWave Engineering LF-400 active whip Receivers: R-7-A Drake, Icom R-9000. [RadioMatt@AOL.com or NKJX01B@Prodigy.com] (We have almost 300 degrees of water views: Atlantic to South, Block Island sound to north, Gardiners' Bay to West and some local lakes to the Southwest.)

Bill Townshend, Washington DC; Sony ICF-2010.

Don Trelford, St. Anns Bay, Jamaica.

William Wyllie, Franklin MA; Realistic DX 390

@David Yocis, Darien CT; R390A, Kiwa loop [73564.203@compuserve.com]

## The New Overnight Service of the CBC ... by Shawn Axelrod

May 1, 1995 was the date for the beginning of the new overnight service at the Canadian Broadcasting Corporation, or CBC. In many cities across Canada the CBC did not sign off at its usual time of 0110 local time. Instead, listeners were treated to the new service that the CBC is broadcasting. On stations that are located in the Yukon and Northwest Territories, as well as Vancouver, Calgary, Edmonton, Regina, Winnipeg, Ottawa, Toronto, and St. Johns NF, the new overnight service was broadcast instead of signing off as they would usually do. In July, the stations in Montreal and Quebec City will go on line, and by September 1, 1995, the entire network will most likely be fulltime with no signoff at the old 0110 local time.

The overnight service will be made up of rebroadcasts of shortwave radio programming. This programming will be filled with arts, news, science, and other programming from the shortwave broadcasters that many of you may be familiar with if you listen to shortwave. There will be a CBC newscast on the hour (about 5 to 10 minutes in length) followed by the following English language programs:

After the 0100 news: Radio France International

After the 0200 news: Radio Netherlands

After the 0300 news: Radio Sweden

At 0330: BBC, The Europe Today Program

After the 0400 news: Deutsche Welle

After the 0500 news: ABC Radio Australia

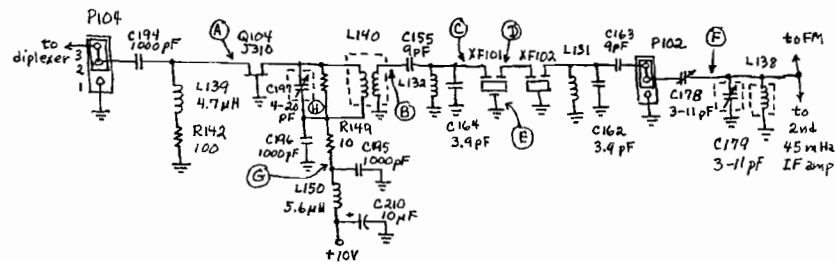
Please note that all of the times listed above will be local time (except in Newfoundland). There may also be a local newscast at 0530. This will make the first time since the Gulf War that the CBC AM radio network will be on 24 hours per day. For those of you who often DX'ed the CBC frequencies during their daily silent period, I am afraid you are, or soon will be, out of luck on the many frequencies that carry the CBC network.

So if you hear a shortwave broadcast on your AM radio, you may be listening to the CBC or one of its many re-broadcasting stations.

## Drake R8: More On Improving Image Rejection ... by Dallas Lankford

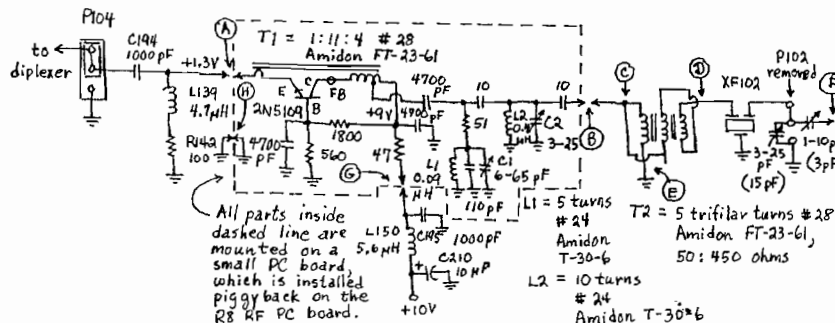
In my recent article (DX News, Vol. 61, No. 28 - July 18, 1994), "Drake R8: Increased Dynamic Range, Mod 2," I described how the 50 kHz image rejection could be improved from about 80 dB to over 94 dB by removing the R8 image reject circuit, and removing the 45 mHz crystal filter XF100 and moving it to just ahead of the 2nd mixer, SBL-1X. As I pointed out in that article, those changes to the image reject circuit and crystal filter were done in conjunction with a replacement of the 1st 45 mHz IF amplifier by a common base transformer feedback amplifier, and that it was not known whether the improved image rejection could be obtained without replacing the 1st 45 mHz IF amplifier. All of the mods mentioned above were done with prototype PC boards, which were anything but attractive. A few days ago I decided to replace the prototype PC board circuits with attractive and thoughtfully laid out PC board circuits, so that the finished circuits would be professional in appearance as well as performance.

You can imagine my surprise when I measured the 50 kHz image rejection of my R8 RF boards with their pretty new PC board mods and found that the image rejection at  $\pm 100$  kHz had fallen off to about 86 dB. This caused me to make additional changes at various points in the 45 mHz signal path to determine why the image rejection was degraded, and how to restore the image rejection to over 94 dB. Based on a number of changes and measurements, which I will not relate here, the 94 dB or greater image rejection which I obtained previously was due in part to circuit layout and parts positions of the prototype PC boards. The solution to this problem, which will be described in detail below, involved removal of header plug P102 and development of a new matching network between the output of crystal filter XF102 and the high impedance 45 mHz IF transformer consisting of C179 and L138.



The original R8 45 mHz IF signal path from P104 to the 45 mHz IF transformer consisting of C179 and L138 is given above. If you compare the partial schematic sketch above with the R8 service manual schematic, you will notice three differences (1) the 4.7 H choke L139 and 100 ohm resistor R142 are reversed in my sketch above, to reflect the actual R8 RF PC board layout, and (2) C179 is shown with a shield, as is the case on the R8 RF PC board, and (3) C197 is also shown with a shield, as is the case on the R8 RF PC board.

The final modifications to my R8 RF board (excluding replacement of the RF amplifier, removal of the image reject circuit, and addition of crystal filter XF101 immediately ahead of the 2nd mixer, which were described in detail in the DX News article mentioned above) are given below. Upper case letters A - H are given on both schematics for certain important reference points.



As can be seen, most of the original R8 parts between the junction of C194 and L139 and crystal filter XF102 were removed. C210, L150, and C195 were retained for the positive voltage feed of the new common base IF amplifier. The common base IF amplifier was built on a small PC board and mounted piggy back on the R8 RF board. The 47 ohm resistor shown on the common base IF amp board may alternately be mounted on the R8 RF board. Surface mount resistors and surface mount capacitors were used throughout the common base IF amp board to conserve space. Note that a ground connection from the common base IF amp board to the R8 RF board is required, and labeled point H on the modification schematic above (which is a ground pad for the shield of C197 which had been removed). Points A, B, and G are the other three connections required by the common base IF amp piggy back board. These four connections were made with short (about 0.50 inch) lengths of #22 solid tinned copper wire which had been press fitted into PC board pads of the common base IF amp board (so that the short wires would not fall out when they were soldered to the R8 RF board pads).

The 9 pF capacitors C155 and C163 were not present on my R8 RF board, and there were no PC board pads to accommodate such capacitors. Apparently these two capacitors existed only in some R8 prototypes, and were not included in any production R8's as far as I know.

And the two inductors L132 and L131 and two capacitors C164 and C162 were also not present on my R8 RF board. Instead, three surface mount devices (perhaps capacitors) were used in my R8. These three surface mount devices were removed.

Also, XF101, P102, C178, the shield of C179, and C179 were removed.

T2 was mounted on the R8 RF board in the holes vacated by XF102, a small jumper made from #24 solid tinned copper wire was added between the two indicated holes vacated by P102, a modified Mouser # 24AA0022 3-25 pF ceramic trimmer capacitor was added between the two indicated vacated holes of P102, a Mouser # ME242-1810 2-9 pF ceramic trimmer was added in place of C178, and a Mouser # 24AA021 2-14 pF ceramic trimmer was added in place of C179. The shield for C179 was not restored. When installing trimmer capacitors which are grounded at one end, be sure that the grounded end is the rotor lug. Drake production line workers did not always adhere to this standard practice, which can make peaking tuned circuits difficult.

Removal of some of the parts above, especially XF101 and P102, is not easy, and should not be attempted by a novice. I've said it before and I'll say it again, ChemWick Lite 0.100 desoldering braid is the only desoldering braid which works really well. The PC board holes and pads for XF101 are very small and easily lifted if too much heat is applied. I used a 23 watt soldering iron for all these modifications.

The PC board holes for P102 are also very small, so small that the lugs of a Mouser #24AA0022 3-25 pF ceramic trimmer will not fit. The lugs must be made smaller by cutting off the flanges and reducing the lug width with an India stone deburring stone. After the lug widths have been reduced, the lugs must be bent for the narrower spacing required.

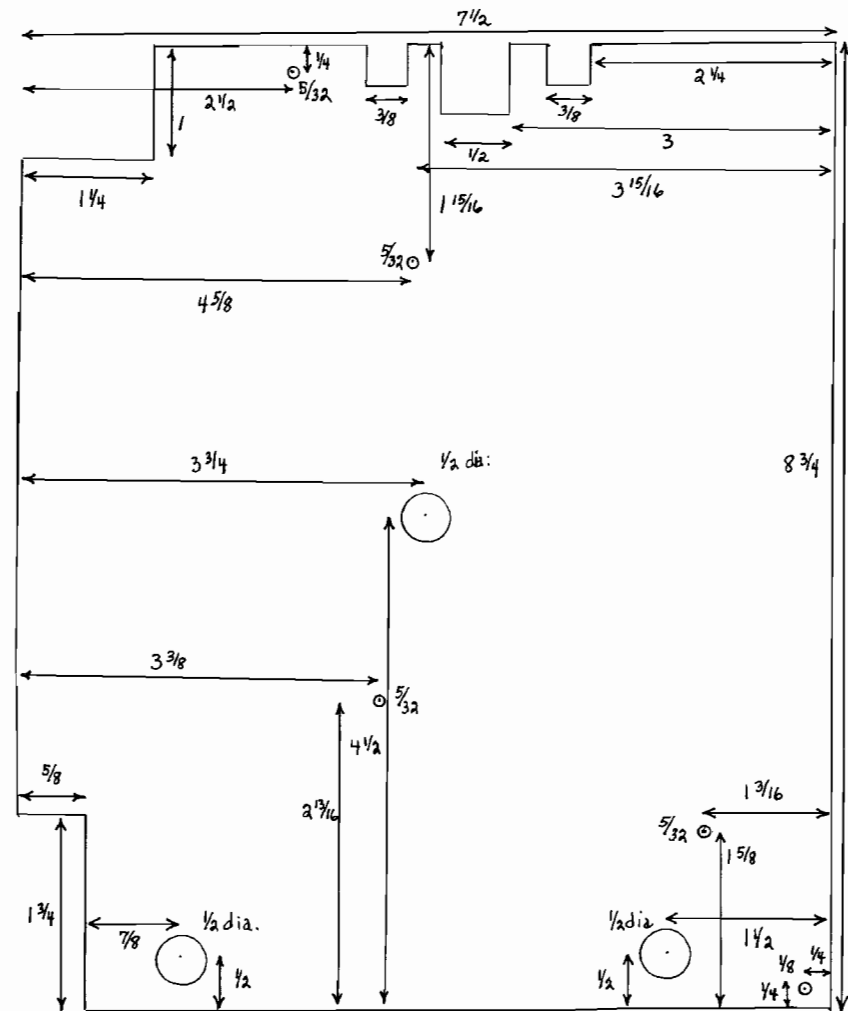
Note on the modification schematic above that the 3-25 pF capacitor mounted at P102 and the 1-10 pF capacitor mounted in place of C178 should be set approximately to 15 pF and 3 pF respectively. This can be done before installation with an accurate capacitance meter, or after installation by setting the "plates" about half meshed for the 3-25 pF trimmer, and near minimum capacitance for the 1-10 pF capacitor. If the value of the 1-10 pF capacitor is set too low, C179 will not be able to peak L138 to as high as normal. The value of the 1-10 pF capacitor should be set as low as possible without reduction of signal level when C179 is peaked.

Two R8 RF boards have been modified in the manner described above. For one such modified R8 RF board, the 50 kHz image rejection (at  $\pm 100$  kHz) was 94 dB, and for the other R8 RF board, the image rejection was 97.5 dB. Such slight variation in image rejection from one RF board to another is to be expected because of variations in the 45 MHz crystal filters from one board to another.

As pointed out in the DX News article mentioned above, the original R8 image reject circuit was a bad idea because the amount of image rejection available from that approach depends on the geometry of the PC board layout and the geometry of the IF transformer windings, which in turn determines the amount of phase cancellation, and hence the amount of image rejection. Previously I thought I had avoided the phase cancellation problem with my modifications, but apparently that was not the case. Whether the above changes

solve the phase cancellation problem is not known. I suppose it does not matter. My goal was to improve the R8 image rejection substantially, and that has been accomplished. Hopefully, these notes will provide the determined builder with sufficient information to duplicate my R8 image rejection improvements.

### Drake R8: Type B Spurs Elimination Addendum - by Dallas Lankford



In DX News, Vol. 60, No. 27 - June 28, 1993, I described how to fabricate a shield made from PC board material which eliminated the so-called type B spurs and reduced other sources of noise and RFI in the Drake R8 receiver. The shield described in that article, "Drake R8: Type B Spurs Elimination," was time consuming to fabricate because of the irregular shape required for the shield to clear the 45 MHz IF crystal filter shield and other obstacles on the bottom of the R8 RF PC board. Later production R8's do not have the 45 MHz crystal filter shield on the bottom of the RF board, and in any case, the shield has no effect on R8 performance, and so it may be removed. The remaining obstacles on the bottom of the RF board are untrimmed MiniCircuits mixer leads, and untrimmed coil shield ground lugs, and, perhaps, a few other

leads, which can be removed by cutting them shorter with a small diagonal cutter. After these changes are done, the type B spur shield can be made rectangular, except for a few cutouts required for IF board plug clearance and three cutouts required for clearance of three tabs which are part of the push-in ground and antenna connectors in the center of the rear of the RF board. The dimensions, cutouts, and holes required for this new shield are given in the drawing below. The three 1/2 inch diameter holes line up with the three threaded spacers used for mounting the RF board. The four 5/32 inch holes are for four 6/32 by 1/2 inch long nylon screws, which are used to mount the shield to the RF board. The 1/8 inch hole near one corner of the shield is for a 4-40 by 3/8 inch long screw which is used for making ground contact between the RF board and a shield. Three of the four 5/32 inch holes mate with alignment holes in the RF board. These alignment holes in the R8 RF board are about 1/8 inch diameter, and so must be enlarged with a 5/32 drill bit. The fourth 5/32 hole near a tab of the push-in antenna connector assembly does not correspond to an existing hole in the R8 RF board. When you drill this hole, drill from the trace side so that you do not accidentally cut a trace on the RF board. To space the shield from the RF board, 1/16 inch flat nylon washers were used. The side of the shield PC board without copper should face the bottom of the RF board. All plugs on the IF board should be taped over with Scotch 27 Glass Cloth Electrical Tape to prevent possible shorts by the down facing copper side of the shield. A 1/16 inch flat nylon washer should also be used as a spacer at the corner where the 4-40 screw and nut is used to make ground contact between the shield and RF board. Initially braid and a ground lug were used at that corner to ground the shield to the R8 chassis, but LO noise and other spurious responses were observed, apparently due to ground loops. That corner of the RF board has a square of bare solder plate, to which a thin layer of solder should be added before drilling that corner for the 4/40 screw. A thin layer of solder should also be added to the shield at the corresponding corner. These thin solder layers improve the sturdiness of the ground connections.

## Radio Roundup

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*News of the radio industry, of interest to DX'ers*

Greetings all ... The rumor mill says he may surface back in Boston on WBZ ... While morning duos are back big on the radio, two males or a male/female combo are clearly the most common. NR Cer Greg Henson checks in with the following tidbits from our nation's capitol ... Veteran newscaster Jamie Bragg recently received a Lifetime Achievement Award for his 37 years on WTOP ... WPGC talk show host "Casey" Samson, has been accused by the Securities and Exchange Commission of fraudulently selling 20 million dollars worth of real estate investments to area residents. His brokered show will remain on the air, according to WPGC management. As a side note WPCG has been sold to Infinity Broadcasting ... WWKB is now carrying the Leslie Marshall Show from Major Talk ... The rumor mill has the Cheek and Howard sports announcing duo coming to an end in Toronto, after a 13-year run. The Jerry Howard half has decided to move on to TSN, The Sports Network ... On November 3rd WBIV-1060, in Natick, MA, went off the air. Most of their programming has moved over to WBMA-890, in Dedham ... KDKA is now airing the Ross Perot Show, Sunday evenings at 8:00 pm, in addition to his daily commentaries Monday through

Saturday ... It is interesting to note all the e-mail address flowing forth on radio and television stations today soliciting viewers and listener feedback. Internet addresses and World Wide Wed Mosaic Pages are becoming very common. Two of the latest I have noticed is WHAS, 84whas@iglou.com and WCKY, wcky@iglou.com One has to wonder if in the future e-mail QSLing will become acceptable ... In Beantown, WBNW-590 has hit the airwaves, affiliated with the Bloomberg Business Radio network ... KFBK-1530, in Sacramento, has a number of changes on tap. The Tom Sullivan Show has expanded from 2 to 3 hours. Rick Van Cise has arrived from KOMO for an afternoon talkshow gig. Gregg Fishmann has moved on to a new California State News Network under development by Chancellor Communications ...

If you would like to contribute to this column, I may be reached at the address above, via CompuServe 72376,2557, InterNet [PeteKZ1Z@AOL.COM](mailto:PeteKZ1Z@AOL.COM), the FIDO system in the Shortwave, Ham or Broadcasting echo areas, The Oracle 1:141/1015, or amateur radio packet, KZ1Z @ K1UOL.CT. So much for now.

## Graveyard Achievements

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Meridian, ID 83642-3241

*Distance records for stations logged on graveyard frequencies*

1490 kHz

Logged from Jan 1, 1960 to Present

Date of Last Update: January 6, 1995

\* indicates North American record-holder

WANA	AL	Anniston	Charles Reh	Leamington, ON	605
WAJF		Decatur	Neil Wolfish	Toronto, ON	745
WHBB		Selma	Frank Merrill	Milan, MI	687
AFRN	AK	Campion	Esa Hänninen	Lemmenjoki, Finland	3209
AFRN		Eielson AFB	Frank Merrill	Nenana, AK	52
KBAS	AZ	Bullhead City	Jeff Tynan	Parker, CO	620
KCUZ		Clifton	John Wilkins	Wheat Ridge	521
KYCA		Prescott	Jeff Tynan	Parker	547
KAIR		Tucson	Roy Millar	Bellevue, WA	1220
KZAO	AR	Dardanelle	Stephen Ponder	Harrison, AR	71
KXAR		Hope	Stephen Ponder	Bossier City, AR	80
KDRS		Paragould	Shawn Axelrod	Winnipeg, MB	1033
KOTN		Pine Bluff	Carl Dabelstein	Lincoln, NE	510
KARV		Russellville	Steve Francis	Alcoa, TN	519
KWAC	CA	Bakersfield	Olle Alm	Abisko, Sweden	4947
			Bruce Reynolds	San Jose, CA	*210
KMET		Banning	Bruce Reynolds	San Jose	364
KOWL		Bijou	Pete Taylor	San Francisco, CA	155
KICO		Calexico	Bruce Reynolds	San Jose	482
KRKC		King City	Frank Merrill	Nenana	2266
KTOB		Petaluma	Frank Merrill	Nenana	2107
KBLF		Red Bluff	Bruce Reynolds	San Jose	200
KDB		Santa Barbara	Roy Millar	Bellevue, WA	921
KOWL		South Lake Tahoe	Esa Hänninen	Lemmenjoki	4791
			Roy Millar	Marysville, WA	*609
KSYC		Yreka	Esa Hänninen	Lemmenjoki	4634
			Bruce Reynolds	San Jose	*305
KBOL	CO	Boulder	Esa Hänninen	Lemmenjoki	4519
			Bruce Reynolds	Warrensburg, MO	*621
			Jeff Tynan	Parker	134
KGUC		Gunnison	John Wilkins	West Des Moines, CO	612
KIUI		Manitou Springs	Bruce Reynolds	Warrensburg	517
KOLR		Sterling	Russ Edmunds	Blue Bell, PA	108
WGCH	CT	Greenwich	Russ Edmunds	Little Silver, NJ	122
WNLC		New London	Russ Edmunds	Little Silver	114
WTOR		Torrington	Frank Merrill	Milan	1013
WTRL	FL	Bradenton	Karl Jeter	Stone Mountain, GA	375
WXVQ		Deland	Ernie Cooper	Provincetown, MA	1253
WKEM		Immokalee	UK DXPedition EE	Sheigra, Scotland	4186
WMBM		Miami Beach	Marc DeLorenzo	Hyannis, MA	*1232
			Steve Francis	Alcoa	399
WCKC		Milton	Marc DeLorenzo	Hyannis	1125
WITB		Vero Beach	Karl Jeter	Stone Mountain	426
WSIR		Winter Haven	Don Trelford	St. Ann's Bay, Jamaica	919
WMOG	GA	Brunswick	Jason Hustedt	Lexington, SC	144
WMLS		Monroe	Don Lynch	Lynn, MA	1063
WSFB		Quitman	Ernie Cooper	Provincetown	990
WSNT		Sandersville	Karl Jeter	Stone Mountain	165
WSYL		Sylvania	Don Trelford	Runaway Bay, JMC	1113
WRLD		West Point	Charles Reh	Leamington	*649
		(Janette, AL)	Esa Hänninen	Lemmenjoki	4435
KCID	ID	Caldwell			

KKLB	Chubbuck	John Wilkins	Wheat Ridge	*650
		Esa Hänninen	Lemmenjoki	4431
		John Wilkins	Wheat Ridge	*440
WKRO	IL Cairo	Russ Edmunds	Glen Rock, NJ	851
WDAN	Danville	Niel Wolfish	Winnipeg, MB	848
		Shawn Axelrod	Winnipeg	(Tie) 848
WESL	East St. Louis	John Malicky	Pittsburgh, PA	546
WOPA	Oak Park	Wayne Heinen	Buffalo, NY	461
WZOE	Princeton	Niel Wolfish	Willowdale, ON	541
WKBV	IN Richmond	Niel Wolfish	Winnipeg	961
WNDU	South Bend	Steve Francis	Alcoa	427
KBUR	IA Burlington	Esa Hänninen	Lemmenjoki	4220
		John Wilkins	Wheat Ridge	*739
WDBQ	Dubuque	Wayne Heinen	Colorado Springs, CO	781
KXLQ	Indianola	John Wilkins	Wheat Ridge	615
KRIB	Mason City	Esa Hänninen	Lemmenjoki	4110
		Jeff Tynan	Parker	*649
KKAN	KS Phillipsburg	Olle Alm	Abisko, Sweden	4318
		John Wilkins	Wheat Ridge	*308
KTOP	Topeka	Esa Hänninen	Lemmenjoki	4417
		Charles Reh	Leamington	*717
WFKY	KY Frankfort	Tim Kerfoot	Weston, ON	472
WKAY	Glasgow	Frank Merrill	Milan	352
WFXV	Middlesboro	Robert Kramer	Chicago, IL	418
WOMI	Owensboro	Niel Wolfish	Toronto	573
WSIP	Paintsville	Ernie Wesolowski	Omaha, NE	740
WKC	LA Bogalusa	Charles Reh	Leamington, ON	867
KEUN	Eunice	Jim Boehm	San Antonio, TX	371
KJIN	Houma	Steve Francis	Alcoa	584
KRUS	Ruston	Charles Reh	Leamington	859
WPOR	ME Portland	Esa Hänninen	Lemmenjoki	3600
		Russ Edmunds	Parsippany	*288
		Charles Reh	Leamington	673
WTVL	Waterville	Andy Rugg	Montreal, PQ	455
WARK	MD Hagerstown	Jerry Starr	Youngstown, OH	516
WHAV	MA Haverhill	Christian DeHaes	Chicoutimi, PQ	436
WMRC	Milford	Jeff Falconer	Clinton, ON	420
WACM	West Springfield	Esa Hänninen	Lemmenjoki	4009
WABJ	MI Adrian	Karl Jeter	Stone Mountain	*559
WAND	Manistique	Rodney Valdron	Petit Rocher	975
WMPX	Midland	Niel Wolfish	Winnipeg	791
		Shawn Axelrod	Winnipeg	(Tie) 791
WPBK	Whitehall	Don Voorhies	Oswego, NY	489
KXRA	MN Alexandria	Russ Edmunds	Parsippany	1111
KQDS	Duluth	John J. Rieger	South Milwaukee, WI	345
KLGR	Redwood Falls	Roy Millar	Marysville, WA	1322
WLOX	MS Biloxi	Frank Merrill	Milan	855
WCLD	Cleveland	Charles Reh	Leamington	724
WHOC	Philadelphia	Jerry Starr	Youngstown	731
WTUP	Tupelo	Dave Whatmough	Hamilton, ON	783
WJFL	Vicksburg	Sreva Francis	Alcoa	462
KDMO	MO Carthage	Frank Merrill	Milan	661
KTTR	Rolla	Shawn Axelrod	Winnipeg	874
KDRO	Sedalia	Shawn Axelrod	Winnipeg	813
KDBM	MI Dillon	Esa Hänninen	Lemmenjoki	4279
KDBI		Roy Millar	Marysville	*486
KXGF	Great Falls	Shawn Axelrod	Winnipeg	621
KLYN	Laurel	Esa Hänninen	Lemmenjoki	4199
KBSR		Shawn Axelrod	Winnipeg	*605
KEZO	NE Omaha	Esa Hänninen	Lemmenjoki	4282
		Roy Millar	Marysville	*1363
WEMJ	NH Laconia	Jerry Starr	Youngstown	511
WLGW	Lancaster	Andy Rugg	Nuns' Island, PQ	125

WUSS	NJ Atlantic City	Morris Sorensen	Scarborough, ON	33	405
KRSN	NM Los Alamos	John Wilkins	Wheat Ridge		274
KRTN	Raton	Tim Hall	Rancho Bernardo, CA		767
KOAW	Ruidoso Downs	Tim Hall	Rancho Bernardo		668
WCSS	NY Amsterdam	Morris Sorensen	Port Carling, ON		303
WBTA	Batavia	Russ Edmunds	Little Silver		286
WKNY	Kingston	Frank Merrill	Milan		496
WICY	Malone	Charles Reh	Leamington		446
WDLC	Port Jarvis	Don Trelford	Scarborough, ON		286
WCDO	Sidney	Joe Kureth	Uniontown, MD		218
WOLF	Syracuse	Charles Reh	Leamington		333
WSSB	NC Durham	Andy Rugg	Montreal		705
WLOE	Eden	Russ Edmunds	Kinnelon, NJ		430
WFLB	Fayetteville	Marc DeLorenzo	Hyannis		650
WRNB	New Bern	Dave Fox	Reading, PA		370
WRMT	Rocky Mount	Andy Rugg	Montreal		705
WSTP	Salisbury	Charles Reh	Leamington		452
WSVM	Valdese	Frank Merrill	Milan		449
WHSL	Wilmington	Marc DeLorenzo	Hyannis		661
KNDC	ND Hettinger	Olle Alm	Abisko, Sweden		3982
		Jeff Tynan	Parker		*462
KOVC	Valley City	Roy Millar	Marysville		1137
WBEX	OH Chillicothe	Bill Alisaukas	Douglasville, GA		378
WJMO	Cleveland Heights	Chris Lucas	Fairfield		430
WOHI	East Liverpool	Steve Francis	Alcoa		382
WMOA	Marietta	Steve Francis	Alcoa		284
WMRN	Marion	Niel Wolfish	Winnipeg		978
		Shawn Axelrod	Winnipeg	(Tie)	978
KOKC	OK Guthrie	Esa Hänninen	Lemmenjoki		4620
		John Wilkins	Wheat Ridge		*497
KBIX	Muskogee	Niel Wolfish	Winnipeg		1000
KBKR	OR Baker	Esa Hänninen	Lemmenjoki		4374
KRNR	Roseburg	Esa Hänninen	Lemmenjoki		4541
		Bruce Reynolds	San Jose		*412
KBZY	Salem	Esa Hänninen	Lemmenjoki		4420
		Mike Hardester	Modesto		*514
WESB	PA Bradford	Esa Hänninen	Lemmenjoki		3894
		Russ Edmunds	Little Silver		*262
WAZL	Hazleton	Steve Francis	Alcoa		558
WARD	Johnstown	Don Lynch	Lynn		435
WLPA	Lancaster	Jeff Falconer	Clinton		354
WBCB	Levittown	Morris Sorensen	Kirkland Lake, ON		671
WMRF	Lewistown	Niel Wolfish	Toronto		228
WMGW	Meadville	Esa Hänninen	Lemmenjoki		3945
		Charles Reh	Leamington		*126
WNBT	Wellsboro	Charles Reh	Leamington		271
WVGB	SC Beaufort	Charles Reh	Leamington		598
WGCD	Chester	Steve Francis	Alcoa		174
WMRB	Greenville	Robert Kramer	Chicago		570
WSDC	Hartsville	Russ Edmunds	Little Silver		515
KFCR	SD Custer	John Wilkins	Wheat Ridge		284
KORN	Mitchell	Charles Reh	Leamington		788
WOPI	TN Bristol	Andy Rugg	Montreal		750
WDXB	Chattanooga	Carl Dabelstein	Lincoln		730
WCSV	Crossville	Charles Reh	Leamington		440
WROL	Knoxville	Joe Kureth	Uniontown		451
WJJM	Lewisburg	Karl Jeter	Stone Mountain		187
WDXL	Lexington	Bruce Reynolds	Warrensburg		385
KNOW	TX Austin	Roy Millar	Marysville		1779
KBST	Big Spring	John Wilkins	Wheat Ridge		557
KQTY	Borger	Shawn Axelrod	Winnipeg		988
KNEL	Brady	Jim Boehm	San Antonio		125
KWMC	Del Rio	Jim Boehm	San Antonio		147



KSAM		Huntsville	Jim Boehm	San Antonio	197
KZZN		Littlefield	Shawn Axelrod	Winnipeg	1125
KPLT		Paris	Bruce Reynolds	Warrensburg	370
KDOK		Tyler	Steve Francis	Alcoa	690
KVWC		Vernon	Stephen Ponder	Fort Worth, TX	158
KJQN	UT	Ogden	Olle Alm	Abisko	4449
			Bruce Reynolds	San Jose	*594
			Don Voorhies	Oswego, NY	203
WKVT	VT	Brattleboro	Marc DeLorenzo	Hyannis	218
WFAD		Middlebury	Charles Reh	Leamington	580
WIKE		Newport	Andy Rugg	Montreal	525
WCVA	VA	Culpeper	UK DXPedition £	Sheigra, Scotland	3445
WVEC		Hampton	Charles Reh	Leamington	*477
			Don Lynch	Lynn	514
WAYB		Waynesboro	Esa Hänninen	Lemmenjoki	4239
KBRO	WA	Bremerton	Esa Hänninen	Lemmenjoki	4229
KVAC		Forks	Esa Hänninen	Lemmenjoki	4180
KEYG		Grand Coulee	Jack Woods	Walldport, OR	177
KGHO		Hoquiam	Esa Hänninen	Lemmenjoki	4324
KLOG		Kelso	Jack Woods	Douglas, AK	*956
			Esa Hänninen	Lemmenjoki	4294
KENE		Toppenish	Esa Hänninen	Lemmenjoki	4295
KTEL		Walla Walla	Don Voorhies	Oswego	442
WCZR	WV	Charleston	Frank Merrill	Milan	257
WTCS		Fairmont	Frank Merrill	Milan	347
WLOH		Princeton	Bruce Reynolds	Warrensburg	700
WWSG		Sutton	Shawn Axelrod	Winnipeg	680
WGEZ	WI	Beloit	Jerry Starr	Youngstown	580
WLCX		LaCrosse	Steve Francis	Alcoa	728
WIGM		Medford	Esa Hänninen	Lemmenjoki	3968
WOSH		Oshkosh	Steve Francis	Alcoa	*619
			Gene Allen	Vallejo	985
KIML	WY	Gillette	Olle Alm	Abisko	4390
KUGR		Green River	Jeff Tynan	Parker	*283
			Niel Wolfish	Winnipeg	708
KOJO		Laramie	Shawn Axelrod	Winnipeg	614
KGOS		Torrington	Hank Holbrook	Chevy Chase	1600
WMDD	PR	Fajardo	Esa Hänninen	Lemmenjoki	4053
CJPR	AB	Blairmore	Shawn Axelrod	Winnipeg	*773
			Esa Hänninen	Lemmenjoki	3631
CBXY		Falher	Esa Hänninen	Lemmenjoki	4102
CFWB	BC	Campbell River	Roy Millar	Marysville	135
CKGO		Hope	Roy Millar	Marysville	375
CBXN		Natal	Tim Hall	Banff, AB	227
CKOO1		Oliver	Christian DeHaes	Chicoutimi	182
CKMV	NB	Grand Sault	Esa Hänninen	Lemmenjoki	2968
CBDQ	NF	Labrador City	Esa Hänninen	Lemmenjoki	3281
CBDJ	NT	Hay River	UK DXPedition £	Sheigra, Scotland	2591
CKEN	NS	Kentville	Russ Edmunds	Little Silver	*601
			Shawn Axelrod	Orleans, ON	210
CHVR	ON	Arnprior	John Wilkins	West Des Moines	691
CHYM		Kitchener	Don Voorhies	Oswego	54
CFRC		Kingston	Shawn Axelrod	Winnipeg	871
CFPS		Port Elgin	Charles Reh	Leamington	490
CKLR	PQ	L'Annonciation	Russ Edmunds	Little Silver	493
CKBM		Montmagny	Esa Hänninen	Espoo, Finland	3810
CJMC		Ste-Anne-des-Monts	Esa Hänninen	Lemmenjoki	3930
CJSN	SK	Shaunavon	Roy Millar	Marysville	*651
			Jim Boehm	San Antonio, TX	572
XERO	AG	Aguaascalientes	Tim Hall	10mi W of Mazatlan, SIN	361
XEGT	MICH	Zamora	Pete Taylor	Cabo San Lucas, BCS	316
XESK	NAY	Ciudad Ruiz	Tim Hall	Poway, CA	503
XEDR	SON	Guaymas	Esa Hänninen	Lemmenjoki	5321
XEMS	TAMS	Matamoros			

HJZB	COL	Tulua	Pete Taylor	Cabo San Lucas	*803
YVRP	VEN	Maracaibo	UK DXPedition £	Sheigra	5298
			UK DXPedition £	Sheigra	4747

£ = UK DXPedition [Steve Whitt, Mark Hattam, Clive Rooms]  
 ££ = UK DXPedition (Mark Hattam, Clive Rooms, Dave Kenny and Martin Hall)

# Formats

**Tony Fitzherbert**

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Fairfield, CT 06430-1728

*Changes in programming status; reported by listeners*

While en route to Maine, I caught WJIB's "Let's talk About Radio", which featured an interview by Bob Bitner with veteran WBZ personality Norm Nathan. Among the interesting points Norm made was that in 1950 the USA had about 3000 radio stations. Today that amount has doubled, but the available jobs have halved, because of automation. Norm talked about some of his jobs in his half century of radio, noting that perhaps the most bizarre was at 50,000 watt WMRE-1510, where he had to play little known "memories" programmed by a 22 year old general manager. Had he been allowed to develop the playlist, the station probably would have been a success (my comment)....a 22 year old general manager of a major market station????? That is like a 16 year old untrained teen operating an Amtrak Metroliner - the thought is frightening! In my region, WPLM has dropped big band music for soft adult contemporary, WGNV, still on 1200 three weeks ago, is into adult standards, and tiny WTBQ-1110 is airing a LIVE ASSIST mix of oldies and adult contemporary music.

Stan Morse of Boxford, MA, writes that WZNN-930 has dropped CNN News for adult standards, simulcasting WMYF-1540, of nearby Exeter, NH, Dave Hoffman, Commuter Rail Manager at Chicago's Burlington Northern Aurora Line, advises that WKKD-1580 has dropped oldies for automation and SMN Real Country feed, and Al Holtz of Conrail notes that WHWH-1350, Princeton, now airs soft adult contemporary music.

WLIR-1300, Spring Valley, NY, now brokers its Jewish programming out to its hosts, according to the GM whom I heard soliciting feedback to be mailed directly to the program hosts, who buy the time blocks and sell their own commercials. Now...it was bound to happen...all Catholic radio has come about, but not in Spring Valley, but in Cleveland. WMIH-1260 is all Catholic, and, I believe, owned by the Church. Here come the format changes, mostly from the *M Street Journal*, for this column....

560	WGAI	NC	Elizabeth City	- News, talk.
610	WSKE	CO	Vail	- Country // KHTH.
620	KOTK	OR	Portland	- Talk.
680	KBRD	WA	Lacey	- Back on the air with adult standards.
700	KVRG	CA	Soledad	- Spanish hits//KBRG.
710	WZOO	OH	Asheboro	- Hot adult contemporary.
780	WLRM	MS	Ridgeland	- All talk.
860	WYAM	AL	Hartselle	- SMN country music.
870	WQRX	AL	Valley Head	- Country music.
890	WBPS	MA	Wellesley Hills	- Is indeed Prime Sports (TF).
900	WIAM	NC	Williamston	- MSG Christian Country.
930	WYNI	AL	Monroeville	- Country music.
950	KJJO	MN	St. Louis Park	- Smooth jazz//FM.
950	KDSX	TX	Dennison	- Prime Sports.
960	WRFC	GA	Athens	- News, talk, sports.
1010	WIOI	OH	New Boston	- Talk.
1060	WLNO	LA	New Orleans	- Ex-WNOE, now religion.
1080	WEPP	PA	Pittsburgh	- Now WDSY, country music//FM.
1130	WAME	SC	Camden	- Religion and jazz.
1130	WYXE	TN	Gallatin	- BCN country music.
1140	KCMJ	CA	Palm Springs	- Adult standards.
1220	KRGO	CA	Fowler	- R & B days, ethnic at night.
1220	WERT	OH	Van Wert	- SMN adult standards.
1230	WIRO	OH	Ironton	- Prime Sports//WZZN.

**WKMG**  
 \*\*\*\*\*-1520

P.O. BOX 70  
 NEWBERRY, S.C. 29108

1240	WBBW	OH	Youngstown	- SR Sports.
1240	WDXY	SC	Sumter	- JSN Easy Listening music.
1240	KXYL	TX	Brownwood	- CHR "Kiss".
1240	WTON	VA	Staunton	- Full service country music.
1250	WARE	MA	Ware	- Now SMN Real Country music.
1280	WJPY	DE	Seaford	- Gospel, SMN urban AC//WJPY-1470.
1280	WDUK	OR	Eugene	- CSN Children's programming.
1290	KKSB	CA	Santa Barbara	- WW-I adult standards.
1320	WISN	SC	Columbia	- All news.
1340	WMDR	ME	Augusta	- The defunct WFAU is back with Christian programming (TF).
1350	WMYM	FL	Cocoa	- WW-I adult standards.
1360	KTOF	IA	Cedar Rapids	- Religion.
1360	WNJC	NJ	Washington Township	- All brokered Spanish Religion.
1360	WIXZ	PA	McKeesport	- Prime Sports.
1370	WKJF	MI	Cadillac	- News and talk.
1380	WBEL	IL	South Beloit	- WW-I adult standards.
1380	KRKO	WA	Everett	- News and talk.
1390	WRTK	OH	Youngstown	- News and talk.
1390	WLAN	PA	Lancaster	- Drops Christian programming for adult standards - again!
1410	WDOE	NY	Dunkirk	- JSN Oldies.
1420	KTAN	AZ	Sierra Vista	- SMN Adult Standards.
1420	WLET	GA	Toccoa	- Talk.
1440	WGVL	SC	Greenville	- News and talk.
1450	WHKP	NC	Hendersonville	- Easy listening and talk.
1470	WVBS	NC	Burgaw	- Religion//WDTJ.
1470	WKAP	PA	Allentown	- Ex-WXKW, now WW-I adult standards.
1470	WHRD	WV	Huntington	- Prime Sports.
1480	WRDW	GA	Augusta	- All sports.
1480	KKQC	NM	Fosstown	- MSG Christian Country.
1480	KMRT	TX	Dallas	- Spanish CHR.
1490	KXRE	CO	Manitou Springs	- Prime Sports.
1490	WMBM	FL	Miami Beach	- Black gospel.
1490	WYYZ	GA	Jasper	- Country music and southern gospel.
1490	WHAV	MA	Haverhill	- Spanish (TF).
1500	KJIM	TX	Sherman	- Oldies.
1510	WNLC	CT	New London	- WW-I adult standards.
1510	KKHI	CA	San Rafael	- Jazz.
1510	WWSM	PA	Annville	- Classic country.
1540	WYNC	NC	Yanceyville	- Gospel.
1540	KCBG	TX	Galveston	- Gold based adult contemporary.
1550	KQFN	ND	West Fargo	- All sports "The Fan."
1550	KZRK	TX	Canyon	- SMN Z Rock//FM.
1590	KAHS	CA	Ventura	- Drops pre-teen for country//FM.
1590	WHPY	NC	Clayton	- Religion//WOTJ.
1590	WMIM	PA	Mt. Carmel	- WW-I adult standards.
1600	WKXF	KY	Eminence	- Gospel.

This column ends with the staggering THREE responses received to the question a few columns ago...which three of your area radio stations would you want to be able to receive if you were stranded on an island, and could hear only three stations. This response, I hope does not attest to the number of people who read this column! John Hanz, of Old Bridge, NJ, would be happy with WCBS-880 for news, WMGQ-98.3, New Brunswick, hits of the 60's through the 90's, and WMXV-105.1 or WPAT-93.1, rock mix. Ken Onyschuk, Steiger, IL, opted for WFMT-FM, Classical, WMAQ-670, news, but no more OJ junk (Amen!), and WGCL, rock oldies. A thoughtful reply from Walt Breville, Wright City, MO, picked KWRE-730, with live assisted country music, good local talk "Your hometown voice!", KYKY-98.1, hits of the 70's thru the 90's, with a Saturday night disco show, and WEW-770, with nostalgia from the 1950's and 60's plus soft rock, jazz, and easy listening music. (Give me KNX-1070 for the news, KWIC-99.3 for contemporary music, and WDAF-610 for country music! -pls) Thank you very much, gentlemen! All for now. Do get your area radio format changes into your formats column! 73's.

## USA DIGITAL RADIO IN-BAND ON-CHANNEL DIGITAL AUDIO BROADCAST SYSTEM DESCRIPTION

USA Digital Radio  
332 South Michigan Avenue  
Suite 605  
Chicago, Illinois 60604  
USA

April 9, 1995

**ABSTRACT** - USA Digital Radio is finalizing the development of new state-of-the-art formats for in-band on-channel (IBOC) delivery of digital audio broadcasting (DAB). USADR's IBOC-DAB systems are designed for top-notch digital audio delivery as well as enhanced ancillary data transmission capabilities. USADR's AM and FM IBOC DAB systems employ MUSICAM source encoding as well as innovative modulation techniques which address the various radio channel impairments characteristic of AM and FM band propagation. The USADR IBOC-DAB systems are designed to be backwards compatible with conventional AM and FM broadcasting for a seamless and cost-effective transition to DAB.

### INTRODUCTION

The radio listening public is ready for top notch audio performance on demand. The market is also ready for new digital data services. In Band On-Channel Digital Audio Broadcasting (IBOC-DAB) has been developed by USA Digital Radio to offer the highest quality audio to the listening public (ISO/MPEG-Audio Layer II MUSICAM up to 256 kbit/s) while also offering expanded data services to the marketplace. IBOC-DAB has been designed for cost effective deployment which leverages existing broadcast and transmission infrastructure. Backwards compatibility with existing broadcasts ensures an efficient seamless transition to digital broadcasting with no disruption of existing services while remaining consistency with existing spectral usage and regulations. USADR has developed IBOC-DAB to offer new high-quality high-performance music and data services that are affordable, practical, backwards compatible with existing services and very low risk. USADR's development of practical affordable IBOC-DAB systems will allow widespread deployment of IBOC-DAB in the United States in a short time. USA Digital Radio has hosted successful field trials of AM and FM IBOC DAB in the United States.

USA Digital Radio is now in the process of finalizing the design on its AM and FM

IBOC-DAB systems. USADR is also preparing to work with integrated circuit and receiver manufacturers on the rapid commercialization of receiver technology. Since USADR IBOC-DAB will re-use existing transmission infrastructure at a low incremental cost, deployment of DAB transmitters in all United States markets will proceed very quickly.

This paper describes recent technical advances in source coding, error correction and digital modulation which enable FM-IBOC to successfully deliver high performance audio and unprecedented ancillary data capacity through harsh multipath in the mobile environment. This paper also describes the challenges met by AM IBOC.

### USADR FM-IBOC DAB

The USADR FM-IBOC system for digital audio broadcast is an efficient and multipath robust information system for the transmission and reception of CD quality stereo (ISO/MPEG-Audio Layer II at 256 kbit/s) and ancillary data (typically 64 kbit/s). FM-IBOC DAB delivers a flexible platform for audio and data broadcasting while preserving and enhancing the existing VHF commercial FM economic and technical infrastructure. The USADR FM-IBOC system is *in-band on-channel*, complying with existing spectral emission regulations. Careful organization of the DAB spectrum permits the DAB and analog FM signals to coexist in the emissions mask without interfering. Challenges facing the practical implementation of FM IBOC DAB include severe multipath, limited assigned channel bandwidth and aggressive requirements for music quality and data channel capacity. Major advances in the areas of audio source encoding, error correction and digital modulation have allowed the USADR FM-IBOC DAB system to meet these challenges.

A block diagram of the USADR FM-IBOC DAB system is shown in Fig. 1. The primary components of the USADR FM-IBOC DAB system are the audio source encoder, the error correction encoder and the

modulator. The audio coding rate is continuously variable from 128 to 256 kilobits per second. The ancillary data rate is variable up to 64 kilobits per second. The modulation data rate is 384 kilobits per second, with the difference being allocated to error control coding (ECC).

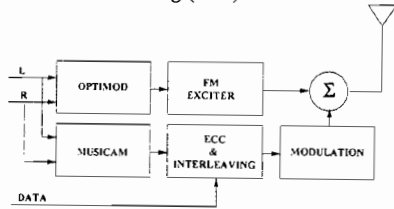


Fig. 1. FM-IBOC DAB System Block Diagram.

### Audio Source Encoding

The audio source encoding for the USADR FM-IBOC DAB system is based upon the ISO/MPEG-Audio Layer II (ISO 11172-3) MUSICAM standard. This standard has been advanced through the development of variable music coding rate based on demand as well as a soft failure mechanism for graceful audio degradation under severely impaired channel conditions. Source coding preserves 16 bit stereo quality over 20 kHz of audio bandwidth.

The audio coding rate for FM-IBOC DAB is continuously variable as a function of the program material and the ancillary data requirements. The purpose of a continuously variable coding rate is to optimally utilize the channel throughput, or the modulation data rate, as a function of the requirements of both audio coding and ancillary data. Data throughput is allocated to audio source coding on an as-needed basis, continuously limiting the coding rate on a frame-by-frame basis, based on the program material, to that needed to reproduce CD quality audio. Continuous conservation of the audio coding rate allows for increased availability of data for both ECC and ancillary data.

An illustration of variable data rate music coding is shown in Fig. 2. Figure 2-a shows the spectrum of a complex frame of music. The abundance of music components demands a high audio coding rate. In contrast, Fig. 2-b illustrates a very simple passage of music which demands a much data rate to encode its reduced music information content. FM-IBOC coding rates vary between 128 and 256 kilobits per second. Variable rate source coding is transparent to the listener.

### Error Correction

A desirable characteristic of analog FM transmission is the soft failure mechanism -

graceful degradation - in eventual audio impairment. In the presence of increasingly severe channel distortion, the audio recovered from an analog FM signal is commensurately distorted but is usually intelligible. Furthermore, the use of monophonic/stereo blending in mobile receivers can mask many transient multipath induced impairments altogether. The USADR FM-IBOC DAB system mimics the soft failure characteristic of analog FM by implementing hierarchical ECC and advanced error concealment methods to provide for a gradual deterioration of music quality as the channel bit error rate increases.

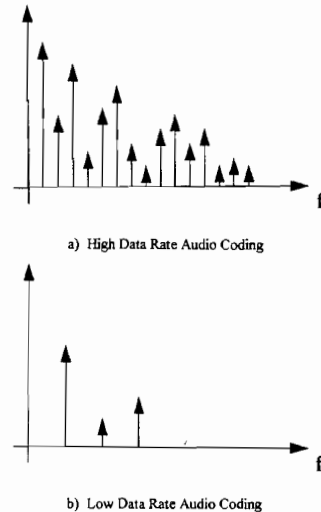


Fig. 2. Variable Data Rate Music Coding.

Hierarchical ECC is based on the concept that the information in the coded audio data stream takes on varying degrees of importance. For example, frame header information is critically important because it establishes the location of all of the audio information in the frame. Furthermore, the most significant bits (MSB's) in each audio sample are much more important than the least significant bits (LSB's). The exponent portion of sample values in exponent-mantissa format are even more important than the MSB's of the mantissa. Also, low frequency audio components are usually more important to audio reproduction than higher frequency audio components.

The process of applying hierarchical ECC to coded audio involves recognizing the relative importance of the coded information and the subsequent application of commensurate error protection. Following the previous example, the header information in a MUSICAM frame

is assigned the highest level of error protection, followed by the exponents of audio samples and the more significant bits. The less significant bits in the audio samples are assigned lower degrees of error protection. Additionally, low frequency components of audio are protected to a higher degree than the higher frequencies.

The advantage of hierarchical ECC in producing a graceful mode of audio degradation is shown in Fig. 3. Fig. 3-a shows the audio spectrum of a clean passage of music. Fig. 3-b shows what may happen in the audio spectrum in the case of constant error protection. Bit errors under impaired channel conditions may effect high frequency components, low frequency components, MSB's, LSB's, audio sample exponents or even header information with equal probability. The result is a catastrophic mode of failure, which results in a randomly scattered loss of audio information and a possible misrepresentation of header information. The listener is subject to either unpleasant artifacts or sudden muting. In contrast, hierarchical ECC employed by USADR FM-IBOC DAB yields audio which degrades gradually in the presence of severe channel impairments. The result, shown in Fig. 3-c, is a gradual loss of dynamic range as well as a fold-back in the audio response of the receiver as bit errors are detected in various relatively lightly protected portions of the coded audio. Graceful degradation is found by the listener to be a much less objectionable failure mode than catastrophic failure.

### Modulation

The VHF channel is plagued by significant multipath, particularly in dense urban environments where most listeners are situated. These environments can be characterized as having short strong multipath delays under 5 microseconds in duration with additional weak echoes of up to 20 microseconds in duration. Multipath echoes create strong intersymbol interference (ISI) in digital communication systems because of echoes at various amplitudes, phases and delays with respect to the direct or strongest path signal. A widely accepted approach for combatting ISI is the use of multichannel modulation methods. This has the effect of increasing the baud interval to a length much greater than the expected multipath delay. To compensate for the decrease in baud rate per subchannel, multiple subchannels are required to convey the same amount of information. The USADR FM-IBOC DAB system employs 48 separate subchannels, each operating at 8 kilobits per second, to achieve an overall aggregate channel data rate of 384 kilobits per second. In addition to the 48 separate subchannels, a wideband reference sounding waveform is injected into the

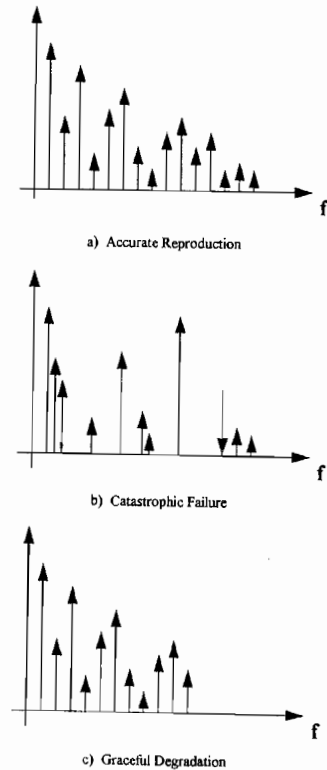


Fig. 3. Comparison of Audio Failure Modes.

modulation waveform to simplify subchannel acquisition and multipath equalization at the receiver.

The design of the USADR FM-IBOC DAB subchannel modulation waveforms are based on spread spectrum techniques which are also commonly used for mitigating multipath. Although originally developed for military applications, spread spectrum techniques have found diverse application in consumer telecommunications in areas such as the global positioning system (GPS) and wireless local area networks (wireless LANs). The USADR FM-IBOC DAB modulation scheme improves upon these principles by incorporating a novel signal set design that maintains a high degree of spectrum efficiency, a feature which most spread spectrum systems lack.

The spectrum of FM and FM-IBOC DAB signals are shown in Fig. 4. Fig. 4-a depicts a typical conventional analog FM signal spectrum. Fig. 4-b illustrates various FM-IBOC DAB subchannels. The subchannel modulation waveforms were

designed using a novel method which ensures that the subchannels are wideband, noise-like and mutually orthogonal. Additionally, a void is maintained in the center of the spectrum of each subchannel waveform to allow FM to survive undisturbed. When observed individually, each of the DAB carrier signals has a spectrum which spans the entire 460 kHz DAB bandwidth with a 220 kHz void centered about the analog FM carrier. Data is impressed on the DAB subcarrier signals using biphasic keying. The spectrum of the DAB composite is depicted in Fig. 4-c. The spectrum of a typical combined FM plus DAB signal is shown in Fig. 4-d.

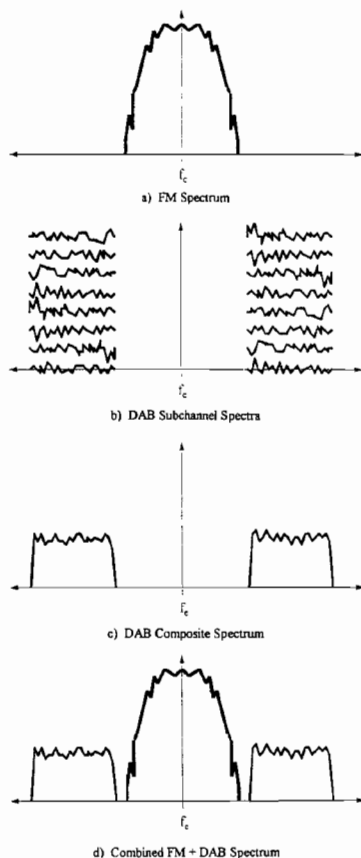


Fig. 4. FM-IBOC DAB Modulation Waveform.

A unique characteristic of the USADR FM-IBOC DAB signaling set, particularly when compared to conventional code division multiple access (CDMA) spread spectrum techniques, is that the transmit and receive filter shaping is directly incorporated into the design of the signal set. Further filtering is unnecessary, avoiding possible undesirable disruption of the signal set properties through filter distortion. The orthogonal property of the signals insures that subchannel to subchannel interference is minimized whether or not channel impairments are present.

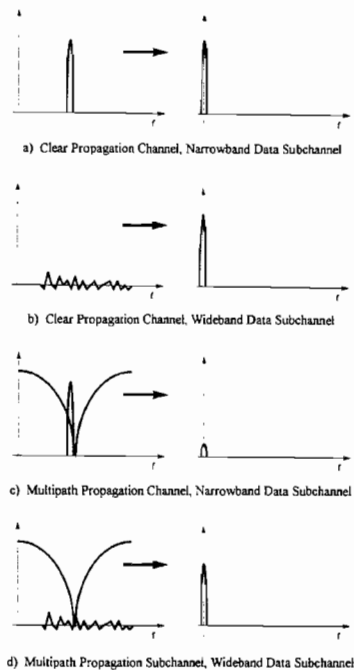


Fig. 5. Demodulation of Narrow and Wideband Data Subchannels in Clear and Multipath Propagation Channels.

The wideband nature of the subchannel modulation waveforms is responsible for their robust performance in multipath. The advantage of wideband data subchannels in multipath over narrowband data subchannels, as is the case in OFDM, is illustrated in Fig. 5. Fig. 5-a illustrates demodulation of a tone or narrowband data subchannel in the case of clear propagation. Demodulation of tone subchannels involves a frequency shift, as shown in Fig 5-a. Fig 5-b illustrates the despreading operation involved in demodulating a wideband subchannel.

Although the modulation subchannel waveforms and the demodulation processes are different, the same subchannel baseband data stream is recovered in both processes.

Fig 5-c illustrates demodulation of a tone carrier in a possible multipath environment. In the case of OFDM through multipath, individual subcarriers are subject to severe attenuation due to spectral nulls in the propagation response introduced by multipath. In the case of Fig. 5-c, subchannel demodulation effectiveness is limited by multipath-induced localized attenuation in the frequency response of the channel. In contrast, Fig. 5-d shows how wideband subchannel demodulation is affected to a lesser degree due to the fact that any localized attenuation in the frequency response due to multipath only attenuates a small fraction of any wideband subchannel's power.

### Synchronization

Adaptive equalization is key to adequate DAB receiver performance in multipath. In order to facilitate rapid synchronization and training of the adaptive equalizer, a reference signal, constant from baud to baud, is added to the composite DAB signal at a reduced power level. Although the use of a buried reference diminishes the power that is available for the data modulation because of the ceiling set by compliance with the emissions mask, it has been found that channel corruption, not signal fading, is the dominant source of impairment in the critical urban environment. The reference signal can thus be considered as a "pilot tone." However, the reference signal itself is designed to be wideband so that it approximates the frequency response of the modulated data signals. This insures that sufficient amplitude and phase information is available in the reference, when recovered in the receiver, to accurately equalize the wideband signals.

A further benefit of the reference signal is that its presence facilitates the design of a robust power amplifier for the DAB signal. By incorporating an adaptive equalizer, in the transmitter, which is trained on the reference, frequency variations and phase errors due to component aging and thermal variations can be minimized.

### Spectrum Usage

The spectrum of the USADR FM-IBOC DAB signal is situated primarily in the protective sidebands associated with the 600 kHz FM station mask used in the United States. The sidebands begin (3 dB points) at a 120 kHz offset from either side of the unmodulated analog FM carrier and extend to 220 kHz from the carrier. The amplitude of these sidebands is attenuated by 38 dB with respect to an unmodulated analog carrier in a 1 kHz resolution bandwidth.

## USADR AM-IBOC DAB

The USADR AM-IBOC DAB system is designed to meet several fundamental design requirements. The system is in-band on-channel, fitting within the 40 kHz portion of the United States emissions mask for AM. The AM-IBOC system is backwards compatible, maintaining existing analog AM broadcast signal quality and coverage. The AM-IBOC system employs ISO/MPEG Layer II MUSICAM source coding at 96 kbit per second and supports a 2.4 kilobits per second data channel. The IBOC-DAB coverage regions meet or exceed existing analog AM primary coverage areas. AM-IBOC DAB is made affordable by leveraging existing broadcast infrastructure and assets. Affordable receiver implementation is also being realized.

A block diagram of the USADR AM-IBOC DAB system is shown in Fig. 6. The USADR AM-IBOC DAB system employs a 40 kHz total modulation bandwidth. Due to this stringent bandwidth requirement, USADR AM-IBOC DAB employs ISO/MPEG Layer II MUSICAM at a bit rate of 96 kbit per second joint stereo, lower than that of USADR FM-IBOC DAB. Audio coding reproduces 16 bit stereo with 15 kHz of audio bandwidth. Transmission of music, ECC and ancillary data for a total of 128 kbit per second in this bandwidth requires an average bandwidth efficiency of 3.2 bits per second per Hertz while avoiding interference with the analog AM already in place. The USADR AM-IBOC DAB modulation format is carefully designed so as to not interfere with the existing analog transmission. The spectrum of the AM-IBOC DAB modulation waveform is represented in Fig. 7.

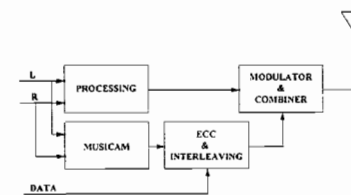


Fig. 6. AM-IBOC DAB System Block Diagram.

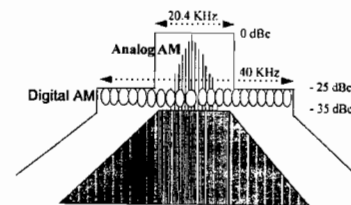


Fig. 7. AM-IBOC DAB Modulation Spectrum.

The AM channel was thought to be somewhat less hostile than the multipath plagued FM channel. The AM propagation channel magnitude frequency response has been found to slope by as much as 20 dB across the 40 kHz AM-DAB propagation channel.

Furthermore, the direction of the tilt of the magnitude response slopes have been found to change rapidly while driving near and under physical obstacles such as overpasses, overhead signs and power lines. Adaptive equalization and phase correction based on training waveform information has proven essential to the reliability of mobile reception of AM-IBOC DAB, particularly in view of AM-IBOC's high spectral efficiency requirement.

Since AM is a nonconstant envelope signaling format, the AM transmitters used to date for AM-IBOC DAB demonstrations and testing have been found to require very little modification to transmit the USADR AM-IBOC DAB signal.

#### CONCLUSION

The radio listening public is ready for top notch audio performance on demand. The market is also ready for new digital data services. In-Band On-Channel Digital Audio Broadcasting (IBOC-DAB) has been developed by USA Digital Radio to offer the

highest quality audio to the listening public (ISO/MPEG-Audio Layer II MUSICAM) while also offering expanded data services to the marketplace. IBOC-DAB has been designed for cost effective deployment which leverages existing broadcast and transmission infrastructure. Backwards compatibility with existing broadcasts ensures an efficient seamless transition to digital broadcasting with no disruption of existing services while remaining consistency with existing spectral usage and regulations. USADR has developed IBOC-DAB to offer new high quality high-performance music and data services that use affordable, practical, backwards compatible with existing services and very low risk. USADR's development of practical affordable IBOC-DAB systems will allow widespread deployment of IBOC-DAB in the United States in a short time. USA Digital Radio has hosted successful field trials of AM and FM IBOC-DAB in the United States

USA Digital Radio is now in the process of finalizing the design on its AM and FM IBOC-DAB systems. USADR is also preparing to work with integrated circuit and receiver manufacturers on the rapid commercialization of receiver technology. Since IBOC-DAB will re-use existing transmission infrastructure at a low incremental cost, deployment of DAB transmitters in all United States markets will proceed very quickly.

#### FOR MORE INFORMATION

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This report was distributed at the 1995 NAB Convention. Thanks to Mr. Timothy Huster of the Xetron Corporation for providing it to the readers of DX News.



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#### CANADA

MANTOUBA, CFBY, 920, Portage La Prairie, f/d letter with coverage map on back and sticker. v/s Red Hughes, manager. (Reiser-IL)  
ONTARIO, CBI, 740, Toronto, p/d QSL & letter in 13 days. (Goetsch-OH)  
ONTARIO, CICC, 630, Chatham, p/d QSL. v/s G. Brooks, engineer. (Goetsch-OH)  
ONTARIO, CFOS, 560, Owen Sound, p/d form letter and bumper sticker. v/s R. Coyne, CE. (Goetsch-OH)  
ONTARIO, CFRB, 1010, Toronto, f/d QSL, station info sheet and schedule along with ODXA information sheet. v/s Steve Canney ODXA. (Goetsch-OH) (Our good friends at ODXA handle the verification chores for CFRB/CFRX. They do a great job. Say hello to them for us when you write. -Ken)

#### USA

ALABAMA, WNTM, 710, Mobile, f/d prepared card in 5 days. v/s Mike Malone, PD. (Lazarus-LA)  
ALABAMA, WVNN, 770, Athens, f/d prepared card, personal letter, business card, coverage map and program schedule 2/12 months after f/up and 5 1/2 months after original report. v/s Rick Tyler, Promotions Director. (Lazarus-LA)  
ALABAMA, WACV, 1170, Montgomery, f/d prepared card and personal letter in 2 1/2 weeks. v/s Joyce Former, Receptionist. (Lazarus-LA)  
ARKANSAS, KAAY, 1090, Little Rock, f/d QSL card in 3 years. (Reiser-IL)  
ARKANSAS, KSYG, 1010, Little Rock, letter confirmation. v/s Norm Laramee, CE. (Holbrook-MD)  
CONNECTICUT, WTIC, 1080, Hartford, f/d letter. v/s Charles Dube. (Goetsch-OH)  
FLORIDA, WPSO, 1500, New Port Richey, f/d prepared card and personal letter 1 week after f/up and 2 1/2 months after original report. v/s D. Angelatos. (Lazarus-LA)  
GEORGIA, WDAK, 540, Columbus, n/d note on station letterhead in 8 days. v/s Mike Stevens. (Goetsch-OH)  
GEORGIA, WSB, 750, Atlanta, f/d form letter in 8 days. v/s Greg Mocerri, PD. (Goetsch-OH)  
ILLINOIS, WBBM, 780, Chicago, n/d letter, info sheets, coverage maps, stickers in 11 days. v/s Mark Williams, CE. (Goetsch-OH)  
ILLINOIS, WGN, 720, Chicago, p/d QSL card, sticker and 1994 Yearbook in 11 days. v/s James Carollo, Dir of Engineering. (Goetsch-OH) (What was the Yearbook about? -Ken)  
ILLINOIS, WLS, 890, Chicago, f/d letter and information about the GE Superadio in 24 days. v/s Warren Shulz, CE. (Goetsch-OH)  
INDIANA, WIBC, 1070, Indianapolis, f/d QSL card. v/s M. Beaty, CE. (Goetsch-OH)  
IOWA, WSUI, 910, Iowa City, QSL card plus letter, schedule, coverage map. v/s Dennis Reese. (Holbrook-MD)  
KENTUCKY, WHAS, 840, Louisville, frequency only QSL. v/s Charles Strickland, CE. (Goetsch-OH)  
KENTUCKY, WVLC, 590, Lexington, f/d prepared card, personal letter and sticker in 3 1/2 months. v/s Tom Devine, CE. (Lazarus-LA)  
MASSACHUSETTES, WBZ, 1030, Boston, f/d QSL card. v/s Mark Manieli, Engineer. (Goetsch-OH)  
MICHIGAN, WHND, 560, Monroe, f/d "Honeyradio '57 Chevy" QSL & sticker in 7 days. v/s T.G., Chief Operator. (Goetsch-OH)  
MICHIGAN, WJR, 760, Detroit, f/d QSL in 9 days. v/s Ed Butterbaugh, Dir of Engineering, and Phil Boyce, Ops. Manager. (Goetsch-OH)  
MINNESOTA, WCCO, 830, Minneapolis, frequency only QSL in 20 days. v/s Jerry Miller, CE. (Goetsch-OH)  
MISSOURI, KSD, 550, St. Louis, p/d handwritten letter in 8 days. v/s Joe Blaney. (Goetsch-OH)  
NEW YORK, WEVD, 1050, New York City, frequency only QSL in 16 days. v/s George B. Lewis, CE. (Goetsch-OH)  
NEW YORK, WOR, 710, New York City, f/d QSL card and letter and coverage map in 20 days. v/s Jim Huste. (Goetsch-OH)  
NEW YORK, WPIE, 1160, Trumansburg, QSL form letter, coverage map. v/s Joe Loverro, GM. (Holbrook-MD)

NORTH CAROLINA, WPTF, 680, Raleigh, f/d QSL in 9 days. (Goetsch-OH)  
 OHIO, WAKR, 1590, Akron, f/d QSL in 9 days. v/s Glenn Foldessy, CE. (Goetsch-OH)  
 OHIO, WEOL, 930, Elyria, p/d letter & sticker in 6 days. v/s Glenn Smith, Chief op. (Goetsch-OH)  
 OHIO, WHK, 1420, Cleveland, f/d letter in 10 days. v/s Chris Quinn, Eng., Mgr. & Chief operator  
 (he also sweeps the floors!!! --Ken). (Goetsch-OH)  
 OHIO, WKBN, 570, Youngstown, p/d letter and frequency only QSL card in 8 days plus coverage  
 maps. v/s James Hartzler, Radio Engineer. (Goetsch-OH)  
 OHIO, WKNR, 1220, Cleveland, f/d QSL, magnet and 1994 Browns sked in 8 days. v/s John  
 Landry, CE. (Goetsch-OH)  
 OHIO, WONE, 980, Dayton, f/d coverage map-reception verification. (Goetsch-OH)  
 OHIO, WTVN, 610, Columbus, p/d folder card & stickers in 8 days. (Goetsch-OH)  
 OHIO, WWWE, 1100, Cleveland, frequency only letter in 9 days. v/s Gary Bruce, PD. Also received  
 a second unrequested confirmation letter for the same report. (Goetsch-OH)  
 PENNSYLVANIA, KDKA, 1020, Pittsburgh, f/d personally typed folder card, frequency-only form  
 letter, coverage map and business card. v/s Mel Check, Engineering Crew Chief.  
 (Goetsch-OH)  
 PENNSYLVANIA, WBZY, 1200, New Castle, QSL in about 5 weeks. (Holbrook-MD)  
 PENNSYLVANIA, WPWA, 1590, Chester, f/d QSL certificate in 14 days. (Goetsch-OH)  
 TENNESSEE, WLAC, 1510, Nashville, p/d letter, coverage map, sked and magnet in 13 days. v/s  
 Kelly Carls, PD. (Goetsch-OH)  
 TENNESSEE, WNQM, 1300, Nashville, QSL form letter and bumper sticker. v/s Adam Lock (these  
 are the same folk who operate WWCR shortwave). (Holbrook-MD)  
 TENNESSEE, WSM, 650, Nashville, p/d QSL & many goodies in 15 days. v/s Tom Bryant,  
 Production Manager (and NRC member!!!). (Goetsch-OH) (If you visit the Opryland Hotel  
 in Nashville, you will find the WSM studios right there in the lobby. At a recent  
 convention, I spent some time watching them through the window! --Ken)  
 TEXAS, KEYH, 850, Houston, f/d prepared cards in EE and SS 2 1/2 months after f/up and 4 1/2  
 months after original report. v/s David Armstrong, GM./CE. (Lazarus-LA) VIRGINIA,  
 WTAR, 990, Norfolk, p/d note, business card & sticker in 8 days. v/s Claus McKenney,  
 CE. (Goetsch-OH)  
 WISCONSIN, WTMJ, 620, Milwaukee, f/d QSL logo card in 8 days. v/s John Schwietzer. (Goetsch-  
 OH)

#### OUTSIDE OF NORTH AMERICA

IRELAND, Atlantic 252, 252, Santa Maria, 2 f/d QSL cards, stickers, letters in 1 month. (Ross-ON)  
 JAMAICA, Radio Jamaica, 580, Galina, f/d QSL card in 3 months after f/up and 6 months after  
 original report. (Lazarus-LA) ST. PIERRE & MIQUELON, RFO, 1375, letter in 6 months.  
 v/s Louis Langlois. (Musco-RI)  
 TURKS & CAICOS ISLANDS, Radio Vision Cristiana, 535, South Caicos, f/d QSL card, f/d  
 prepared cards in EE & SS and personal letter in one month after f/up sent to WRTH  
 address in T & C after several tries to New Jersey had failed, and 11 months after original  
 report sent to NJ. v/s Wendell Seymour. (Lazarus-LA)  
 VATICAN CITY, Radio Vatican, 1611, f/d QSL card in two months. 23rd country verified! (Ross-  
 ON) (Keep up the good work, those countries will mount up pretty soon--Ken)  
 VIRGIN ISLANDS, WVWI, 1000, Charlotte Amalie, f/d QSL sheet and stickers in 14 days. v/s Rick  
 Ricardo. (Goetsch-OH)

A note from Don Moore in response to my comment about mail delivery to and from South  
 America confirms he mailed his report from Iowa to Colombia. Round trip time was ten days. Not  
 bad considering how long it takes to get a letter across town!

A good turn-out once again. I am receiving a few of the veri-signers reports being sent to Wayne  
 Heinen. In general, they don't have enough info to use in this column. So, send on your listings of  
 confirmations, using more or less the format you see above.

Contributors this month were: Michael Goetsch, Cleveland, OH, Hank Holbrook, Dunkir,  
 Maryland, Henry Lazarus, New Orleans, LA, Ron Musco, Poquonock, RI, Thomas J. Reiser,  
 Chicago, IL, Robert Ross, London, Ontario.

## Professional Sports Networks

Barry S. Finkel BSFINKEL@ANL.gov

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Chicago, IL 60643-2409

Network listings for team sports stations

This column contains NIIH information, NBA information, and MLB information.

Jon Ohman sent me a Hartford Whalers' network list, which duplicates the one I included in the  
 last column. But Jon lists the announcers as Chuck Kaiton and John Forslund (my previous  
 column had Chuck Kaiton and Arnold Dean).

Here are some NIIH corrections from Jon Ohman: **Buffalo Sabres** - Delete John Bucyk from the  
 list of announcers; he is an analyst on the Boston Bruins' broadcasts. **Pittsburgh Penguins** - The  
 flagship is 1250 WTAE PA, not KDKA. **Tampa Bay Lightning** - Delete Denny Gare from the list of  
 announcers; he is now an assistant coach with the team.

**Boston Bruins (NIIH)** Dale Arnold and John Bucyk (partial list from "Boston Globe" via Jon  
 Ohman)

590 WNBW-MA \* 610 WGIR-NH 1200 WKOX-MA 1440 WWTM-MA

**Boston Celtics (NBA)** Glenn Ordway and Jerry Sichting (partial list from "Boston Globe" via Jon  
 Ohman)

850 WEEI-MA \* 1200 WKOX-MA 1310 WORC-MA

RADIO STATION K B A L  
 BOX 206  
 SAN SABA, TEXAS, 76877

About the Boston Red Sox flagship controversy - Jon Ohman sent me a clipping from the *Boston  
 Globe* 3/29/95 that gives the following information. 850 WEEI-MA is the flagship station,  
 replacing WRKO. Joe Castiglione and Jerry Trupiano remain the announcers.

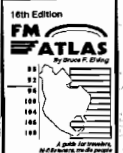
Those with World Wide Web Internet access and who are Seattle Mariners fans might enjoy the  
 Mariners' home page found at URL <http://www.mariners.org>. This page did not have a radio  
 network list (the last time I checked). The e-mail address for the Toronto Blue Jays is  
[bluejays@bluejays.ca](mailto:bluejays@bluejays.ca).

Ken Onyschuk sent me a flagship/announcer list from *Broadcasting* and *Baseball Weekly*. Bob  
 Galerstein sent two pages of flagship/announcer information; I do not know the source. Here are  
 additions/differences from the flagship/announcer information I had in a previous column (from  
 Lynn Gillis); I do not know which list is correct.

**Atlanta Braves** - The BG list adds Tim Brando.  
**Colorado Rockies (SS)** - 1150 KCUV-CO Francisco Gamez [network unknown]  
**Houston Astros** - The BG list deletes Bill Brown (He does TV only).  
**Montreal Expos (SS)** - The BG list deletes Rich Griffin.  
**New York Mets (SS)** - 620 WSKQ-NY Juan Alicea, Renato Morffi [network unknown]  
**Oakland Athletics** - The KO list has 910 KNEW-CA; the other two have 610  
 KFRC-CA.  
**Philadelphia Phillies** - 1210 WOGL-PA has changed calls to WGMP.  
**San Diego Padres (EE)** - The BG list adds TBA.  
**San Diego Padres (SS)** - Mario Thomas Zaplain, Eduardo Ortega, Matias Santos  
**San Francisco Giants (EE)** - The BG list adds Mike Krukow.  
**Seattle Mariners** - The BG list adds Rick Rizzos.  
**Texas Rangers** - The BG and KO lists have 1080 KRDL-TX as flagship; the LG  
 list has 820 WBAP-TX. I heard the Rangers on 1080 KRDL-TX.  
 - The BG list adds Brad Sham.

**Los Angeles Dodgers (EE) 1995** Vin Scully, Rick Monday, Ross Porter (from Media Guide via  
 Bob Galerstein)

610 KAVL-CA	920 KVEC-CA	1240 KLOA-CA	1360 KGME-AZ s
1490 KMET-CA	720 KDWN-NV	980 KEYQ-CA	KSMA-CA
1370 WAXE-FL s	1560 KNZR-CA	760 KGU -HI s	1230 KAAA-CA s
1300 KRQP-CA	1400 KTUC-AZ sa	790 KABC-CA *	KBOV-CA
1310 KIQQ-CA	KWYX-CA	800 KSOS-UT s	KYVA-NM s
1340 WSTA-VI s	1450 KVEN-CA	910 KVVQ-CA	1240 KJAA-AZ
1350 KCKC-CA	KMSL-MT		



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 of \$18.00. NY orders, please add sales tax.**

Los Angeles Dodgers (SS) 1995 Jaime Jarrin, Rene Cardinas (from Media Guide via Bob Galerstein)

970 KAFY-FL 1280 KDOL-FL s 1330 KWKW-FL \* 1490 KICO-FL  
1600 KGST-FL

Milwaukee Brewers 1995 Bob Uecker, Pat Hughes (from Media Guide via Bob Galerstein)

550 WSAU-WI	1090 WISS-WI	1320 WFHR-WI	1490 WIGM-WI
94.3 WPRE-WI	570 WMAM-WI	1150 WHBY-WI	1330 WHBL-WI
1550 WEVR-WI	95.9 WRDN-WI	580 WKTY-WI	1230 WIKB-MI
1340 WLDY-WI	WMIR-WI	96.3 WJMC-WI	590 WJMS-MI
WCLO-WI	1380 WBEL-WI	1590 WTOQ-WI	96.7 WATW-WI
620 WTMJ-WI *	1240 WJPD-MI	1400 WATW-WI	98.3 WCQM-WI
680 WDBC-MI	WJMC-WI	WBIZ-WI	92.1 WRJC-WI
99.1 WIKB-MI	910 WDOR-WI	WOBT-WI	WDUZ-WI
WRLS-WI	99.3 WIGM-WI	940 WFAW-WI	WOMT-WI
WRDB-WI	92.3 WJPD-MI	100.1 WDDC-WI	960 WTCH-WI
1260 WEKZ-WI	1430 WBEV-WI	92.7 WDUX-WI	100.9 WRCO-WI
970 KXTP-WI	WWIS-WI	WRDN-WI	WLDY-WI
102.3 WISS-WI	980 WPRE-WI	1270 WRJC-WI	1450 KFIZ-WI
93.7 WEKZ-WI	105.3 WRLO-WI	1010 WSPO-WI	1290 WKLJ-WI
WDLB-WI	WHTD-WI	106.3 WEVR-WI	1050 WLIP-WI
1310 WIBA-WI	WRCO-WI	93.9 WDOR-WI	

Philadelphia Phillies 1995 (Tentative) Harry Kalas, Richie Ashburn, Chris Wheeler, Andy Musser (from Media Guide via Bob Galerstein)

580 WHP-PA	1150 WDEL-DE	1250 WQXA-PA	1390 WKLP-WV
590 WARM-PA	1210 WGMP-PA *	1270 WLBR-PA	1400 WOND-NJ
95.3 WDNO-DE	790 WAEB-PA	1230 WCMC-NJ	1320 WGET-PA
1420 WCOJ-PA	105.5 WCHX-PA	850 WEEU-PA	WBPZ-PA
1360 WPPA-PA	1490 WBCB-PA	960 WPMR-PA	1240 WYGL-PA
1390 WRSC-PA	WLPA-PA		

Philadelphia Phillies (1995) (SS) [announcers not listed] (from Media Guide via Bob Galerstein)

860 WTEL-PA \* (home day games only; no network)

Pittsburgh Pirates 1995 Lanny Frattare, Steve Blass, Greg Brown, Bob Walk (from Pocket Schedule via Jon Ohman)

590 WMBS-PA	1230 WTIV-PA	1350 WOYK-PA	1470 WZGO-PA
600 WFRM-PA	1270 WCBC-MD	1400 WKBL-PA	1480 WCNS-PA
92.3 WXIE-MD	940 WESA-PA	1280 WKST-PA	WKWK-WV
1490 WESB-PA	93.5 WBNV-OH	990 WTIG-OH	1310 WNAE-PA
1420 WBRD-FL	WMGW-PA	94.7 WELK-WV	990 WVSC-PA
1330 WASN-OH	1430 WVAM-PA	WNTJ-PA	96.7 WVNW-PA
1000 WIOO-PA	WFLP-PA	WEIR-WV	WOHI-PA
100.9 WOOX-PA	1020 KDKA-PA *	WETZ-WV	1440 WAJR-WV
1540 WECZ-PA	102.1 WOWQ-PA	1050 WMSG-MD	1340 WCVI-PA
1450 WFERA-PA	1570 WANR-OH	103.1 WANB-PA	1050 WADC-WV
WTRN-PA	WJPA-PA	1580 WANB-PA	105.5 WPXZ-PA
1160 WCCS-PA	WHAR-WV	WMAJ-PA	1590 WCBG-PA
107.1 WEXC-PA	1230 WBVP-PA	WTCS-WV	1460 WMBA-PA
1600 WPDC-PA			

\* = Flagship station a = Station broadcasts both the California Angels and Los Angeles Dodgers. b = Alternate flagship when CJCL has a Maple Leafs hockey broadcast. c = Station is in the Blue Jays' Media Guide but not the Pocket Schedule. d = Station is in the Blue Jays' Pocket Schedule but not the Media Guide. e = These call letters are from the *FM Atlas 15th Edition*; the calls listed in the Pocket Schedule and Media Guide are different. s = Selected games only w = Weekend games only

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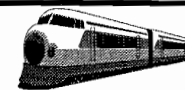
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