

DX News

• Serving DX'ers since 1933 •

Volume 60, No. 27 - June 28, 1993 (ISSN 0737-1659)



Inside...

- 2 .. AM Switch
- 5 DDXD
- 13 .. IDXD
- 21 .. FMDXD
- 22 .. GYDXA-1490
- 25 .. IDXA
- 26 .. DDXA
- 27 .. Prof. Sports Nets

- 28 .. Now and Then
- 31 .. Contests
- 32 .. Target DX
- 34 .. Bandscans
- 36 .. R8 Dynamic Range
- 38 .. R8 Spur Elimination
- 40 .. MT Convention
- 41 .. Denon 680-NAB
- 41 .. Musings
- 47 .. NRC Convention

From the Executive Board ... As the operation of the NRC depends upon the voluntary contributions and labors of its members, we would like to recognize some of these outstanding members each year. If you have any suggestions of members that you feel deserve recognition, please tell us their names and your reason for suggesting them to Ken Chatterton - Box 164 - Mannsville, NY 13661 by no later than August 5.

From the Publisher ... I hope that your DX sessions at the dials this summer have been hotter than the weather this month has been around here. Frequent rain = thundershowers = QRN = little DX in the heartland ... although my garden won't need watering for some time to come!

We've received some clippings which cannot be used in DXN, although they may be sent on to column editors. Please do not highlight, underline or copy clippings at an size smaller than they appear ... the highlight, especially yellow appears as a grey or black smudge, and the already-small newspaper print is reduced to about 60% during the printing process, or about 5-point type, half the size of elite typewriter type. Also, we cannot accept obviously copywritten articles or syndicated features such as cartoons. Very few local newspaper articles are copywritten, by the way. We'd still welcome DX-related cartoons by an NRC artist, however. Finally, if you are interested in contributing an article but don't know how to set it up for publication, please write to the publisher in Topeka for details. Regular contributors and column editors: Some contributions are getting outside of the physical requirements. Follow these simple guidelines when setting up copy: Width, 7.75 to 8 inches; length, if on legal-size paper: leave a half-inch at the bottom; column editors (except for DDXD), leave 2 inches at the top of the first page; following pages: leave a half-inch at the top. Avoid elite size typewriter type (10 point or 12 pitch) if possible; pica (12-point or 10 pitch) is much easier to read, and most columns are now in 13-point type size for legibility. Our members who have problems with eyesight will thank you!

DXChange ... Bill Swiger - RR 1, Box 142A - Bridge-

port, WV 26630-9368 needs an assembly or owner's manual (copy or original) for a Dynakit Stereo 700 and PAS #2 pre-amp.

ANARC ... Under the new constitution, positions on the ANARC Executive Council do not need to be held only by Club Representatives (who are appointed by the individual clubs). Anyone in the NRC who is interested in running for any open position this fall should contact NRC Club Rep and Council member Paul Swearingen for further information. Nominations will be due in September.

Convention ... via ANARC Update, word of the *Popular Communications* Worldwide Shortwave Listeners Conference in conjunction with the Virginia Beach Hamfest October 2-3, 1993. For more information, contact Harold Ort at 76 North Broadway - Hicksville, NY 11801.

Welcome to these new members ... Mr. Robin Christof, Welland, Ontario; Richard N. Harrison, Brooklyn, CT; David Howard, Dover, PA; Bernard J. Daday, Schnecksville, PA; Dan Mason, Santa Fe, NM; A. R. Lamb, Zephyr Hills, FL; Atsushi Masamune, Seattle, WA; and Mike Decker, Marshall, TX (rejoins). We'll mail 696 copies of DXN for #28.

Remaining DXN Schedule, Volume 60

#	Deadline/Pub. Date	29. Aug. 13	Aug. 23
28.	July 16 July 26	30.	Sept. 10 Sept. 20

DX Time Machine

From the pages of DX News:

50 years ago ... from the July 17, 1943 DXN: Editor Ray Edge reported that the International DX'ers Alliance's *Globe Circler* had ceased publication. 29 NRC members were in the Armed Forces.

25 years ago ... from the June 15, 1968 DXN: In a "DX Profile", 28-year-old Jerry Starr reported that he was a disk jockey at WHOT and had been a DJ for 14 years.

10 years ago ... from the July 18, 1983 DXN: Tom Farmerie reported that he was on schedule with the 50th Anniversary Book.

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	Old call:	New call
560 WPAZ PA Philadelphia	WBEB	1390 WDOT VT Burlington	WKDR
730 WKMW AL Madison	WBBI	1430 KSTB TX Breckenridge	KBIL
980 KPSS CA Fresno	KEYQ	1440 WBBC VA Blackstone	WKLV
KMZZ MN Richfield	KRXK	1450 WZLB NY Rome	WFRG
990 WRMM NY Rochester	WCMF	1550 WLXV CT Bloomfield	WQJM
1070 WKDR NY Plattsburgh	WNWX	1560 KEYJ TX Abilene	KHBA
1080 WDJX KY Louisville	WWSN	1590 WSMA MI Marine City	WDFN
1230 KIZA CO Pueblo	KPCX*	1600 WQJR FL Atlantic Beach	WNCM
1240 WIMZ TN Knoxville	WZKZ	*Note: KIZA 1230 new call was	
1280 WNPT AL Tuscaloosa	WWTG	a typo as "KKPC" last issue.	

APPLICATIONS/GRANTS FOR NEW STATIONS

None

KKCQ AM - FM

DUBLIN
1 DUBLIN, MN 55942

APPLICATIONS FROM EXISTING FACILITIES

540 KOJY CA Costa Mesa: reduce day power to 240 watts (this doesn't sound right, perhaps should be NIGHT power, we'll check on this, possible FCC typo)

820 WSCR IL Chicago: add 1200 watts nights

850 KORC OR Waldport: to 820 kHz with 1000/100 U1

1330 KNOW MN Minneapolis: powers to 9700/5100

1360 KFFA AR Helena: reduce night power to 90 watts

1560 WWGM TN Nashville: city of license to Gallatin, TN, power to 1500 (930 CH)

GRANTS TO EXISTING FACILITIES

610 KAVL CA Lancaster: changes in antenna system

890 WFAB PR Ceiba: relocate transmitter site

910 KAMD AR Camden: reduce powers to 1000/125 U1

1010 WFGW NC Black Mountain: changes in antenna system

1280 KDKD MO Clinton: changes in antenna system

1430 WNWZ TN Germantown: antenna to U3

1490 WCSV TN Crossville: relocate transmitter site

1500 WTNE TN Trenton: changes in antenna system

OTHERNESS

560 KVOK AK Kodiak: station is SILENT for repairs

710 WXXB TN Smyrna: this on again, off again station is once again ON THE AIR, does not seem to have changed to recently requested WZRS call yet

CKAC1 PQ Montreal: here's a rare catch for you hard core DXers, this is the 10 watt station located in Olympic Stadium that rebroadcasts the Expo baseball coverage from CKAC-730

730 WBBI AL Madison: station is SILENT pending a sale

830 WGBV GA Smyrna: construction permit for this new station has been CANCELLED and the call letters DELETED

860 CHAK NWT Inuvik: station is on this frequency, NOT 870 as shown in the Log

890 WEMA MA Dedham: application for power increase and move to Wellesley, MA has been DISMISSED

960 WQLE PA Kane: station is SILENT (again)

1010 KBIS AR Little Rock: a report in Billboard Magazine claims that Group W (Westinghouse) is planning to buy this station so they can take it off the air hoping to increase night coverage of their WINS on this frequency in New York, NY. Now seriously, how much interference does KBIS give to WINS?

WCST WV Berkeley Springs: station is SILENT

CBEB ON Manitowadge: station DELETED, replaced with FM

1060 WBMB MI West Branch: silent station is being taken over by new owners who expect to have it back on soon

1120 WUST DC Washington: CP for 20000 (3000 CH) is on the air, they have also moved from their old rooftop antenna to the site of WMZQ-1390 where they share one of their four towers.

1150 WMET MD Gaithersburg: station is once again simulcasting WPGC-1580

1230 KLXR CA Redding: silent station is ON THE AIR

CBAB NS Sheet Harbour: station DELETED, replaced with FM

1240 KRMH CO Leadville: station is SILENT

KMCL ID McCall: according to the station this silent station should be back on the air by "this summer"

1290 KOIL NE Omaha: station is SILENT due to transmitter fire (which occurred the same day new owners took over) but is expected to return to the air soon

WTNX TN Lynchburg: license renewal DISMISSED, call is DELETED

1320 WCVG KY Covington: reliable local reporter claims this station is now IDing as "WNKR" although we have not found any indication of this change from the FCC or any other sources. Guess it means this is not an "official" change but you might want to pencil it into your Log, we'll try to check this further

WTSS PA Scranton: station is SILENT (again)

1330 KTOD AR Conway: station is SILENT

1340 KSKI ID Hailey: General Manager says the AM station was taken off the air 3-15-93 and "we returned to license to the FCC at that time" so this station is evidently DELETED

1400 WMCS ME Machias: license renewal DISMISSED and calls are DELETED

1420 KSKR OR Coos Bay: silent station may return to the air soon, is being taken over by new owners

1450 KDMN CO Buena Vista: station is SILENT

WPAM PA Pottsville: station is SILENT

CHET BC Chetwynd: station is DELETED

1470 WPNC NC Plymouth: last issue under Otherness we typo'd these calls as "WPCN", still WPNC, still SILENT

1490 KMET CA Banning: station is SILENT

KXRE CO Manitou Springs: station is now "officially" back on the air (see last issue) and is rebroadcasting KKRU Pueblo, CO.

1500 KMXO TX Merkel: license CANCELLED, call letters DELETED

1520 WQMA MS Marks: silent station is ON THE AIR

1550 CBGA3 PQ Riviere au Renard: station DELETED, replaced by FM

1560 WBOL TN Bolivar: station is SILENT, according to station they took the AM off the air when their FM began operations over a year ago and although the AM is still licensed they have no plans to return it to the air.

CHOK
1070
Sarnia Lambton's
First Radio

- CBDG BC Cassier: station is SILENT
- 1570 WNKX TN Centerville: station is SILENT
- 1580 WWOE NC Camp Lejeune: well, you guessed it, they went silent again on 5-6-93 as reported last issue, they returned to the air 5-18-93. This appears to be their 3rd return to the air so far in 1993.
- WHHM TN Henderson: station is SILENT
- 1590 WHPY NC Clayton: station is SILENT
- WMIM PA Mount Carmel: station is SILENT

THANKS! John D. Bowker, Dave Schmidt, Mike Hardester, Shawn Axelrod, Bob Gilford, David Lewis, Wayne Heinen, Chet Copeland, G. Harley DeLeurere, Ed Krejny, Al Merriman and MSJ.

OTHER SOURCES OF BCB INFO? Last week we received a letter from a new member of the NRC who was somewhat irked because the station information in the June 1993 Popular Communications Magazine's Broadcast DX column had not yet appeared in NRC's DX News. Well, I guess that's because you just recently joined the NRC and missed this information in AM Switch. While the column in PopCom is very interesting and well written as a general overview of what's happening in broadcasting, it is not the place you might expect to find the very latest FCC information. Because of the very long turn-around time for a slick paper magazine (months) the FCC information on calls, facility changes and the like are pretty much outdated by the time it reaches the reader. We checked on some of the AM facility change applications listed in the June 1993 PopCom column as an illustration. The WVNE-760 application for power increase shown this month was listed in AM Switch in the DX News you received on 10/12/92, EIGHT months ago! The newest piece of info in this particular PopCom section was delivered to your mailbox in the DX News on 2/8/93 so the newest information is over four months old. We are not knocking PopCom or their BCB column, it serves a different purpose for readers with a casual interest in broadcasting. If you are a "hard core" AM DXer and need to get your FCC and DX information as fast as possible and 30 times a year you should rely on your membership in the NRC.

73 and Good DX, *Jerry & BKF* Jerry Starr & Buffalo K. Foonman

Domestic DX Digest

North: Bill Hale

495 Creekview Drive - Meridian, ID 83642-3241

South: Duncan Shaw

2618 Ellendale Place, #3 - Los Angeles, CA 90007

East: Dave Braun

11 Mill Bend Acres - Wyoming, DE 19934-9523



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

DDXD-North



MEDIUM WAVE RAMBLINGS



- Thanks to **John Baumgarten**, **Shawn Axelrod** and **Morris Sorensen** for sharing their DX this time. And to **Ron Bailey** and **J.W. Bay, Jr.** and **Morris** for their Graveyard updates. Otherwise this column wouldn't have been submitted.
 - Here are the deadlines for DDXD-N for the remaining issues in Volume 60. Not many to go!
- | | | | | | |
|----------|-------|--------|----------|-------|-------|
| Issue 28 | | Jul 10 | Issue 29 | | Aug 7 |
| Issue 30 | | Sep 4 | | | |

SPECIAL

- 680 CFTR ON Toronto - 6/7 1842-1900 - First day of all-news format after over 20 years as CHR. Continuous news, weather, sports, etc with non-IDs as 680 News and Toronto mentions. *This is 680 News, your news centre, serving the Greater Metro area.* (MS-ON)
- 1480 WZRC NY New York - Read on FidoNet . . . that this guy has changed from Z-Rock to satellite C&W, with an impending change to Korean programming right around the corner. Also, watch AM Switch for a CL change. [Ed.]

MIDNIGHT TO 0800 HOURS ELT

- 1150 CKOC ON Hamilton - 5/16 0500 - Good with Oldies 1150 non-IDs, local ads ⇒ *Oldies Coast-to-Coast.* (SA-MB)
- 1260 WIBV IL Belleville - 5/18 0700-0705 - Fair with CLs and news item from neighboring O'Fallon, Illinois. (JB-WI)
- 1340 KANR ID Nampa - 5/13 0645 - Fair with News anytime, anywhere on KANR - All News Radio 1340. New. (SA-MB) [My local 1340 pest, with their tower 5 miles due south! - Ed.]
- 1380 KLIZ MN Brainerd - 5/28 0655 - CIs and ads for businesses in Brainerd. Good signal, but disappeared when KAGE went to full power. (JB-WI)
- 1540 WSMI IL Litchfield - 5/25 0728-0730 - Farm news and could just barely hear CLs under KXEL. (JB-WI)



0800 TO 1600 HOURS ELT

- 620 CKCK SK Regina - 5/23 1532 - Excellent with oldies, IDs as All Oldies all the time, CK Sixty-Two. Carries Oldies Coast-to-Coast at night. (SA-SR)

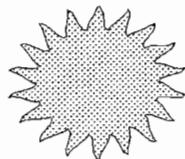
The Challenging Crystal Set

For hobbyists demanding the ultimate DX challenge, Ray Cole's publication detailing step-by-step procedures in building a crystal set is for you! Only \$3.50 .. order from NRC Publications. (NY residents, add sales tax)

\$1.00 OFF

For a limited time receive a dollar off the NRC's Loop Antenna Design and Theory or Beverage & Long Wire Design and Theory with this coupon only!
Order Loop-\$6.95 or Beverage-\$4.95 Both for \$11.90
(mention this offer or clip this coupon)

National Radio Club Publications Center
PO Box 164
Manassas, NY 13661-0164
OFFER GOOD THROUGH SEPT 1, 1993



**HOT
SUMMER
SALE**

DDXD-East

NEWS AND VIEWS

Welcome for the first time to Jim Weber of Alexandria, Virginia. Hope to hear from you often, Jim.

Jeff Kitzke mentions that he got a QSL for KLEE-1480 on 500 watts. I believe that was on the DX test this past winter. Bob Gilfert received veries from CFRB-1010 and WTAR-790 in 8 days, and WHAS-840 in 4 days. Congrats guys! Bob also mentions that he has obtained both a Hallicrafters S-40A and a Hammarlund HQ-129-X in the last two weeks.

Mike Hardester concludes (we think) the saga of WWOE, and mentions that he is facing retirement in a little over 100 days, back surgery and trying to find a job after retirement. All of that leads to a drop on the priority list for DX related matters. Hope all works out for you Mike! Drop a line when you can.

This is everything received through June 15. Upcoming deadlines are July 10, August 7 and September 4. Try to mail your logs at least three days before the deadline and they are sure to get in the next available column.

SPECIAL

1120 WUST DC Washington - Noted at various times with SS and FF programs. Per article in 6/8 Washington Post is now ethnic Monday-Friday with GOS/REL on weekends. (BG-DC)

1150 WMET MD Gaithersburg - New phone and address are: (301) 417-9600, and 2401 Research Boulevard, Suite 203, Rockville, MD 20850. (BG-DC)

CKOC ON Hamilton - 5/8 0003 - Mixing with WDEL, WDEL mostly on top, with oldies and "CKOC" IDs. Original Ontario Canada pioneer calls restored, ex-CKMO. (JK-VA)

1350 WSVY VA Portsmouth - 5/19 1800 - ID as "WSVY AM and FM, Portsmouth, Windsor(?), Norfolk, where the V stands for variety". Ex-WBSK. (DB-DE)

1360 WHLP MD Baltimore - 4/30 2215 - Tentative, new here, with NOS/BBD and mentions of Baltimore over WSAI. (JK-VA)

WHLP MD Baltimore - Dumped want ads, format now BBD/NOS. (BG-DC)

1450 WOL DC Washington - 5/24 & 5/31 0000+ - Noted on air //102.3 FM during MM SP shown in log. (BG-DC)

1480 WZRC NY New York - Now CW, ex-ROK, during the summer station will be leasing time for Korean programming. From local newspaper report. (ES-NJ)

WZRC NY New York - 5/27 2050 - Noted with ID and CW, ex-Z-Rock. (DB-DE)

1520 WINW OH Canton - 4/30 2200+ - In good mostly over WWKB with NOS and "1520 AM WINW". Same format as WFBL. I thought this was a daytimer? Their 1 KW louder than someone else's 50 KW, which sounded horrible in weak distorted Spanish! New. (JK-VA)

1580 WWOE NC Camp Lejeune - 1 checked 5/16, nothing, 5/17 nothing, 5/18 0700 nothing, then 5/18 1600+ they were noted on with regular programming. (MH-NC)

UNID AND UNID HELP

1020 UNID 2/13 2112 - CW under KDKA from Issue 20, the time was erroneously listed as 0912, so WRIX would have been off the air, KCKN? (JK-VA)

1340/1400 UNID Yankee baseball UNIDs on 1340 and 1400 are undoubtedly WYCK-1340 and WICK-1400, Wilkes-Barre and Scranton respectively. WYCK-1340 simulcasts WICK full time and has EZL in non baseball times. 1340 is only about a half mile from my QTH and has a game on now, the evening of 6/6. (HJH-PA) (Thanks for the help, Harry! - db)

1480 UNID 6/6 2320 - Someone noted with ESPN Sports Network. (DB-DE)

1600 UNID Laurence Kearley's UNID on 1600 in French (Halifax Bandscan) is definitely WUNR-Brookline, MA. Program is for metro Boston's Haitian community. (MC-MA)

0000 to 0800 ELT

550 WKRC OH Cincinnati - 5/24 0215 - Sports calls taken, "WKRC News Radio 55". (ES-NJ) (I thought this changed calls to WLWA? - db)

620 WDNC NC Durham - 5/24 0250 - Local ads, "Radio 620 WDNC" into Best of Bohannon. (ES-NJ)

CJER 90 am CISA 123 am CKSJ 140 am
ST-JÉRÔME STE-AGATHE ST-JOVITE

783 rue Labelle, Saint-Jérôme (Québec) J7Z 5M4

- 750 CJWW SK Saskatoon - 5/23 1509 - Good with Country 7-50 CJWW → modern C&W music. (SA-SR)
- 1220 CJRB MB Boissevain - 5/23 1506 - Good with classical music program. (SA-SR)
- 1240 KSUB CA Susanville - 5/17 0910 - In, very poorly, for about 30 seconds over GY hassle with . . . degrees at the airport. I'm ??? ???. KSUE News. Must have been the end of a local news report. While looking for an absent KLVJ, whose AM didn't make it on today. [Ed.-ID]
- CJAR MB The Pas - 5/23 1502 - Fair with weather and news into a mix of old and new rock 'n' roll. IDs as CJ-1240 and CFAR 590. Weaker than CFAR 590. (SA-SR)
- 1300 CJME SK Regina - 5/23 1521 - Good with Classic Gold and Great Oldies CJME into oldies. (SA-SR)

1600 TO 2400 HOURS ELT

- 590 CFAR MB Flin Flon - 5/22 2244 - Good with CFAR-590, CJAR-1240 ID ⇒ ROK music. (SA-SR)
- 600 CFQC SK Saskatoon - 5/22 2135 - Excellent with a mix of old and new rock music. New slogan as Hits - Six Hundred. (SA-SR)
- 970 KQAQ MN Austin - 5/29 1925-1935 - Over WHA, which is unusual, with ESPN Sports program. Must simulcast with KWEB Rochester, as both were mentioned during station break. (JB-WI)
- 1200 WCHB MI Taylor - 5/31 2002 - Fair with network ads, promo for The Issues, weeknights at ??? on AM 1200 WCHB - Newstalk Radio. Detroit mention into Talknet with Bruce Williams. (MS-ON)
- 1240 WIBU WI Poynette - 5/29 2110-2115 - Good signal with polka music. Regular here days, but very seldom nights. (JB-WI)
- 1360 WKMI MI Kalamazoo - 5/31 2054 - Poor, but on top briefly with man saying . . . for more information, contact WKMI, then faded back into mess. (MS-ON)
- 1580 WPGC MD Morningside - 5/31 1958 - Good with ad for a Colorado address, another for Unitel Cellular and ID as WPGC-AM Morningside-Washington. (MS-ON)

REPORTERS

- SA-MB Shawn Axelrod Winnipeg, MB; ICOM R-70 + 4' box loop
- SA-SR Shawn Axelrod Swan River, MB; 1992 Dodge car radio w/whip
- JB-WI John Baumgarten Tomah, WI; Superadios II or III
- MS-ON Morris Sorensen Scarborough, ON; borrowed Kenwood R-5000 + McKay-Dymek ferrite loop
- Ed.-ID Editor Meridian, ID; Delco AMS/FM\$ ETR

GRAVEYARD DX UPDATE



New Distance Records:
1400:
WFTG KY London Ron Bailey Shelby, NC 191

1490:
WANA AL Anniston Ron Bailey Shelby, NC 256

Totals:	1230	1240	1340	1400	1450	1490	Total
RON BAILEY Shelby, NC	11	21	18	5	11	17	83
MORRIS SORENSEN Scarborough, ON	2	9	2	7	6	7	33
J.W. BAY, Jr. Drexel Hill, PA	30	-	-	-	-	-	30

73, Bell



The highlights of the 1992 NRC Convention at Omaha are available on four C-90 cassette tapes in a convenient carrying/storage case for \$9.50. Order your set now from NRC Publications. New York residents, please add sales tax.

680 WCNN GA North Atlanta - 5/16 0100-0115 - Good over UNID SS and tentative WPTF with *CNN Headline News*. "This is AM 6-80 WCNN" ID at 0110. Too bad it disappeared during 40 foot walk from car to house. (BG-DC)

850 WKIX NC Raleigh - 5/16 0118+ - Poor under WRMR. (BG-DC)

930 WIZR NY Johnstown - 6/7 0000 - Poor, caught "WIZR Johnstown" in partial null of WFMD. Went into UNID news and gone by 0002. Log says 28 watts. (BG-DC)

1290 CJBK ON London - 5/29 0145 - Poor with oldies. (BG-DC)

1310 WSSJ NJ Camden - 6/9 0002+ - Poor under WDCT sign off with call letter ID. (BG-DC)

1350 WSLR OH Akron - 5/20 0016+ - Poor with CW music. Taking a real beating from WYCB-1340 splash. (BG-DC)

1430 WNJR NJ Newark - 5/19 0330+ - Good, way over CJCL with SS REL. "WNJR Newark" ID at 0404. (BG-DC)

1470 WMMW CT Meriden - 0020+ - Very good with *Stardust* satellite feed. No sign of CHOW tonight. (BG-DC)

1570 CKLMt PQ Laval - 5/19 0200 - FF talk briefly over CFOR and a tentative XERF. Gone before 0201. (BG-DC)

1580 WPGC MD Morningside - 5/24 0245 - Calls taken on *Business Radio Network*. (ES-NJ)

1590 WKTP TN Jonesboro - 5/19 0300+ - Fair under WAKR with WJRO sneaking in every now and then. (BG-DC)

1600 TO 2400 ELT

540 WGTO FL Cypress Gardens - 5/15 2326 - In way over "54 Rock" with ESPN sports. Semi-aural conditions. (JK-VA)

560 WQAM FL Miami - 5/15 2323 - In strong with *Kaplan's Sports Call in Show*, "560 WQAM". (JK-VA)

620 WSUN FL St. Petersburg - 5/15 2332 - Loud, mixing with Cuba, with "Educating talk radio for the 90's, 620 WSUN". (JK-VA)

680 WCNN GA North Atlanta - 5/15 2241 - Wiping out semi-local WPTF with CNN News and "WCNN" IDs. (JK-VA)

730 WACE MA Chicopee - 6/7 1935 - Spanish REL programming. (ES-NJ)

800 WTMR NJ Camden - 6/7 2015 - End of *Voice of Hope* program. "WTMR, the station where the Master reigns." "Gospel 800, WTMR Camden New Jersey." (ES-NJ)

970 WFUN OH Ashtabula - 5/6 2025 - *Night Tracks* program, music, sports, weather in WWDJ null, AC format. (ES-NJ)

980 WTRY NY Troy - 5/9 2230 - Over WWRC and an UNID CW with "Yesterday's oldies and today's hits, 98-TRY". It is very unusual to get them on their night pattern. (JK-VA)

1040 WYFX FL Boynton Beach - 5/14 2121 - Fair/good, over WHO, with the usual UC and "Foxy 10-40" IDs, lost later to WHO. (JK-VA)

1070 CBA NB Moncton - 5/7 2005 - End of BBC news, then "This is CBC Moncton, AM and FM". (ES-NJ) (Was it BBC news or CBC news? - db)

1140 WVEL IL Pekin - 5/14 2136 - Fair with REL music and "WVEL" IDs. On pretty late, mostly over WRVA/CJTR. (JK-VA)

1150 WCNX CT Middletown - 5/17 1955 - Local ads, "News Talk 1150 WCNX". (ES-NJ)

1190 WLBB NY New York - 6/7 1945 - Noted every evening with reggae, calypso and West Indian programming. (ES-NJ)

1220 WXCT CT Hamden - 5/17 1950 - With *Boston Red Sox Radio Network* in Spanish. (ES-NJ)

1230 WERI RI Westerly - 5/7 1945 - Ads into Red Sox baseball with "Boston Red Sox Radio Network". (ES-NJ)

WERI RI Westerly - 6/7 2000 - NBC Radio News into local news, ID. (ES-NJ)

1250 WMTR NJ Morristown - 6/7 1950 - "1250 the new WMTR, the station for great songs and great memories", NOS. (ES-NJ)

1280 WADO NY New York - 5/3 2346 - Real loud with SS programming and "WADO" IDs. (JK-VA)

1290 WHIO OH Dayton - 5/7 2357 - Good, some WADO splash, with "1290 WHIO, depend on it". (JK-VA)

1320 WLEE VA Richmond - 6/2 1924 - Huge mess, heard female say "here on WLEE". May have gone into *Barry Farber Show*, but mess was too big to be sure who was who. (BG-DC)

1340 WMID NJ Atlantic City - 6/7 2005 - "South Jersey's winningest bet with music all morning and talk all night", into Bruce Williams phone in show. (ES-NJ)

1350 WSLR OH Akron - 5/7 2316 - Very loud with CW and "Whistler 1350 WSLR" IDs. Better signal than 3WE or WKNR! (JK-VA)

WFLS VA Fredericksburg - 5/19 2340 - Poor with partial SID "...1350 WFLS", caller on air with song request then lost to UNID GOS/REL. Lotsa WYCB QRM. (BG-DC)

1360 WSAI OH Cincinnati - 5/7 2305 - In with *Sports Byline USA*, "WSAI" IDs. (JK-VA)

1370 WXXI NY Rochester - 5/7 2256 - Fair, mostly on top of WSPD, with *Blues Music*. (JK-VA)

WSPD OH Toledo - 5/7 2314 - In with Cleveland Indians baseball on "1370 WSPD". (JK-VA)

1380 CKPC ON Brantford - 5/7 2317 - Mostly on top of the channel with Canadian newscast, 25 KW CP on? (JK-VA)

1390 WRIV NY Riverhead - 5/17 1945 - Program promos, "1390 WRIV your original hometown station", old standards. (ES-NJ)

WFBL NY Syracuse - 5/7 2257 - Fair/good with NOS and "Playing the music of your life, first in Syracuse, AM Stereo 1390, WFBL". (JK-VA)

1410 WPOP CT Hartford - 4/20 2215 - Good on top of KQV with "News radio 1410 WPOP", weather. In quite late for them. (JK-VA)

1440 WMAX MI Bay City - 5/7 2251 - A big surprise for MI #5 in VA, with "1440 The Max" and Newstalk programming. In the clear. (JK-VA)

1460 CJOY ON Guelph - 5/7 2205 - Strong with "CJOY Good Time Oldies", new in VA! (JK-VA)

1470 WXKW PA Allentown - 5/27 1958-2016 - Good with CW music, several call letter IDs and ad for *Radio Shack*. No sign of usually dominant CHOW. (BG-DC)

WZGOt PA Portage - 6/2 2115 - (or is it WHYM now?) Poor with Pirates baseball under UNID open carrier and mixing with WITR/WXKW/WMMW. No ID heard but is only 1470 on Pirates list. (BG-DC)

1480 WZRC NY New York - 5/19 2238+ - Poor with *Z-Rock* under UNID with *Radio Free America*. (BG-DC)

1520 WKZQ SC Myrtle Beach - 5/10 2044 - Loud over WWKB with "WKZQ, your official concert station". (JK-VA)

WVOI OH Toledo - 5/7 2318 - Mostly on top of WWKB with UC music. (JK-VA)

KOMA OK Oklahoma City - 4/30 2247 - In briefly with oldies music and "K-OMA" IDs over/under WINW and weak WWKB. New in VA. (JK-VA)

1540 CHIN ON Toronto - 6/2 2330 - ID at slightly past 2330 "CHIN Toronto". WMDO usually dominant into early evening, drops in power irregularly during this time. (JW-VA) (The Log doesn't show any evening power for WMDO. Can someone check into this? - db)

1550 WYNX GA Smyrna - 5/10 1955 - "Light 1550 WYNX", metro Atlanta weather. One of my toughest non-verifiers. (ES-NJ)

WARD PA Pittston - 6/2 2300 - With Red Barons game. (JW-VA)

1590 WKTP TN Jonesboro - 5/7 2325 - Strong with "WKTP (WKPT?) always the best mix of easy favorites". (JK-VA) (Jeff, they relay WKTP-1400, Kingsport, TN - db)

1600 WIDU NC Fayetteville - 4/30 2135 - Pretty loud for 25 watts, "WIDU" IDs and GOS/REL/UC programming. (JK-VA)

WBBD WV Wheeling - 5/7 2328 - Good for 33 watts with NOS music. WWRL in background. (JK-VA)

OTHER STUFF

530 WNVY508 MD ??? - 5/30 1829 - Recorded roadwork updates, run by Maryland Highway Administration. (BG-DC)

1620 WRMR NY Monticello - 5/15 2000+ - Good, loud at times, with classic rock/AC/CHR, "1620 WRMR" IDs, address given every 10 minutes or so: WRMR, P.O. Box 402, Glen Oak(?), New York, 11004(?). No phone number this time. From the signal level, I would say that the power is in the range of 1-5 KW. At least there was a music alternative to WOWO this evening. They sure were getting out good! (JK-VA)

REPORTERS

MC-MA Mark Connelly, Billerica, MA:
 BG-DC Bob Gilfert, Washington, DC: DX-440, S-40A, Hyundai H-510
 MH-NC Mike Hardester, Jacksonville, NC:
 HJH-PA Harry Hayes, Wilkes-Barre, PA:
 JK-VA Jeff Kitz, Boynton, VA: Panasonic RQ-V52 AM/FM Walkman
 ES-NJ Elliot Straus, Toms River, NJ: R-390A, Quantum Loop, LW's, MFJ-959B
 JW-VA Jim Weber, Alexandria, VA: FRG-7, ICF-2010, Radio West Loop (Jim sent one of the best looking postcards I have received...all Hershey's candy bars!)
 DB-DE Dave Braun, Wyoming, DE: R-2000, Palomar Loop



DDXD-South

OK, OK... this should just about clean out the DDXD-5 for now. Some of these logs may be "ancient history", but it will hopefully harken days of good DX whilst you hear summer static on the rig. I took a trip out to the beautiful islands of Hawaii last month. Not much serious DXing done, just picked up a lot of island stations. Next time I go (if ever again), I'll have to set up some beverages outside the hotel window, hi. But thanks to my "splurge", no trips to either DX convention for ME this year.

Yes, you CAN send loggings via electronic mail via the Internet to dshaw@aludra.usc.edu. Or by fax to (213) 740-1859. Or by phone to (213) 740-1487.

SPECIAL, SPECIAL, READ ALL ABOUT IT!

- 550 KUSA MO St. Louis - As of 3/15, drops Classic C&W for CNN Headline News. AM 550 KUSA ID's. (EB-MO)
- 590 KEZK IL Wood River - All sports as of 4/5, *All Sports Radio* AM 590 IDs, drops soft AC // -FM (EB-MO)
- 790 KNST AZ Tucson - 5/3 2228 Officially logged this half of the KNST/KWFM frequency swap. Fair, generally over the QRM with Toros vs. Sky Box baseball, local ads, frequent call ID's. (0W-CO)
- 860 WLBG SC Laurens - 4/25 1600 noted simulcasting with WPCC-1410 (RB-NC)
- 1230 KPCC CO Pueblo - 4/19 1010 Noted w/BRN program. ID: *KPCC Pueblo Community College* at 1030. Definitely on the air w/ new format. (WH-CO1)
- 1370 KTMG CO Deer Trail - 5/4 2000 First noted back on the air on this after several months/years' silence. Still using C&W format; daytimer here. (0W-CO)
- 1380 KASP MO St. Louis - Now CHR //WKBO-106.5 Granite City, IL; *The New Q-106.5* ID's; dropped all sports on 2/22 (EB-MO)
- 1460 WPCC SC Clinton - see 860 WLBG above
- 1660 "KDAB" NV Las Vegas - 4/18 0130 And other nights. Signal weak but at times readable with rock music and IDing as *KDAB testing digital audio broadcasts*. (TR-SC)

TIS/TAR/ETC

- 1580 TIS NC Charlotte - 5/1 1800 Operated by NC DOT. ... *In the event of a major delay along route 85, you will be advised of traffic information including estimated delays and suggested detours*. (RB-NC)

TESTING 1-2-3

- 680 KNBR CA San Francisco - 5/10 0430 Noted testing - running a wide range of sweep tones (MS-CA)
- 790 WLKW RI Providence - 3/29 0000-0015 not heard, only WMRZ and KKBQ (DT-JA)
- 940 WECO TN Wartburg - 3/27 0000-0030 only very strong WINZ and weak R. Reloj, Cuba. (DT-JA)

0000 TO 0800 HOURS ELT

- 540 WYLO WI Jackson - 5/10 0200 in and out, disclaimer for preceding religious program, then brief sign-off w/ Lord's Prayer. (DS-TN)
- 790 KKBQ TX Houston - 3/29 0008-0030 C&W, local ads, ID: *Our call letters are KKBQ, 92.9*, poor to fair o/u WTAR, WMBZ (while looking for WLKW test) (DT-JA)
- KGHL MT Billings - 4/25 0625 Logged during KABC silent period. QRM from KOQO and tentative XESU. ID: *AM 790 KGHL*. Wx promos and C&W music by Lori Morgan and Garth Brooks. (MS-CA)
- 800 CKLW ON Windsor - 3/11 0235 fair with PJB/others in XEROX null with talk (EB-MO)
- 910 WALT MS Meridian - 3/11 0251 fair with intermittent \$ with KVIS with UC (EB-MO)
- 920 WGNU IL Granite Bay - 5/10 0145 good with NOS. *We have music for your every mood on WGNU* call ID. (DS-TN)
- 940 WFAW WI Ft. Atkinson - 5/10 0006 well atop the channel with 15A for Wisconsin Safety Patrols, wx, *AM-940 time is 6 minutes after 11:00*, back to Jim Bohannon. Tom Bryant has also heard this late at night; are they forgetting; to switch patterns, or does their night pattern favor the south? (DS-TN)
- 1290 WIRL IL Peoria - 5/16 2052 way atop with Spiegel's ad at Peopria Civic Center, two sung ID's, wx, and OLD. (DS-TN)
- 1340 KCAPT MT Helena - 5/1 0516 Local spots, jingle, lite OLD music in and out of QRM. Tentative log pending reception of verie. (0W-CO)

- 1370 KXTL MT Butte - 5/10 0327 In KWRM null w/ID: *AM 1370 KXTL*, spot for book and *Gold Bond* then Bruce Williams' "Talknet". (MS-CA)
- 1380 WAOK GA Atlanta - 5/10 0023 in mess with church ad with several Atlanta mentions, very slow *W...A...O...K...* call ID, into Urban/AC music. (DS-TN)
- 1440 KVON CA Napa - 4/17 0142 Loud with spot mentioning *...serving Napa for 18 years!* Talknet, ID, then NBC News (really? I thought KVON was Ae/Mutual! -djs). Fast verie back on this one! (MS-CA)
- 1450 WJPA PA Washington - 4/27 0707 Ad for *Daffy's Restaurant*. *...You'll be happy when you go to Daffy's!* Then sports with lots of talk about Pittsburgh teams (Penguins, etc.) (RB-NC)
- 1460 WFMH AL Cullman - 4/24 0715 North AL wx (20-30 mph winds), ad for *Ace Hardware* under WBNS's OLD and WBCU's C&W. (RB-NC)
- 1470 WTKO NY Ithica - 5/1 0700 CBS News, ad for *Sherwin Williams*, then talk about just having the wettest April ever in Ithica. (RB-NC)
- WMBD IL Peoria - 5/16 2100 xlnr in satellite sports program, interrupted mid-sentence for ad from *Bower Furniture* in Washington & a Legal ID. Pipeline to Peoria this evening! (DS-TN)
- 1590 KCIN CA Victorville - 4/26 0300 Spot for *Golf Digest*. ID: *KCIN Victorville - Apple Valley - Hesperia*. Unistar news followed by *Army National Guard* spot.

0800 TO 1600 HOURS ELT

- 960 KZXY CA Apple Valley - 4/25 1305 Simulcast ID: *The High Desert's new Kix 106!* (KIXA-FM and KIXW-FM). Phone number is (800) 457-6647. AM call letters have not changed.
- 1490 KXREt CO Manitou Springs - 4/19 1250-1325 Non stop heavy metal music (ala "Z-Rock"). No announcements and no ID's. They faded at Monument Hill and KBOL Boulder took the frequency. So even on the analog radio I know I was on the right frequency. So this apparently looks like it will be back on soon. (WH-CO2)

1600 TO 2400 HOURS ELT

- 560 WIND IL Chicago - 3/18 1730 fair over KWTO with KUSA splash (minimized since switch to all-news) with Spanish AC, local ads and PSAs in SS (EB-MO)
- 710 WAQI FL Miami - 4/13 2113-2130 SS talk show, local ads mentioning FL cities, ID in EE at 2130 WAQI, Miami and in SS as *Radio Miambi*. Fair, int. from unID Cuban. (DT-JA)
- 730 WARB LA Covington - 4/14 2100-2230 MBS Talk shows w/Dr. Goldstein, partial ID at 2100 *Every Tuesday... on WARB*. Poor, int. from R. Cadena, Cuba (DT-JA)
- 1140 WQBA FL Miami - 3/18 2141-2150 SS talk show, local ads for *Gateway Monument, Shelfore Heights Real Estate*. Fair. (DT-JA)
- KXNO NV Las Vegas - 5/14 2249 ID: *You're listening to Casino Radio*. Fighting KCMJ & KIIS splash over. Ex-KLUC, KRSR, KMJJ (MS-CA)
- 1270 WNOG FL Naples - 3/24 1945-2009 News, ad for usedcars, News at 2000, ad for *Red Cross*, talk show, poor with int. from R. Reloj, Cuba. (DT-JA)
- 1300 WFFG FL Marathon - 3/25 2037-2044 C&W, ID WFFG - *great country and sports, news on the hour, and daily fishing reports* and WFFG *Keys Country 1300 AM*. Fair to poor, int. from unID SS (DT-JA)
- 1360 WKAT FL North Miami - 3/27 2051-2127 SS music and talk to 2100; then "Alouette" and woman announcer with FF accent. Poor, int with unID REL. (DT-JA)
- 1380 WRBQ FL Tampa - 3/27 2210-2217 UC or Old Rock; *Tampa Bay's 138, the Touch*. Good, no int. (DT-JA)
- 1400 WFTL FL Fort Lauderdale - 3/28 2350-0000 Talk show on consumer affairs, ID at 0000 as 1400, *WFTL...* poor, int from WIRA and unID REL (DT-JA)
- 1410 WDOV DE Dover - 4/24 1924-1950 Ad for *Melvin's Sunocco* then music by Ella Fitzgerald in celebration of her birthday. Two versions of "Mack the Knife" and "Summertime" sung with Louis Armstrong. '92 NRC Log lists some guy named Schmidt as CE, hi! (RB-NC) (Never heard of him! -djs)
- 1450 WOCN FL Miami Beach - 4/6 2136-2146 Talk show, ID at 2146 *WOCN Miami Beach*, poor, int. from unID (DT-JA)
- WLKS KY West Liberty - 4/27 2352 Sales pitch for *Petigreed baby chicks \$15.95 per hundred - NO LEGHORNS!* (RB-NC)
- 1480 WZJY SC Mount Pleasant - 4/7 2131-2208 GOS, promo for contest, ID at 2200 *You're listening to 1000 watts of power on 1480, this is WZJY, Mount Pleasant, South Carolina*. Poor, int. from unID with talk show (supposed to be 880/44, CH 250?) (DT-JA)

1490 WDSL FL Port St. Lucie - 4/9 2039-2100 pbp spring training baseball, partial call ID, poor, int. unID SS and talk show. (DT-JA)

REPORTERS

(MS-CA) Mike Sanburn; Bellflower, CA; GE Superadio II & III
 (WH-CO) Wayne Heinen; Aurora, CO;
 (WH-CO1) Visiting Penrose, CO with Pontiac Car Radio
 (WH-CO2) Driving through Colorado Springs w/Car Radio
 (OW-CO) John Wilkins; Wheatridge, CO; Drake R-8 & 4' Box Loop
 (DT-JA) Don Trelford; St. Anns Bay, Jamaica;
 (EB-MO) Eric Bueneman, N0UIH; Hazelwood, MO; DX-200, DX-400, TM-152, STA-90, SM-2
 (RB-NC) Ron Bailey, AA4S; Shelby, NC; ICOM IC-765 & seven beverages
 (TR-SC) Todd Roberts, WD4NGG; Hilton Head Island, SC;
 (DS-TN) Doug Smith, W9W1; Nashville, TN;

New Rule Boosts Radio

The Winchester Star
 -via Perry F. Crabill, Jr.

FCC Allowing More Consolidation of Industry

RICHMOND (AP) — The radio industry, buffeted by a decade of economic woes, is singing a different tune as new ownership rules energize the industry.

The National Association of Broadcasters says more than half of all radio stations lost money in 1991. Of the 11,000 radio stations in the United States, nearly 300 are silent.

In an effort to return profit to the business, the Federal Communications Commission adopted the "duopoly ruling" last summer.

Under duopoly, a company may own two AM and two FM stations in a single market, as long as the combined ratings of the stations don't exceed 25 percent of the area's listener market.

Previously, owners could control up to 12 AM and 12 FM stations nationwide, but none could have overlapping signals.

Stuart B. Bedell, assistant chief of audio services for the FCC in Washington, said the agency has received between 225 and 250 applications under the new rule.

Although it's too early to assess the program's success, initial reports indicate the rule is working. The radio industry has seen a flurry of activity this spring as stations buy competitors and cut costs by consolidating operations under one roof.

Clear Channel Communications Inc. owns Richmond stations WRVA-AM and WRVQ-FM and is trying to add WRXL-FM, WRNL-AM and the Virginia News Network to its corporate family. Together, the stations claim 24.7 percent of the Richmond area's radio market.

Mark P. Mays, senior vice president of operations for Clear Channel, said his company also is pursuing duopolies in San Antonio; Austin, Texas; New Haven, Conn.; and New Orleans.

Benchmark Communications of Baltimore, which owns WVG0-FM in Richmond, acquired another Richmond station, WDCK-FM, on April 6. WVG0's general manager, John L. Crowley, has taken over as

"The industry got overly fragmented."

—William W. Jaeger
 Sconnix Broadcasting
 Co. in Vienna

general manager of WDCK and plans are in the works to combine sales and administrative employees under one roof.

Benchmark, which recently acquired WKOC-FM in Moyock, N.C., also is awaiting final FCC approval of a plan to add Norfolk stations WTAR-AM/WLTY-FM to its holdings.

Another Richmond station, WKHK-FM, owned by ABS Communications Inc., completed a merger in March with WSVS-AM/FM, a 100,000-watt station in Crewe with an overlapping signal.

Station owners say the trouble began in the 1980s, when the FCC adopted policies that prompted a surge in the number of radio stations. The infusion of new signals split up the revenue. Stations that had been making money found themselves making less. And those that were barely making ends meet found themselves in deep trouble.

Between 1985 and 1990, the growth rate of radio revenues dropped nearly in half to an average of 6 percent, the FCC said. Operating profits also fell dramatically, and radio's share of local advertising dollars remained flat.

"The industry got overly fragmented," said William W. Jaeger, vice president of finance for Sconnix Broadcasting Co. in Vienna.

Sconnix owns 10 stations in six different markets. Jaeger believes duopoly is a positive move for the industry and his company plans to take advantage of the ruling in Kansas City, Mo., where it owns KF KP-FM, and in Davenport, Iowa, where it owns WLLR-AM/FM.

"When you control two stations in a market, there is a significant cost saving by operating them together," he said. "With this ability to have some consolidation,

you're going to get stronger radio stations and stations that can better serve the public interest because they're not worried about whether they'll be around next week."

Not everyone is happy with consolidation, namely the employees who are laid off because of job duplication.

But more would join the unemployment lines if stations went bankrupt, said J.T. Anderton, editor of Radio Business Report, a Washington-based trade publication.

"I see two choices," Anderton said. "Either more stations are going off the air, or there's going to be some consolidation."



The NRCAM Radio Log, 13th Edition, is the most accurate AM radio listing of stations in the U. S. and Canada. Only \$16.95; Canada \$17.95 to U. S./Canadian NRC Subscribers ONLY. \$19.95 to U. S., Non-NRC Subscriber; \$20.95 Canadian Non-NRC Subscriber. Airmail: to Europe, \$27.00, to the Pacific nations, \$32.00.

Mail to: NRC Publications
 Box 164 - Mannsville, NY 13661
 (NY residents add sales tax).

International DX Digest

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

The most fascinating part of this month's column is Ray Moore's analysis of TP chances from Florida. Thank you, Ray, for sharing this very interesting information.

In addition to his Holy Week loggings (when many local stations are off the air), César Objío reports that two Dominican stations are back on the air. Thank you, César, for sending your comments on all my loggings from the Dominican Republic.

Bob Gilfert has some hot news about Turks and Caicos. Welcome to Richard Harrison (his membership application is in the mail) joining his brother Charles with a TA log from Cape Cod.

Mark Connelly sent his most recent loggings on 5.25" disk. Thank you for helping me save time. A reminder that all are encouraged to send extensive loggings in ASCII text on 5.25 disks, which I will return to you on request. I do not have the ability to read 3.5" disks at this time.

TRANS-ATLANTIC DX

612 MOROCCO Sebaa-Aioun, May 27 0050 - Very good with Arabic vocal. [MC-MA]

639 SPAIN La Coruna (et al.), May 27 0052 - Good with man & woman in Spanish. [MC-MA]

684 SPAIN Sevilla, May 27 0054 - Bits of Spanish talk in extremely heavy WRKO-680 slop. [MC*ME]

891t ALGERIA Algiers 5/25 0200 - Strong het. 5/26 0105 - Arabic music, badly broken up. Only fools are positive. I am reasonably sure Algiers was heard. [CCH,RNH*MA]

891 ALGERIA / ?, May 27 0100 - Arabic battling second station, probably Portugal. SAH present. [MC*ME]

990 ENGLAND BBC R. Devon, Exeter, 4/17 2257-2305 - Pop song, pips and news at 2300, was // 1548 throughout. Briefly dominant over Spain. SIO 232. [JB-NF]

1017 UNID (Spain suspected per band conditions at the time), 5/27 0113 - Carrier almost as strong as YVRS/KDKA-1020; WBZ-1030 splash ruled out audio reception. [MC*ME]

1035 ENGLAND BBC R. Kent, Hoo, 5/7 0016-0029 - Many experts discussing the results of the Kent

Jim Renfrew
 61 Wilcox Street
 Rochester, NY 14607-3832

County Council elections. Messy with other Brits QRMing, but usual Portuguese QRM almost nonexistent due to a welcome combination of unusual propagation and antenna direction/location. SIO 222. I was very glad to get this as I've read somewhere that this transmitter may be off pretty soon. [JB-NF]

1035 SCOTLAND North Sound R., Aberdeen, 5/7 0001-0202 (not continuously monitored) - News and weather followed by jingle ID, mainly oldies. At 0201 faded up nicely with weather from the "Scottish Night Network", which is the program (from R. Clyde) that North Sound carried overnight. QRM was from Kent and 1 or 2 other Brits. [JB-NF]

1044 MOROCCO Sebaa-Aioun, May 27 0107: Arabic-sounding talk. [MC*ME]

1053 ENGLAND BBC Radio 1 synchros, 5/18 2302-2305* - Radio 1 jingles and repeating canned announcement saying to retune to FM as Radio 1 is "no longer broadcasting overnight on MW", to return at 6 am Brit local time. [JB-NF]

1071 SPAIN R. Euzkadi Irratia, Bilbao, 5/23 2307-2310 - Rock music, woman DJ in Basque // 1161. Interesting that the QRM was // too, both over France-Inter. SIO 333. [JB-NF]

1098 SLOVAKIA R. Bratislava, Nitra-Jarok, 5/6 2330-2334 - Pips, Slovak TC, piano music, nice "Radio Bratislava ID by woman at 2331. Initially quite clear, SIO 333, but rapidly swallowed by Spanish QRM. [JB-NF]

1098 SPAIN synchros, May 27 0108 - Mx., Spanish talk. [MC*ME]

1107 Very likely Egypt, Voice of the Arabs, Batrah, 5/23 2255 - Arabic music under Spain, but no // frequencies heard. SIO 222. [JB-NF]



- 1107 SPAIN synchros, May 27 0110 - Bits of Spanish talk; bad slop from C&W on WHIM-1110 (RI). [MC*ME]
- 1134 CROATIA Hrvatska R., Zadar, 5/23 2253 - Man in Croatian with ID, ragtime music. SIO 243. [JB-NF]
- 1152 ENGLAND/SCOTLAND 5/7 0108-0145 - Exasperating mix of Brits fading in and out, sometimes a signal would be alone, loud and clear, on the frequency for a few minutes, but not one ID heard on this can of worms frequency. [JB-NF]
- 1152 ENGLAND R. Broadland, Norwich, 5/23-24 2345-0055 - Persistence pays off with request from someone in Yarmouth at 2345, nice ID at 0026 and another one at 0053. Frequency was in its usual tangled condition, see above! SIO 222-1. [JB-NF]
- 1152 SCOTLAND "Clyde 2", Glasgow, 5/24 0141-0145 - Was certainly there earlier (started to monitor frequency at 2326) but jingle finally clearly heard at 0141. SIO 222. [JB-NF]
- 1161 SPAIN R. Euzkadi Irratia, San Sebastián, 5/23 2248 - Fade up over France-Inter with program of Latin American dance music, woman presenter in Basque language. SIO 232. [JB-NF]
- 1170 PORTUGAL RDP R. Comercial, Vila Real, 5/23 2323 - Telephone interview in Portuguese. SIO 333. [JB-NF]
- 1170 ENGLAND 5/24 0147-0206 - Mix of Brit stations with overnight programs, one seemed to be saying "Nighttime Solid Gold", and there were frequent "Supergold" program IDs, these seemed to be "echoing", 2 stations on this frequency using that overnight service? [JB-NF]
- 1179 SPAIN 4/28 0340 - Bits of Spanish talk. [MC-MA]
- 1188 GERMANY Mitteldeutscher Rundfunk, Reichenbach, 5/6 2347 - Only there for a few minutes with German news report, but soon sank into an unresolved morass of weak signals. SIO 232. [JB-NF]
- 1197 ENGLAND Virgin R., synchros, 5/7 0209-0211 - Rock music // 1215. Great signal in spite of relatively low-power transmitters, SIO 344. [JB-NF]
- 1215 SPAIN 4/17 0455 - I was looking for UK's Virgin Radio here, but came up with this instead. Man and woman in Spanish dominant; bits of talk (maybe UK?) way under. 4/28 0355 - Fast Spanish talk by man, fair-to-good. [MC-MA]

- 1215 ENGLAND Virgin R., synchros, 5/7 0204-0209 - Fleetwood Mac, woman DJ with idle chat, PSA for Somalia relief fund, ad and jingle ID. This was SIO 454 after VOAR-1210 signed off. [JB-NF]
- 1251 LIBYA Tripoli 4/17 0422 - Loud with Arabic vocal. [MC-MA]
- 1305 SPAIN 4/17 0423 - Man in Spanish, over others. [MC-MA]
- 1332 ENGLAND BBC Wiltshire Sound, Lacock, 5/6 2254-2322 - Comment and results from Wiltshire for County Council elections, with pause for BBC news at 2300. SIO 232. [JB-NF]
- 1332 ENGLAND WGMS Peterborough, 5/6 2257-2322 - Mainly oldies, news at 2300-2303, a contest called "What is it?", a number of IDs and even their mailing address at 2315. SIO 232. [JB-NF]
- 1350a UNID May 27 0015 - Approximately 1 kHz het seemed to be on the high side (e. g. 1351) rather than usual 1349 (Mauritania). Domestics overtook the channel quickly and the het faded. European monitoring information relayed to me by Richard Eckman indicates that the Mauritanian is right on 1350 now. [MC*ME]
- 1359 SPAIN Arganda 4/17 0427 - To good peaks with operatic Spanish vocal. 5/11 0317 - Best TA tonight, Spanish music, Spanish talk by man, at monster level, wasting the 1360 domestics. [MC-MA]
- 1359 ENGLAND Breeze AM, Chelmsford, 4/17 2314-0003 - In a mess but definite "You're listening to Breeze AM" at 2318 then old pops and dedications for listeners. SIO 222-1. [JB-NF]
- 1359 ENGLAND Xtra AM, Coventry, 4/17 2314-0003 - Rock music in a mess, but I taped a canned ID "Nonstop classic rock, only on Xtra AM" at 2314. Frequency gradually taken over by Spain, SIO 222-1. [JB-NF]
- 1368 ENGLAND BBC Wiltshire Sound, Swindon, 5/6 2307 - Briefly up with election coverage, definitely // 1332. SIO 222. [JB-NF]
- 1368 UNID 5/11 0319 - Het, possible Spanish of Portuguese talk. [MC-MA]
- 1458 MAYOTTE RFO Pamandzi, 5/18 2255-2257 - Faded up briefly in French with France-Inter program // 1350 piano music. SIO 232-1. [JB-NF] (very nice - Jim)

Calidad de vida, calidad de música

• WIOA - San Juan - Box 11427, Santurce, Puerto Rico 00908 • WIOC - Ponce • WIOB - Mayaguez

- 1458.2 GIBRALTAR??, Gibraltar BC, 5/18 224851, 2259-2300 - Briefly audible in English with talk of a "World Record", WS news at 2300 // BBC World Service on 7325 kHz. (See GIBRALTAR info below from Mauricio Molano). SIO 242-1. [JB-NF]
- 1467 FRANCE Roumoules 5/11 0340 - Good with open carrier, then music-box interval signal. [MC-MA]
- 1503 AZORES AFRTS LAjes, 5/18 2240-2247 - Message regarding the Health Benefits Advisor, "Country and Western on Unistar" promo, Eagles tune. SIO 333. [JB-NF]
- 1530 VATICAN 4/28 0346 - Slav or Albanian talk // 6245; destroying WCKY. 5/11 0314 - Vatican IS music, Slav-sounding talk // 6245 (but not 1611). Loud and totally dominant. [MC-MA]
- 1530 UNID 5/24 0113-0127 - Fade up with commentary in Arabic mentioning Saudi Arabia and Iraq a lot, then later Kuwait and Iraq. Into Koran at 0127. QRM from domestic stations, SIO 322. I first noted this station on March 28 at 0028 with Koran under Vaticana. Vaticana went off at 0040-0056 leaving this clear with Arabic dramatic talk and Arabic pop music. Noted again many times; April 3 was the first time I heard a bubble jammer. I alerted Risto Kotalampi in Finland who also heard it, but neither of us has yet been able to ID it. Risto has a contact in Israel who heard it weakly under a jammer. I suspect a Middle Eastern QTH for this, but it's not a time at which there could be much of an audience there. [JB-NF]
- 1539 GERMANY Mainflingen 4/28 0348 - Jazz, German talk getting past 1540 QRM. [MC-MA]
- 1544 CLANDESTINE R. Nac. Rep. Arabe Saharai Dem., 5/23 2251 - Local music with unusual singing style accompanied by guitar-like instrument. Last year I used to hear this in Spanish too, but these days seems to be only in Arabic. Now // 11520 SW, too. SIO 343. [JB-NF]
- 1557 MALTA Deutsche Welle, Cyclops, 5/23 2301 - German news // 6075. SIO 343. [JB-NF]
- 1575 SPAIN 5/11 0336 - Man in Spanish, over others. [MC-MA]
- 1584 SPAIN 4/17 0432 - Spanish talk by man, noticeable echo on audio. 5/11 0310 - News by man in Spanish, fair to good. [MC-MA]
- 1593 GERMANY Langenberg 5/11 0309 - Woman in German, to fair peaks. [MC-MA]
- 1602 SPAIN 4/28 0351 - Man in Spanish, in jumble of carriers. [MC-MA]
- 1611 VATICAN 4/28 0350 - Slav talk, croaking Anguilla. 5/11 0308 - Excellent with Slavic talk by man; rendering 1610 a weak background het. [MC-MA] (What's been regularly croaking Anguilla here is the Wisconsin TIS on 1610 (10 watts) and an UNID (Albany area?) New York State Thruway TIS - Jim)
- 1637 NETHERLANDS (PIRATE) R. Barones, 5/6 2228-2244 - Oldies, Dutch and Dutch-accented male announcer, mentioned "here on Baro" at 2243. SIO 253. [JB-NF]
- 1638 NETHERLANDS (PIRATE) R. Toekomst, 4/17 2228-2231 - Dutch talk, 3 clear IDs at 2230. Station is located in Friesland. SIO 242. [JB-NF]

PAN-AMERICAN DX

- 535 GRENADA St. George's, May 27 0150 - Poor with dance mx. [MC*ME]
- 560 COLOMBIA R. 5-60, LV de la Pampa, 4/10 1610 - Heard very strong with ad for stores in Maicao, pop Colombian music. [CO-DR]
- 610 DOMINICAN REPUBLIC R. Acción, Santiago - unusually strong, almost fighting with RTVD 620 day and night during Holy Week. [CO-DR]
- 640 VENEZUELA Puerto la Cruz YVQO, May 27 0147 - Spanish sports with a Caracas team - dominant. [MC*ME]
- 670 VENEZUELA Caracas YVLL, May 27 0149 - Rumbos mention over/under other Spanish with WRKO-680 slop null. [MC*ME]
- 700 VENEZUELA R. Sur, Puerto Ordaz, 4/10 0315 - IDing at this time with pop music. Surprised to hear this station so far away on the Orinoco River and only 2 kW? [CO-DR]
- 705t ST. VINCENT May 27 0152 - Carrier in heavy WOR-710 slop. [MC*ME]
- 710 PUERTO RICO WKJB Mayaguez 1622 - Pop music, local station off the air. [CO-DR]



1220 KHZ AM

- 720 DOMINICAN REPUBLIC R. Norte, Santiago 4/11 1621 - With news about what is happening on the beaches. [CO-DR]
- 740 VENEZUELA R. Caroni - Another station heard from Puerto Ordaz on the Orinoco River, but this 50 kW station is heard weaker than R. SUr. How come? [CO-DR] (I have heard R. Caroni here, but not R. Sur - Jim)
- 750 COLOMBIA Caracol Medellin, 5/7 0318 - Ads for Banco Cafetero in program "Radio Noticias" over R. Caracas, usually very strong. [CO-DR]
- 780 VENEZUELA Coro YVMN, May 27 0145 - Fast Spanish music, Coro ID. This was pretty much steamrolling ZBVL, CFDR, and the rest. [MC*ME]
- 830 UNID May 27 0142 - YVLT most likely the Spanish behind dominant CFJR. What surprised me was the absence of R. Paradise (St. Kitts). Nevis - 895 was very good at the time; even comparatively puny Montserrat - 885 was making a strong showing. [MC*ME]
- 850 COLOMBIA R. Recuerdos, Bogotá, 4/10 0328 - Very good with Mexican rancheras, EST Time check. [CO-DR]
- 850 PUERTO RICO R. WABA, Aguadilla, 4/10 1630 - With pop music and many ads for ACS (Air Conditioning Service), "Auto Mar", "Bruno Vargas Wood House", etc. [CO-DR]
- 860 DOMINICA VO the Islands - with religious programs. [CO-DR]
- 860 NETHERLANDS ANTILLES R. Curom, Willemstad, Curaçao, 4/10 1625 - Fair in Papiamento with ad for "Festival International di Magia", not normally heard because of Clarin-860. [CO-DR]
- 870 DOMINICAN REPUBLIC R. La Vega 4/9 1502 - With news about accidents on the Highways. [CO-DR]
- 880 PUERTO RICO WBOZ Sabana Grande 4/10 1602 - Sports news, good. [CO-DR]
- 885 MONTSERRAT Plymouth ZJB, May 27 0041 - Accented English talk by woman. May 27 0139 - "How Can I Be Sure?" ('60s hit by the Rascals) - at good level. [MC*ME]
- 890 COLOMBIA Santa Marta HJPM, May 27 0138 - EXCELLENT with clear R. Galeon ID and Santa Marta mentions. [MC*ME]
- 895 NEVIS Charlestown, May 27 0039 - Fair to good with mellow vocal, Caribbean English announcer. [MC*ME]
- 910 PUERTO RICO La Super Cadena, Ponce, 4/11 0400 - IDing this was instead

- of "La Gran Cadena", with call-in program. [CO-DR]
- 930 PUERTO RICO WEKO Cabo Rojo, 4/101634 - Notiuno news, then ads for Molina Auto Service, Mueblerías la Unica, etc. [CO-DR]
- 930 MONTSERRAT R. Antilles 5/7 0231 - Very good with comment about the situation in Haiti. [CO-DR]
- 940 VENEZUELA R. Punto Fijo 4/9 1459 - With news about "temporadistas" (vacationers), ads at 1459, UTC-4 timechecks. [CO-DR]
- 950 VENEZUELA Informativo 950 Caracas, 4/9 1456 - with news. [CO-DR]
- 960 NETHERLANDS ANTILLES R. Victoria, 4/9 1459 - Religious program in Papiamento. [CO-DR]
- 970 COLOMBIA R. Super, Bogotá 7/7 0228 - Heard IDing in passing, very good with ads. [CO-DR]
- 1000 COLOMBIA Cartagena HJAQ, May 27 0134 - Spanish talk with Colombia, Cartagena mentions. [MC*ME]
- 1080 VENEZUELA R. Barcelona 4/11 0356 - ID and pop music. [CO-DR]
- 1100 ANTIGUA St. John's ZDK, May 27 0109 - Caribbean music in loop null of WWWE. [MC*ME]
- 1109.6a USA WHIM Providence RI, 5/11 0325 - Way off on low side of channel with C&W music, WHIM ID (not using WWRX call or CNN news format anymore, WBT on 1100.0. [MC-MA]
- 1120 DOMINICAN REPUBLIC AM Stereo Mil Ciento Veinte, Santo Domingo, 5/7 0226 - New station with NBA basketball game, then news about Major League games. ID at 0226. This is the frequency formerly used by R. Antillas, first time heard. [CO-DR]
- 1150 VENEZUELA Mundial Caribe, Punto Fijo, 4/11 0350 - Very good with ID and pop music. [CO-DR]
- 1160 BERMUDA Hamilton VSB3, May 27 0125 - BBC discussion rising over WSKW. [MC*ME]
- 1165 ANTIGUA St. John's C. R. L., May 27 0123 - loud with US-accented male preacher. [MC*ME]

RADIO SENSACION
SU RADIO
TELEFONOS:
360407 - 350127
FAX: 360206
Bolivar y Rocafuerte Est., 2do. Piso
CAYAMBE

Las PAGINAS AMARILLAS son
el medio para consultar antes
de ir de compras

Guide su telefono
no permita que los niños
jueguen con el aparato
telefónico



AM 1310 OC 5055
F.M. 92

- 1180 CUBA R. Taino Habana, 5/23 0300 - Latin music, lots of talk about Cuba. Totally dominating frequency this night and 5/24. The on'y non-Canada, non-USA station heard in two nights of DXing. [SA*MB]
- 1240 CUBA Matanzas 4/22 0225-0256 - Old Latin American "Manantica", 2256 man talking in Spanish, mention of Matanzas, poor over/under WFOY. [DT-JAM]
- 1240 PUERTO RICO R. Walo WALO, Humacao, 5/7 0622 - With romantic program entitled "Nocturnal". [CO-DR]
- 1270 COLOMBIA Antena Dos de RCN, Cartagena, 4/10 0300 - Announcing that RCN will be joined by CNN in order to give news in Colombia, all news through Satellite Intelsat. 5/7 0219 - With information about a baseball game ending at the time between "Altos El Cerro" and "Carnaval", Carnaval winning 7 to 6. [CO-DR]
- 1280 COLOMBIA HJNB R. Suroeste, Concordia 4/10 0303 - ID and news. [CO-DR]
- 1290 VENEZUELA R. Puerto Cabello 4/9 1450 - With program about religious information in Chichirivichi, with religious act related by a priest. [CO-DR]
- 1300 PUERTO RICO WITL Mayaguez, 5/7 0845-0847 - Sign on in Spanish, poor. [DT-JAM]
- 1320 ARUBA VO Aruba, Oranjestad 4/10 1644 - Weak with pop music and program in Papiamento. [CO-DR]
- 1320 VENEZUELA R. Apolo, Turmero, 5/7 0213 - Ads for Mother's Day and the winning numbers of different lotteries in Venezuela, ads paid by "Ferretería Cantacalero". [CO-DR]
- 1340 VENEZUELA R. Uno, Caracas, 5/7 0208 - Ending a religious program. [CO-DR]
- 1350 VENEZUELA R. Falcón, Puerto Cumarebo, 4/10 1350 - With ads for Carnicería Punto Criollo, Servicio Ernesto, Cementos Caribe and information for tourists at the beaches in Estado Falcón. New on this frequency. [CO-DR]
- 1350 COLOMBIA Antena Dos de RCN, Santa Marta, 5/7 0200 - With baseball game between Colombia and Nicaragua, ID at 0200, ads for Coca-Cola, Very good signal. [CO-DR]
- 1370 DOMINICAN REPUBLIC R. EL Seibo is here and always been here on this frequency. Heard during Holy Week with religious programs. [CO-DR]
- 1400 PUERTO RICO WIDA Carolina, 5/11 0718-0810 - Religion-like Spanish music, read list of five or six stations "Radio ????", mentioned Puerto Rico twice, over under WFTL and two unID US stations. [DT-JAM]
- 1410 DOMINICAN REPUBLIC R. Tricolor, Santo Domingo, 5/7 0151 - Surprise, back on the air after more than five years off the air. Heard them and waited for an ID, which they did at 0151 as "HIAD-1410, R. Tricolor", pop old romantic music, boleros. [CO-DR]
- 1420 COLOMBIA HJAP Cartagena 4/30 0213-0234 - News, LA music, ad for cola, phone-in talk show, news, lots of mentions of Colombia, fair, interference from unID Spanish station. [DT-JAM]
- 1420 VENEZUELA R. Sintonía, San Antonio de los Altos, 5/7 0145 - In the program "Noche de Estrellas", all Venezuelan typical music played with the harp mainly. [CO-DR]
- 1430 VENEZUELA R. Bahía, Puerto la Cruz, 5/7 0140 - Pop music, IDed at 0140, very good, not on in 1420 as per WRTH. [CO-DR] (They moved some time ago; I also heard this one when I was in the Dominican Republic in March - Jim)
- 1430 PUERTO RICO WNEL Caguas, 5/12 0735-0745 - Spanish man with guitar ranchero, ID as "Radio PR" and "Radio Tiempo", fair, no interference. [DT-JAM]
- 1450 CUBA CMLN Anacio Rodriguez - Daily here, all day, signs off at 2100 with Cuban National Anthem. [DT-JAM]
- 1450 DOMINICAN REPUBLIC HIAC Salcedo 5/2 1919-1915 - With "Discoteque Dominique", variety of LA music, good no interference - but this may be CMLN 1450 (see above). [DT-JAM]
- 1480 VENEZUELA R. Vibración, Carúpano, 7/7 0135 - Many ads for local stores, "Supermercado Francis", "Vibración Informa" station newsreel and local news, more ads at 0135. [CO-DR]



1490 VENEZUELA R. El Sol, Maracaibo, 4/11 0334 - Now IDing only as "R. El Sol", they seemed to drop the word "Favoritas". Good with old boleros, but with new tune "Perfidia" was the song. 5/7 0132 - Ending a religious program, then many ads and their telephone numbers, only 5 digits, good at this time. [CO-DR]

1500 VENEZUELA R. Dos Mil, Cumaná 4/10 0308 - Several recorded IDs by men, women and a chorus, pop music, very good. [CO-DR]

1510 VENEZUELA La Exitosa 15-10 Super Radio, Güigüe, 4/11 0328 - Yes, this is the station heard by Jim Renfrew, heard IDing with pop music. [CO-DR] (Thank you! - Jim)

1530 BRAZIL Rádio Tres Fronteiras, Campos Sales, 5/17 0107-0132 - Truly extraordinary reception (SIO 333) of a ZY graveyarder without a Beverage (note capital "B") (See 1580 also). A number of unequivocal IDs between Brazilian romantic music. WRTH 93 lists this only as a "construction permit", but it is now definitely on the air. The IDs are "Rádio Tres Fronteiras", not the listed "Rádio das Tres Fronteiras". Signal gradually weakened, useless after 0132. [JB*NF]

1550 VENEZUELA R. Metropolitana, Los Teques 4/11 0331 - Always "Metropolitana" in their IDs, pop music. [CO-DR]

1550 COLOMBIA R. El Sol, Barranquilla, 5/7 0120 - With IDs and the time saying "Las ocho y veinte" (8:20) and pop music. [CO-DR]

1580 BRAZIL unID station 5/17 0017-0057 - Portuguese talk, ads, IDs with so much reverb that they were rendered incomprehensible ... AARRGGHH!!!! Conditions were mega-weird, to use a Connellyism, not really auroral as Brazil was coming in on a few ZY-GY frequencies and Northern European stations like WDR-1593 which are normally weak during auroral conditions, were blasting in. SIO 333 over CBJ, but faded away by 0057. [JB*NF]

1580 COLOMBIA unID 5/18 0735-0803 - Ranchero and lively music, ID as "Eco de Colombia", very little talking, any ideas? [DT-JAM]

1590 VENEZUELA R. Deporte, Caracas, 5/7 0125 - With talk about baseball cards, their prices and interest, all talk. [CO-DR]

1610 ANGUILLA The Valley, May 27 0116 - Loud with local Caribbean news by man in Carib-accented English. [MC*ME]

CORRECTIONS

A review of my Costa Rican tapes leads me to doubt the Honduran on 1570, it may have been a Mexican with unID QRM. [JB-NF]

STATION NEWS

Three new members have joined the International Telecommunications Union (ITU): GEORGIA on January 7, 1993, SLOVAKIA and KAZAKHSTAN on February 223, 1993. [Worldwide DX Club 4/93]

AUSTRALIA: 7RPH Hobart 1620 kHz switched to 864 kHz on 5/5. [C. Hambly/RC in DX Australia 5/93]

COLOMBIA: 1605v Ondas de Belen in Belen de Umbria is a pirate heard irregularly from other parts of South America. [The Radio News via IRCA in NZ DX Times 5/93]

Fiji: Radio Suva 3 heard with spoken programme up to 1100 in English then relays the BBC World Service News. Frequency is 1089. [Arthur Cushen in DXA 5/93]

GIBRALTAR: NRCer Mauricio Molano, who kindly QSLed my report to RNE 5 in Salamanca says the station I've reported a few times on 1458.2 kHz (and again above) is indeed Gibraltar. He says he hears local programming from them in the early mornings. [JB-NF]

LITHUANIA: Construction of the new Baltic Radio International, which plans to broadcast commercial programs to Sweden on 684 kHz, has begun, according to a Lithuanian weekly in Western Europe. The station is expected to take the air this summer. Radio Vilnius has been skeptical about the project even though it is supposed to earn the Lithuanian government royalties of \$150,000 a year. R. Vilnius says the trend in Scandinavia is toward commercial radio on FM. [Radio Nederland Media Network 5/6 in NASWA Journal 6/93]

NETHERLANDS ANTILLES: When Transworld Radio goes off shortwave on June 30, the remaining 800 kHz operation probably will not use QSL cards, although reception reports will be verified. Chuck Roswell was the champion of QSL cards at TWR Bonaire, and he is being reassigned to TWR Monte Carlo [McDaniel Phillips on HJCB's DX Party Line 5/15 in NASWA Journal 6/93]

4RR
REEF RADIO

The Home of Quality Rock & Roll

Neuman Pro. Limited (Incorporated in N.S.W.)
P.O. Box 108, Temorick, Queensland, Australia 4212

NEW ZEALAND: R. Rhema Christchurch has changed to 612 kHz from 1503 kHz. [Bryan Clark in NZ DX Times 5/93]

NICARAGUA: R. Corporación bow announcing 25 kW, s/o 0900? [Hirihara in WRTH LA-NL no. 2 in Distance 5/17/93] On 540.1. [Sharp in DXSF 1/27 in Distance 5/17/93] R. Sandino 750 until 1/28, using 760 as an alternate frequency after 1/29. [Hirihara in WRTH LA-NL no. 2 in Distance 5/17/93] The latter frequency reported as 760.15 [Moore, DXSF in Distance 5/17/93]

PANAMA: SCN 1420/98.3 for the Atlantic Coast, 790/91.5 for Pacific Coast. [Luis A. Vargas in WRTH LA-NL no.2 in Distance 5/17/93]

RUSSIA: Vladivostok transmitters noted with the following programs on January 19 by IRCA member Bill Harms DXing from Seoul, South Korea: 648 kHz VOA relayed here with Special English feature "Science in the News" at 1345 UTC // 6100 and 9760. QRM from co-channel KBS and FEN Okinawa; 1476 kHz R. Aum Shinriko relayed with religious program in Japanese at 1400, QRM from China; 585 Deutsche Welle testing in Chinese via Blagoveshchensk 1000 kW1200-1300 UTC; 783 FEBC Russia was to inaugurate a Korean Service in February, via the 1200 kW transmitter at Blagoveshchensk, 1400-1900 UTC. [ARC via IRCA in NZ DX Times 5/93]

SAO TOME E PRINCIPE: The VOA started testing its new 100 kW MW transmitter on 1530 kHz 5/12. If the tests prove out VOA's thinking, the transmitter will be boosted to 500kW in a few years' time. SW transmitters are also planned. The sked, in English only, is 0300-0700 and 1600-2200. [RNMN 5/13 in NASWA Journal 6/93] It's making it to Sri Lanka between 1645-1800 with fair to poor signals on mediocre to good (but not hot) Japanese receivers. [VG on RNMN 5/20 in NSAWA Journal 6/93] (See Jean Burnell's 1530 Middle East logging above - Jim)

SPAIN: Jordi Brunet's Spanish Medium Wave List, recently printed in Play-DX #742, and current as of May, 1993, is available from the NRC Publications Center (enclose funds for 3 pages copied - plus NYS tax for NYS residents). On Brunet's list, RNE 1 is shown on 1359 kHz with 600 kW from Madrid and 20 kW from MELILLA. But Play-DX #739 explains that MELILLA is now on 972 kHz, as shown in an RNE list edited in March.

SPAIN (more): Mauricio Molano, in letter to Jean Burnell, states that the RNE R.1 Arganda transmitter on 1359 kHz is 600 kW,

so any recent logs of Melilla are incorrect. 1359 is a huge signal here these days. Finally, Mauricio says sending \$1 as return postage to Spain is wasting your money because banks are charging 450 pesetas to exchange th buck, which is only worth 117 pesetas. [JB-NF]

SVALBARD: Coastal stations will relay news from NRK Norway on 1731 kHz USB at 0700, 1500, 1900, perhaps joined later by JAN MAYEN. [DX News via Risto Kotlampi's Euronews via SWL-List via Will Martin in Monitoring Times 6/93]

SWITZERLAND: A letter from CIDXer Daniel Armbruster from Selestat, France cleared up my log of Switzerland on 765 kHz on December 18. I heard an announcer in German on a frequency that I thought was supposed to be RSR in French. Daniel stated that he hears the station clearly and that there is French news at 2300 but from 2305 a common, classical music program (many transmitters) begins in German. Merci beacoup, Daniel! [JB-NF]

TURKS AND CAICOS ISLANDS: Bob Gilfert, in making a phone follow-up on a verification letter, has discovered that Atlantic Beacon 1570 is off the air. It's telephone number is no longer listed, and presumably the Florida PO Box is no longer operative. The Turks and Caicos telephone operator did give him a number for Radio Visión Christiana (809-946-3311), and he found that this new station is due to sign-on in two to three weeks (e.g., end of June), initially with 50 kW, on 530 kHz. It is not clear if the new station now owns the Atlantic Beacon's equipment and transmitter site. The station will be satellite fed from New Jersey (this may be WWRV-1330, which IDs as "Radio Visión Christiana"), and will broadcast in Spanish. As Bob and I talked about this we figure that this will probably be beamed to Florida and/or Cuba, since there can't be much of a daytime Spanish-speaking audience elsewhere in the Caribbean. Bob's information explains why I couldn't hear the Atlantic Beacon from the Dominican Republic during the second week in March, although the lower power Radio Turks and Caicos 1460 could be heard. [BG-DC, with additional comments by JR-NY]

QSL INFORMATION

JAMAICA: 700 JBC Radio One, letter in 45 days from Mrs. Lois Gayle, Mgr. Public and International Affairs, POB 100 Kingston, Jamaica. [ES-NJ]

Radio Turks & Caicos

P.O. Box 69, Grand Turk, Turks & Caicos Islands
Phones: Manager 2041, Admin.2500/1



1460 A.M.

MEXICO: XEX La Super X 730 and XEQ La Q Mexicana 940 both with mini card and XEW pennant in 39 days, both for cassette report, v/s for both: Ing. Miguel Angel Barrientos, Director Tecnico de Plantas Transmisoras, Calzada de Talpan No. 3000, Col. Espartacos, 04870 Mexico (the address announced by both stations). [Olle Alm in DXA 4/93]

CONTRIBUTORS

[MC-MA] Mark Connelly WA1ION, Billerica MA; JRC NRD 525, Sony ICF-2010, RTL-2 Remotely-Tuned Loop via MWT-3 Regenerative Preselector/Controller.

[MC*ME] Mark Connelly WA1ION, Kittery ME; Realistic DX-440, RTL-2 Remotely-Tuned Loop via MWT-3 Regenerative Preselector/Controller.

[SA*MB] Shawn Axelrod, DXing in Swan River MB; 1992 Dodge car radio.

[ES-NJ] Elliot Straus, Toms River NJ.

[CO-DR] César Objío, Santo Domingo, Dominican Republic; Realistic TRF and DX 400, 4' loop.

[BG-DC] Bob Gilfert, Washington DC.

[DT-JAM] Don Trelford, St. Ann's Bay, Jamaica

[CCH,RNH*MA] Charles C. Harrison and Richard N. Harrison, DXing on Cape Cod MA (Marconi Site); Panasonic RF B600, Quantum Loop.

[JB-NF] Jean Burnell, St. John's NF; ICOM IC-R71A, 150 meter wires at Outer Cove, except [*] which were at home with 10m wire only.

SPECIAL FEATURE:

MOORE TRANS-PACIFIC DX

TP Carriers have finally reappeared here after a two month absence from 2/23 to 4/22 which is normally the peak period. This morning was one of the best with 21 different frequencies with assumed TP carriers between 0950 and 1040. The last time I got any decent audio, however, was on 12/21/92 when the station on 1575 produced the best audio of the season from 1138-1155. From 1138-1148 a man and woman in discussion (perhaps news), 1148-1150 "Twelve Days of Christmas" with piano and chorus, then at 1150 man "Club news next" and into sports commentary.

Are you aware of any changes on 1575 kHz? The most consistent station earlier in the season has not been heard since 2/21.

The following table may be of interest. It lists all the occasions on which I have heard TP (assumed) signals this season by frequency. For this type of work it is essential to read frequencies to at least 10 Hz so that you at least know you are on one of the standard frequencies. These stations typically fade slowly in and out. The first column indicates very weak but definite carriers, probably requiring DXer's ears to catch. Next column moderately strong to just on the verge of audio. Third indicates audio was heard anywhere from just making out voice or music up to occasional words understandable. Nothing better was heard this season.

kHz	Weak	Good	Audio	Total
1575	21	34	6	61
1566	11	15	1	27
1557	6	1	0	7
1548	34	54	7	95
1521	3	2	0	5
1512	13	21	1	35
1503	3	2	0	5
1404	0	1	0	1
1395	1	0	0	1
1386	2	0	0	2
1224	6	4	0	10
1035	14	21	0	35
1026	19	11	0	30
1017	7	10	0	17
1008	5	4	0	9
963	1	0	0	1
954	2	0	0	2
936	0	1	0	1
891	0	4	0	4
882	2	1	0	3
864	1	0	0	1
855	0	1	0	1
846	8	5	0	13
837	3	0	0	3
828	1	0	0	1
783	2	2	0	4
774	29	27	0	56
756	10	7	0	17
747	2	1	0	3
738	24	24	0	48
702	0	1	0	1
684	0	1	0	1
612	0	1	0	1



Radio Mundo

TRANSMISORES "CONTINENTAL"
DE 10.000 VATTOS
Y. V. N. C. 740 KLCS
Y. V. N. C. FM. 95. MG.
MARAACAIBO

AVENIDA 25 (PARAISO)
ESQUINA CON CALLE 67 Nº. 24-M
TELEFONOS:
72894 - 95 - 96
VENEZUELA

and this morning I logged 20 different frequencies with carriers. Five new frequencies were noted in addition to those above since May 8, 1278, 1251, 1242, 1215, 648, making a total of 38 different TP frequencies this season.

Reception of TP's has fascinated me since the 1930's (when I was VERY young, by the way) and now that they operated in split frequencies we are going to have a real shot at them here in the East as the sunspot cycle drops to its minimum.

I hope this is of some interest and that perhaps it will entice others to try for the TP's. I think the results so far bode well for the next few seasons as the sunspots decrease.

(From Ray Moore, Key Largo FL, Homebuilt receiver, 30" passive loop)

Days DXed Days Heard

Sep	8	4
Oct	31	27
Nov	20	14
Dec	31	26
Jan	31	24
Feb	27	21
Mar	25	5
Apr	30	16
May	8	8

Carriers are judged to be TP's if ...

1. They are exactly on a standard split frequency.

2. They are on the correct DF bearing.

3. They are heard during the hour before LSR.

I'm late getting this off to you - it is now May 13. May 9 and 10 I drew a blank but the TP carriers started coming in again on 5/11

FM DX

Digest

DX on the FM band, from April through September

Mike Hawk, NØOSY

10212 P St.

Omaha, NE 68127-2130

FM DX really picked up during June. E-skip was very common to locations in the west and south. The northeast has been a no-show, however. Remember that E-skip signals can be quite strong, so even if you don't have a really good FM tuner and antenna, you can still get some pretty amazing loggings. Also, please note the unID's. Since the last *FM Atlas* is over one and a half years old, a current, inexpensive logbook isn't available.

I also wanted to mention a little about meteor scatter before we miss any more showers. Meteor scatter occurs when a meteor ionizes a column in the ionosphere. This supports propagation for anywhere from a few seconds to a minute or more. The best time to DX meteor scatter is during one of the many annual showers, rather than from random meteors. Here is a list of showers, the peak date, and approximate peak hourly rates: Perseids - August 9-15 (12) 50-100; Orionids - Oct 19-22 (21) 10-70; Geminids - Dec 10-16 (14) 50-80; Quadrantids - Jan 3-5 (4) 40-150; Eta Aquarids - May 2-7 (4) 10-40; Arietids - June 5-9 (7) 40-75. Some smaller showers also exist, and slight effects from the above showers can be observed outside of the dates listed above.

Eric Bueneman (NØUIH), 631 Coachway Lane, Hazelwood, MO 63042-1347 5-12-93 Tropo

0045 93.3 WJLI IL Ramsey - good with some KSD-93.7 splatter with light REL

music from the Moody Bible Institute. USA news at 0055 and legal ID at 0100.

2028 100.9 WXKO IL Plana - good with some WFXB-101.1 splatter with SMN CWM, ads mentioning Plana and Taylorville, weather, and a PSA. According to the '93 AM Log, WXKO (AM) is on 1150 KHz in Ft. Valley, GA.

2033 100.5 WYMG IL Jacksonville - good with some KATZ splash with AOR, "100.5 FM WYMG, the Capitol of Rock and Roll" slogan (referring to its rim-shotting Springfield), promo for concert in Peoria. Both WYMG and KATZ on 100.3 have directional antennas to protect each other, since they are only 60 miles apart.

2055 102.9 WSOY IL Decatur - good with AC/CHR, "Y-103" ID. AM is on 1340. [They seem to put out a good signal - I've heard them in Omaha 4 or 5 times - mrlh]

2100 103.7 WDBR IL Springfield - good with CHR, "Top 9 at 9" countdown, and "All Hit DBR" ID.

2350 106.9 KKFA MO Jefferson City - good with "The Soft Rock Cafe-106.9 KKFA" ID into AC 5-16 Tropo

0140 89.5 KOKS MO Poplar Bluff - good over KOPN with light REL from Moody Bible Institute, USA News at 0155, legal ID at 0159 with mention of 100 kW, gave address as PO Box 967,

63901, time check by computer synthesized voice at 0200. Local KCFV off.

0150 89.5 KOPN MO Columbia - weak under KOKS with alternative rock 0205 90.1 WMBI IL Chicago - weak with WVIK with light REL from Moody. No sign of W211AD (WIBI-91.1 relay in Granite City).

Trops have kicked off this season, with local-like signals from 50 KW Springfield/Decatur FMs and TV stations in Decatur and Columbia in as strongly as the St. Louis stations! The VU-110 was finally hooked up on May 15 (after having installed it last fall), and a lot of the local signals showed no change, but the most noticeable change came in the signal of KWUR-90.3 in Clayton. It's now heard like a local on the VU-110, 'twas non-existent on the rabbit ears! KOKS-89.5 has been in the last two nights (as of this writing) after KCFV signs off, but no sign of KJEZ-95.5 yet during WFUN's silent period.

Russ Edmonds, 753 Valley Road, Blue Bell, PA 19422-2052

Russ sends some changes from another trip to Macon, GA

92.1 WJGA GA Jackson - is country
92.3 WMKS GA Macon - ex-WVPI is country. Slogan is Kissin Country, or Kissin 92.3. Finally got a clear ID.

92.7 WKKZ GA Dublin - correct my prior report - seems to be a very broad mix format including country, soul, rock, MOR....but uses slogan "Power 93", which is indicative of a dance/soul format.

94.7 WPUR GA Americus - is off air, and was so last trip also. As AMS reports AM off and "sold", perhaps both stations went the same way.

95.3 WTGA GA Thomaston - is country
95.9 WQZY GA Dublin - still off 5/28
96.5 WDOE TN Chattanooga - is "Kicks 96 1/2"

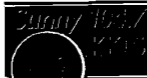
96.9 WDJR AL Enterprise - is now country
96.9 WRDO GA Fitzgerald - is now "Class 97" with a mix format

97.3 WJAD GA Bainbridge - is now soul and "Power 97"

97.7 WQYL GA Griffin - ex WKEU; is OLD
105.9 WXMK GA Dock Junction - is now soul/dance

106.1 WZLI GA Toccoa - is now "Mix 106"
Now, Russ' DX from Macon, using a Delco Car radio and whip 5/24

0518 96.9 WRSA AL Decatur - w/BFL mx atop channel



1957 89.3 WLRH AL Huntsville - w/classical mx and ID o/u WRFQ

2018 99.9 WKHX FL Lafayette - w/country. ads. ID under splash from WFXM-101.1

2024 102.1 WDRM AL Decatur - w/country and ID

2030 104.5 WFYV FL Atlantic Beach - with wock, ads, and ID

2125 100.7 WUSY TN Cleveland - "US-101" and "The 101st Airborne" w/"Hot New Country" and concert promo o/u WLRR-GA

5/25

0630 93.1 WEAS GA Savannah - w/soul, "E-93" and concert promo u/WVVF 93.3 splash

1736 105.9 WILN FL Panama City - w/classic rock, ad, and ID

5/27

0708 94.3 WNFB FL Lake City - "B 94.3" w/classic rock, numerous promos cutting thru severe splash from WSTR-94.1

0722 106.1 WSTH AL Alexander City - w/country, "South 106", full ID u/WQBZ 106.3 splatter

1835 92.7 WJBT FL Green Cove Springs - w/soul, ads, ID atop channel with local WKKZ off for one of it's frequent and unexplained off air periods during this trip.

2056 96.9 WTDR NC Statesville - w/country and lcl ads in and out w/ the mess. This one's a graveyard here.

2107 106.9 WLOW SC Bluffton - w/numerous ID's and BFL mx

5/28

0719 95.5 WTVY AL Dothan - w/country and ID

Now, some changes from edition 14 of the FM Atlas from Russ' "slightly less recent trip to Austin"

92.5 KKLK TX Elgin - slogan is "Cool 92.5"

93.3 KHHT TX Killeen - Ex-KBTS. Is now country. Slogans are "Hot Country" and "Texas Hot Country". Real ID's are rare.

94.7 KFGI TX Luling - Ex-KAFG. Now rock oldies and "Froggy 94". Both slogan and ID are given frequently.

95.5 KKMJ TX Austin - Rock oldies and "Magic" or "Magic Oldies" slogan

104.3 KPLE TX Temple - Slogan is "Superstation KPLE"

Nothing of interest in this area; good cx haven't moved in here yet....Macon is a great place for FM DX. I'm up to 160+ stns on a car radio in about 21 days of partial DX'ing spread over 12/90-8/91 and 4/93-5/93 so

far. Got 8 new in April and another 18 in May! CX are much better than up north, and the station density within a small geographic area is less. I suspect metro Atlanta would be somewhat worse in the latter respect...

I forgot to list some of the frequencies on some of Russ' loggings last issue. The "Ron and Ron" unID was on 102.1 MHz, and the Rock 103 unID was on 102.9. Please take a look back at the 5/31 issue to see if you can help Russ with these unID's. By the way, WVRK is listed as Rock 103.

Me - Equipment: Kenwood KT-815 with IF mod, Antennacraft FM-10 up 30', 20 dB variable attenuator, and rabbit ears for primitive phasing

Loggings condensed - only new/rare listed

5-16 Sporadic-E

2005 Most Calgary stations heard

2012 99.3 CKUA-2 AB Lethbridge - good // Calgary 93.7

2022 90.5 CBUF-2 BC Kelowna - good with FF; BC#1

2026 91.3 CKUA-13 AB Drumheller - //99.3 and 93.7

2028 88.9 CBTK BC Kelowna - opera

2029 94.9 CBTA BC Trail - // 88.9

2040 97.5 CHRK BC Kamloops - Fair with weather and K-97 ID

2055 91.7 CBBC AB Lethbridge - Alternative rock and ID at 2100

5-23 Sporadic-E to AZ, nothing new heard

5-27 Trope

2157 92.7 KBRB NE Ainsworth - local sports

5-31 Sporadic-E

1058 91.3 KOAB OR Bend - NPR; Oregon Public Broadcasting Net.

1059 90.9 KRMBT OR Pendleton - NPR //91.3; ID partially covered by KUCV

1108 94.9 KFXD ID Nampa - "The Legend, KF-95"; Verie back in 1 week

1109 107.5 KLRR OR Redmond - "Clear 107"

1112 97.9 KQFC ID Boise - legal ID; KBOI-670 owns KQFC

6-2 Sporadic-E

1633 92.5 KSSD UT Cedar City - C&W, very strong

1637 94.9 KBRE UT Cedar City - Rock, mention of phone number 800-422-95FM

1645 107.5 KFBI NV Pahrump - "The New 107.5"; ex KUDA; verie back in 1 week

1648 106.5 KRLV NV Las Vegas - Sunny 106

1651 98.1 KREC UT Brian Head - legal ID

1659 91.1 KGSU UT Cedar City - good with rock and rap mix and ID as "Thunder 91"

1700 88.9 KILA NV Las Vegas - REL and ID; KILA is listed on 90.5 in the FM Atlas, and a KEDS is listed on 88.7 in

Las Vegas. Either there has been a lot of station changes or the FM Atlas has a few errors

1853 88.9 XHLD TA Nuevo Laredo - SS; ID as "Radio Tamaulipas"

6-3 Sporadic-E

0955 89.1 WAYG FL Sarasota - // with WAYJ-88.7

0957 88.1 WJIS FL Bradenton - Joy FM

1000 88.9 WFFE FL Tarpon Springs

1003 Most Miami/Homestead heard

1008 99.5 WOYK FL St Petersburg

1012 103.9 WZMQ FL Key Largo - one of the many south FL SS stns.

1013 107.3 WWRM FL St Petersburg - Warm 107.3; o/KEZG

1017 106.7 WJQY FL Ft Lauderdale - Joy 107

1018 107.9 WIRK FL W. Palm Beach

1020 105.1 WHQT FL Coral Gables - Hot 105

1025 104.3 WEAT? FL W Palm Beach - Sunny 104.3; last CL's I have are WEAT.

The slogan the the CL's don't seem to match. Maybe they've changed?

1028 102.3 WTRS FL Dunnellon

1032 101.7 WAVV FL Vero Beach - Vero Beach also heard on 91.9 and 93.7

1034 102.5 WHPT FL Sarasota - The Point. These are new CL's.

1035 98.7 WKGR FL Ft Pierce - The Gator. Tough w/100 kW local on 98.5.

1039 99.3 WLRQ FL Cocoa

1040 97.9 WRMF FL Palm Beach

1042 102.1 WKLG FL Rock Harbor - 1460 miles

1043 96.7 WVCM GA Valdosta - ID sounded like either V or G 97; maybe a call change??

1045 98.9 WMMO FL Orlando

1049 101.1 WAVV FL Marco - Wave 101

1052 92.5 WYUU FL Safety Harbor - U-92. Tough with 100 kW KEZO on 92.3

1056 93.5 WBGF FL Belle Grade

1058 88.9 unID FL?? - ID as "Concert 89"

1059 88.5 WMNF FL Tampa

1100 92.9 WMFQ FL Ocala - Q-Light

1105 97.7 WRRX FL Micanopy - 97-X; over KNCY in same direction!!

1112 102.7 WMXJ FL Pompano Beach - Magic 102.7; over KFRX!!

1114 104.1 unID - with "Radio Free DC" syndicated talk show

1116 95.9 WRBA FL Springfield - Bay 96

1117 106.3 WTUF GA Boston

1118 107.1 WAOA FL Melbourne - "A-1-A"

1122 106.7 WXXL FL Leesburg

1122 107.7 WMGF FL Mt Dora - Magic 107.7



- 24
 1128 102.9 unID - Coast 102.9. Mention of a contest sending a winner to Del Rey Beach.
 1130 107.7 WYNR GA Darien
 1140 92.5 WOKF GA Folkston - Braves BB; Braves also heard on 96.7 & 107.1
 1144 94.5 WBYZ GA Baxley - Z-94.5
 1145 96.9 WKQL FL Jacksonville - Cool FM. Over KZKX! My best catch of the opening. WQIK heard on 99.1
 1146 92.1 WJXK FL Macclenny - no CL's heard, but many ads were
 1146 92.1 unID - Oldies 92.1
 1152 94.5 WCFB FL Daytona Beach - B-94.5
 1153 94.9 WKSJ AL Mobile - AL #2, first on Es
 1157 95.3 WJDB AL Thomasville
 1158 88.7 WRWA AL Dothan - Troy St.'s station
 1200 91.9 WJDB AL Dixons Mills - in with at least 4 others
 1201 92.7 WJBT FL Green Cove Springs - The Beat
 1202 99.3 WMFC AL Monroeville - ARN news
 1204 99.5 WKSM FL Ft Walton Beach
 1206 102.3 WWAV FL Santa Rosa Beach - Wave 102
 1211 95.5 WNGC GA Athens
 1213 94.3 WGOR ?? ?? - Oldies 94 slogan, HELP!
 1217 97.7 unID - ID "97 FM the Rock and Roll Station", and a promo for Subway sandwiches
 1225 Charleston, SC on 95.1, 102.5, and 103.5
 1234 100.5 unID - Sunny 100; VERY TOUGH in shadow of 100 kW KGBI
 1239 92.5 WHLZ SC Manning - Wheels 92.5
 1246 92.1 WJYR SC Myrtle Beach - Joy 92 FM
 1256 88.7 WNCW NC Spindale - mentions of happenings in Asheville
 1259 103.1 WYAK SC Surfside Beach - Y-103
 1300 88.3 WGWG NC Boiling Springs - Legal ID
 6/8 Sporadic E
 1958 97.5 KWVS TX Kingsville - "The Waves"
 2003 91.7 KBNJ TX Corpus Christi - many other C.C stns heard
 2006 95.5 KNFO TX Waco - clear ID; a recent rumor said they changed to KCKR. That's not what I heard on the air!
 2014 94.5 KFRQ TX Harlingen - "The Hot Country Frog"; ex KELT and K-Lite
 2033 102.3 KBIC TX Alice
 2039 98.1 KVET TX Austin - C&W, "K-Vet"
 2045 94.7 XHRP CL Saltillo - nice clear ID
 2053 107.5 XHNZ CH Ciudad Juarez - also Cd. J. on 106.7 and 98.3
 2113 95.5 KLAQ TX El Paso - also 97.5 heard
 6/9 Sporadic E
 1840 Most El Paso's heard
 1846 103.1 KPAS TX Fabens
 1903 98.9 KHWY CA Essex - "98 and 99 FM"

- 1905 102.3 KZXY CA Apple Valley, Y-102 and "The High Desert's Radio Stn"
 1907 96.7 XHNRC - Does anyone have a location for this one??
 1915 99.5 KHYZ CA Mountain Pass - //98.9 KHWY
 1920 Most Las Vegas area stations heard
 1927 101.3 KIQX CO Durango - Rockies BB
 1933 100.9 KPRQ UT Price - oldies and Q-101
 1935 106.7 KIHX AZ Prescott Valley - Kicks 106; ex 106.1
 2000 Most Monterrey, NL stations heard
 2004 92.7 KJBZ TX Laredo - Tejano 93; EE/SS mix
 2007 95.3 KIXV TX Brady
 2024 107.5 KERC NM Clovis - Must be a new call? Only 614 miles, my shortest E skip!
 2037 106.5 KEND NM Roswell
 2042 Many San Angelo, Midland, and Odessa stations
 2106 96.3 KTDR TX Del Rio - EE/SS mix
 2135 95.3 KSEL NM Portales
 6/11 Sporadic E
 1057 102.5 WERX NC Edenton - Rock 102; ex WZBO
 1059 88.3 WRVL VA Lynchburg
 1100 90.3 WMKY KY Morehead
 1102 99.1 WSLQ VA Roanoke, Q99
 1110 88.7 WFOS VA Chesapeake
 1111 94.5 WRVQ VA Richmond, Q94
 1116 94.7 WSNY OH Columbus, Sunny 95
 1137 94.5 WWSW PA Pittsburgh, 3WS
 1138 94.9 WWKL PA Harrisburg, Cool 94.9
 1140 103.1 CIQM ON London, Q103; FM#940
 6/12 Sporadic E to north FL from 2000-2100; nothing new heard

89.7 WCPE
 Great Classical Music, 24 Hours A Day
 1928 State Road 2054 P.O. Box 828 Wake Forest, North Carolina 27588-0828

Music Grade audio cassettes
 C-90 tapes: retail value \$4.00 each; just \$9.00 per 10, \$22.00 per 25, or \$42.00 per 50. C-12 tapes, perfect for airchecks: 10 for \$7.50. Order from NRC Publications - Box 164 - Mannsville, NY 13661. NY orders, please add sales tax.

International DX Achievements

Paul Swearingen
 2840 SE Illinois Avenue
 Topeka, KS 66605-1427
 International DX totals listed periodically in different categories

Yr	Start	DX'er	Loc	Last Update	Best Eur.	Best Eur.	Total Veries	Ctries	Forgn	NA	SA	Oc	Af	As	
1958		Dangerfield, Ben	PA	1981	148	Vatican-782, 2 kW	422	118	323	84	44	8	31	8	
1933		Geary, Kermit	PA	1993	147	SBC-1562, 2500 W	6190	107	988	512	243	61	23	2	
1946		Holbrook, Hank	MA	1982	147	RV-95-998, Moldava	2528	101	704	270	93	49	26	2	
1934		Gustafson, Hilding	IL	1984	114	?	862	112	316	68	36	61	23	14	
?		Morss, Stan	MA	1975	104	CS1-1520, Czech.	3922	82	424	218	62	14	14	2	
1933		Cooper, Ernest	NY-MA	1980	88	R. Bayonne-1493, 4 kW	4142	79	760	528	131	7	6		
1958		Merriman, Alan	VA	1974	82	R. 1270-1115, 10 kW	1460	89	314	171	42	3	12	4	
1977		Vernon, Brian	YU	1981	63	R. Carlisle-1458, 500 W.	314	39	232	7	1	106		55	
1960		Rugg, Andy	QC	1986	51	R. Sofia-827	1512	62	183	79	48		5		
1952		McIntosh, Eric	NZ	1965	45	BBC-1546, 1 kW	686	63	635	301	2	253	4	81	
?		Sampson, John	NJ	1965	38	N. Ireland-1340	445	54	72	23	6	1	3	1	
?		Moore, Ray	MA	1967	26	Hamburg-1357, 1 kW	81	53	79	33	9	6	5		
1954		Starr, Jerry	OH	1974	20	R. Veronica-1562	1209	51	194	134	34	3	3		
1963		Scringeur, Gray	CA/ON	1971	18	Tallinn-1034	526	47	440	354	10	31	1	26	
?		Callarman, John	?	1970	17	Athlone-566	740	50	138	72	20	20	3	6	
1952		Millar, Roy	WA	1992	16	Tallinn-1034	1705	65	429	260	25	79	1	48	
?		Fela, Joseph	NJ	1965	11	TIFC-1075	738	24	35	19	4		1		
1964		Sorensen, Morris	ON/MB	1975	9	Tirana-1457	537	13	385	375	1				
1962		Musco, Ron	CT	1985	6	R. Luxembourg-1439	1121	28	36	29			1		
?		Heinen, Wayne	NY	1981	5	Tirana-1396	882	18	116	109	2	1			
?		Dellit, Sam	Australia	1978	5	Munich-1602, 370 kW	362	37	218	109			80	1	23
1947		Luton, Relfe	NC	1973	3	Hilversum-746	1049	23	142	102	4	33			
1931		Steele, Sid	IL	1982	2	R. Normandie	3001	35	286	256	10	3		1	
1964		Reynolds, Bruce	?	1977	2	Nice-1554	1103	28	121	111	6	2			
1964		Whatmough, Dave	ON	1964	2	?	930	11	820	815	1	2			
1977		Wolfish, Niel	ON	1977	2	Nice-1554	397	11	20	14	4				
1962		Kerfoot, Tim	ON	1975	2	Nice-1554	342	13	259	255	2				
1931		Wheeler, Frank	PA	1982	1	WDR-1586	1732	25	78	68	7	2			
1976		Higgins, Earl	IL	1981	1	WDR-1593 800 kW	60	7	5	4					
1941		Kruse, Len	IA	1971			4080	15	77	61	3	13			
?		Taylor, Pete	CA	1966			1091	55	58	22	4	13		19	
1958		Wesolowski, Ernie	NE	1977			1898	24	168	153	6	7	1	1	
?		Falconer, Jeff	ON	1976			1175?	49	1175		44				
1974		Knitter, Mike	WI	1983			936	17	53	45	8				
1976		Renfrew, Jim	NY	1984			928	38	51	44	7				
1975		Swearingen, Paul	KS	1992			667	21	82	30	16				
1968		Bytheway, Phil	WA	1982			457	9	20						
?		Erickson, Don	CA	1982			442	6	9	8			1		
1962		Edmunds, R. J.	NJ	1969			226	10	56	53	1				
1973		Mount, Paul	OH	1978			225	6	25	22	2				
1969		Karchevski, Bob	MA/CA	1975			204	24	141	112			6		
?		Casamassima, Anthony	NY	1966			124	3	13	12	1				
1965		Long, John	CT	1968			101	29							
1975		Bartek, Daniel, Jr.	NE	1976			23	2							
1960		Lynch, Don	MA	1980			9	157							

Thanks to all who have updated recently. The above listing is by European/Total veries; August's listing will be Oceania/Countries. We'll continue to list bimonthly all current NRC members, as even accomplishments 20 years ago have importance for those of you who set goals for your DX achievements, and that, basically, is the purpose of this column. If you wish to start a new listing for yourself, as for example if you have moved a significant distance from your location listed above, you can either give a final listing for your old location and start a new one for your new location, or just cancel the old listing and go with your new totals. All totals are for veries (paper or taped), not heard, by the way. Why not take a little time and sift through your records this summer and send in an update? 73 -pls.

Domestic DX Achievements

Domestic DX totals listed periodically in different categories

Donald Erickson
6059 Essex Street
Riverside, CA 92504-1599

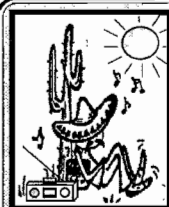
YR	UP	Name, location	TDH	SH	PH	TDT	ST	PT	TDV	SV	PV
26	92	Kermit Geary, eastern PA	5575	50+	10	2487	48+	9	5161	50+	10
31	89	Sid Steele, eastern IL	3300	49+E	10				2946	49+	10
46	89	Hank Holbrook, Annapolis, MD	2161V	50+V	10V				2161	50+	10
30	90	Frank Wheeler, nw PA	2507	50+	9	232	34+	3	1708	50+	9
60	93	Andy Rugg, Montreal & sc Ont.	1498	47+	10	144	27+	7	1467	47+	10
60	93	Andy Rugg, Montreal, PQ	1330	47+	10	144	27+	7	1303	47+	10
64	89	Wayne Heinen, all locations	1374	49+	9				1241	49+	9
62	92	Ron Musco, vic Hartford, CT	1274	46+	9Y	105	28	3	1148	46+	9
63	92	Ray Arruda, nr Boston, MA	1244	47+	9				1050	47+	9
75	89	Wayne Heinen, Colo. Front Range	927	40	7				873	40	7
75	89	Stephen Ponder, Shreveport, LA	769	39+	5	10E	4	4	721	39+	5
82	92	Bob Harrison, northeastern NJ	823	35+	7				570	35+	7
78	93	Niel Wolfish, Toronto, Ont.	1285	43+	10	402	39	6	493	43+	10
81	89	Eric Bueneman, MO & GA	415	39+	5				276	34+	5
67	89	Jim Renfrew, New Canaan, CT	721	39+	8				247	35+	7
61	93	Donald Erickson, Riverside, CA	508	36	6				247	31	5
68	92	Thomas White, nr Washington, DC	970	39+	7				243	38+	7
81	89	Eric Bueneman, metro St. Louis	315	38+	5				233	34+	5
72	92	Mike Sanburn, Bellflower, CA	600	32	5	33	10	1	212	23	5
76	89	Jim Renfrew, Rochester, NY	950	43+	9	68E	27E	5E	161	37+	6
87	89	Jeff Tynan, Parker, CO	674	36	5				128	27	5
90	92	Bob Gilfert, Virginia Beach, VA	27+	5					51	21	4
88	89	Eric Bueneman, Woodstock, GA	100	25+	3				43	16+	2
81	89	Rick Dau, Oakland, IA	700	40	6	32	8		42	16	2
85	93	Niel Wolfish, Winnipeg, Man.	813	37	9	113	10	4	25	10	4
66	92	Ken Onyschuk, Homewood, IL	972	43+E	6				16	13	
71	89	Jim Renfrew, Severna Park, MD	553	36+	5				15	8	1
87	89	Rick Dau, Iowa City, IA	261	27	4	8	5		11	5	
82	89	Bob Smolarek, nc NJ	817	36+	5	78	16	5	7	7	
75	92	Paul Swearingen, e KS	585	43+	6	585	40+	5	1	1	
70	92	Stephen Francis, nr Knoxville	2475	46+	7						
62	90	Marc DeLorenzo, eastern MA	1124	45+	9						
78	89	Jim Renfrew, Raleigh, NC	329	27+	2						
78	89	Jim Renfrew, New York, NY	242	32+	2						
84	89	Jim Renfrew, San Diego, CA	164	17	3						
79	92	Bruce Winkelman, Tulsa, OK	284	30	2						
85	92	Shawn M. Axelrod, southern Man.	1388	44+	9						



Nashville
July 23-24-25 1993

NRC members are invited to join us for a weekend of fun at the 1993 WTFDA Convention! Send an SASE for convention information to Tom Bryant - 849 Todd Preis Drive - Nashville, TN 37221. Convention HQ is Days Inn Central - 211 North First St. - Nashville, TN

37213 (800-251-3038; mention "DX" for convention rate); the room rate is \$45 for 1-4 occupancy (guaranteed through June 15). Advance registration is \$25; at the door, \$30. We'll be looking for you!



"Latin America on the Air"

60 minutes of air checks from Latin America and the Caribbean, 23 countries including most of South America, the Falkland Islands, and more, in a storage case. Order DXC/4, for \$7.50, from NRC Publications; NY orders, please add sales tax.

Professional Sports Networks

Barry S. Finkel
10314 S. Oakley
Chicago, IL 60643-2409

Network listings for team sports stations

With the Rockies' network list, I am missing only the New York Yankees' and the Montreal Expos' (EE and FF) network lists.

Colorado Rockies May 17, 1993 Wayne Hagin, Jeff Kingery (via Wayne Heinen and KOA)

580 KZMX-SD	940 KGRL-OR	1240 KTHE-WY	1410 KCOL-CO	92.7 KVCK-MT		
610 KSKE-CO	950 KMER-WY	1250 KIKC-MT	1450 KVOW-WY	94.3 KRTN-NM		
	KVNU-UT	1030 KBUF-CO	1290 KOWB-WY	KVCK-MT	97.3 KKJQ-CO	
	KCSR-NE	1300 KVOR-CO	1300 KVOR-CO	KBBS-WY	97.7 KSPN-CO	
690 KOAQ-NE	1080 KRPX-UT	1310 KFKA-CO		KBFS-SD	101.3 KIQX-CO	
730 KLOE-KS	1150 KIMM-SD	1330 KFCA-AR	1470 KUFA-UT		102.3 KSPK-CO	
740 KVFC-CO		KCKY-AZ a	1340 KWOR-WY	1490 KBSR-MT	106.5 KQOL-UT	
790 KUTA-UT	1230 KBCR-CO	1350 KGHF-CO		KRTN-NM	106.7 KBOM-NM	
850 KOA-CO *		KYVA-NM	1400 KPAG-CO		KUGR-WY	107.9 KBKL-CO
920 KLMR-CO		KKUL-MT		KCOW-NE	KDBM-MT	
930 KRQE-WY	1240 KFBC-WY		KTUC-AZ			
	KRKY-CO	KEVA-WY	KDRG-MT		KFFX-KS b	

a KCKY also carries the Chicago Cubs.

b The Rockies' list has "KFFX FM Ulysses, KS" I do not know the frequency.

Minor League Baseball - via Ken Onyschuk

Most of these teams do not have networks, I believe; they just have a local station carry the games. If I do not list a station for a team, then I do not know if that team has radio coverage. In one case Ken writes that there is no radio coverage. Ken and I do not know the team names for some of these teams, we only know the home city for the team. We only know the names of a few announcers.

AAA American Association

100.9 WIRE-IN Indianapolis Indians
1390 KKSO-IA Iowa Cubs
1400 WGGY-NY Buffalo Bisons
970 WAVG-KY Louisville Cardinals
99.7 WWTN-TN Nashville Sounds
1350 WSMB-LA New Orleans Zephyrs
1340 KXXY-OK Oklahoma City 89ers
1180 KKAR-NE Omaha Royals

AAA International League (partial)

1480 WCNV-NC Charlotte Knights
1460 WBNS-OH Columbus Clippers
1320 WARA-MA Pawtucket Pawsox
1570 WPEP-MA
1340 WNBH-MA
910 WRNL-VA Richmond Braves
-VA Norfolk Tides
-ON Ottawa Lynx
-PA Scranton
-NY Syracuse Chiefs
-OH Toledo MudHens

AA Pacific Coast League (partial)

920 KOB-NM Albuquerque Dukes
720 KORK-NV Las Vegas Stars (d)
1460 KENO-NV Las Vegas Stars (d) Ken Korach
1310 KXAM-AZ Phoenix Giants
1180 KLAY-WA Tacoma Athletics or Tigers
790 KNST-AZ Tucson Toros (EE)
1450 KTZR-AZ Tucson Toros (SS)
850 CFVR-BC Vancouver Canadians
-AB Edmonton Trappers
-CO Colorado Springs
-OR Portland Beavers

AA Eastern League (partial)

1010 WERQ-MD Bowie Baysox
-OH Akron
-NY Albany
-NY Binghamton
-OH Canton
-PA Harrisburg
-ON London
-CT New Britain
-PA Reading

AA Southern League (partial)

1070 WAPI-AB Birmingham Barons
1320 WQIK-FL Jacksonville Suns
600 WREC-TN Memphis Cubs
1520 WTLN-FL Orlando Cubs
- Carolina Pirates
-TN Chattanooga
-SC Greenville
-AL Huntsville
-TN Knoxville Smokies
xxxx xxxx Nashville Xpress (no radio)



AA Texas League (partial)

- 620 WJDS-MS Jackson Generals
- 680 KKYX-TX San Antonio Missions
- 103.3 KTFX-OK Tulsa Drillers
- 1410 KQAM-KS Wichita Wranglers
- AR Arkansas (Little Rock)

Travelers

- TX El Paso
- TX Midland
- LA Shreveport

Class A Teams (partial)

- 1490 WGEZ-WI Beloit Brewers
- 104.5 KTOF-IA Cedar Rapids Kernels -- John Doskow
- 1340 WOKE-SC Charleston Rainbows or

- Bombers -- Brooks Melchior
- 97.7 KCLN-IA Clinton Giants
- 820 WQSI-MD Frederick Orioles or Bulls
- 95.9 WKKD-IL Kane County Cougars
- 94.3 WQEZ-IL Peoria Chiefs
- 94.3 WQRA-VA Prince William Cannone
- 1170 KJOC-IA Quad City River Bandits
- 960 WSBT-IN South Bend White Sox
- 90.7 KSJS-CA San Jose Giants
- 1450 WFMB-IL Springfield Cardinals
- 1290 WJBR-DE Wilmington Bucs
- WI Appleton Foxes
- IA Burlington Bees
- IN Fort Wayne Wizards
- WI Madison Muskies
- IL Rockford Royals
- IA Waterloo Diamonds

Formats

Tony Fitzherbert
 356 Jackman Avenue
 Fairfield, CT 06430-1728

Changes in programming status; reported by listeners

Welcome to your summer vacation edition of Formats. Of course, the broadcasting world is full of transitions. For example, WKOX-1200, Framingham, MA., the full service voice for Boston's western suburbs for decades, even when a 1000 watt daytimer on 1190, has been relegated to simulcasting country music with FM WCLB. This is the only country AM outlet in the Boston Market, though. And WVIP-1310, Mt. Kisco, the former full service voice for northern Westchester County, is now simulcasting it's FM with adult contemporary music.

In other transitions, the Providence, RI market may once again enjoy country music on WHIM-1110, as it did for years, and former country outlet WICE-550 (who id'ed as "WHIM Country") is offering all sports and talk. The new WHIM replaces an all automated WWRX with a steady diet of Unis CNN Headline News. In Baltimore, "Help Radio", WHLP-1360 has ended its short lived all help wanted ads and has gone to adult standards. On 8/1/93, the curious CHYR-710 days and CHYR-7, at 730khz nights, will move to 96.7 on the FM dial, thus ending a very novel opwetion. And, down in Florida, WKGT-1090, will format the reading of books to the visually impaired, id'ing as "The Voice of Print". THAT is unusual. These transitions are from the M STREET JOURNAL.

Finally, WXMC-1310, Parsippany-Troy Hills, NJ, has added jazz to its adult standard format on the weekends.....unusual, because its 1000 watt, very directional signal heads AWAY from potential listeners in the metro New York area. But these illogical decisions make our hobby very interesting! This information is from Al Holtz, in Philly.

My annual railroad trip will go to Chicago, Pittsburgh, and if the new rail line in St. Louis is open, the Gateway City, too. Hopefully, we will get some new Station Profiles in my travels, in mid July. I do hope to visit some of the unique stations just south of Chicago.

And here is our column, most of which is from the M Street Journal.

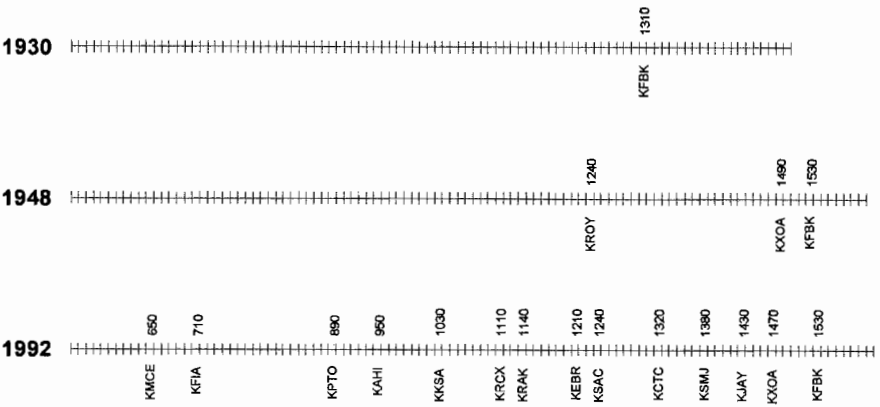
- 540 WRIC VA Richlands - Satellite-fed AC, Talknet.
- 550 WJMW PA Bloomsburg - Country music.
- 550 KUSA MO St. Louis - Unis CNN Headline News.
- 560 KLVI TX Beaumont - Talk, SEN Sports.
- 570 CKWL BC Williams Lake - Country music//CKCQ.
- 580 KUBC CO Montrose - JSN Oldies.
- 580 KANA MT Anaconda - SMN Kool Oldoes.
- 580 KZMX SD Hot Springs - JSN Country Music.
- 590 KEZK IL Wood River - All sports.
- 600 KHTE CA Redding - News, sports, talk.
- 620 KSTR CO Grand Junction - News, talk, with MBS, Sun, ABC/Talknet, CNN, FTP, WOR, and SEN.
- 630 WAVU AL Albertsville - Southern Gospel.
- 630 CFCC ON Chatham - Oldies.
- 640 WGOC TN Blountville - Country music.
- 710 WEKC KY Williamsburg - Country musc, gospel.
- 730 KTRY LA Bastrop - Black gospel.
- 730 WJTO ME Bath - SMN standards, //WLAM, 870.
- 730 WPAL SC Charlston - Urban AC, talk.
- 740 WNNZ FL Orlando - News.
- 750 WAUG NC New Hope - Urban programming.
- 760 KSJL TX San Antonio - Sports.
- 790 KNST AZ Tucson - Here from 940, with news and talk.
- 790 KWSW CA Eureka - Unis standards.
- 790 WRIT SC Bamberg - Black gospel.
- 800 CHAB SK Moose Jaw - Country music.
- 810 WSHF GA Hahira - JSN Soft AC.
- 820 WWAM TN Jasper - Southern gospel, FTP talk.
- 840 CKBX BC One Hundred Mile House - Country//CKCQ.
- 840 KSWB OR Seaside - Country music days, easy listening at night.
- 850 WQST MS Forest - Talk.
- 900 KBIF CA Fresno - Religion and SEN Sports.
- 900 WIAM NC Williamstown - Country music, talk.
- 900 CHML ON Hamilton - All talk.
- 910 WGBI PA Scranton - News, talk//WILK.
- 910 WTMZ SC Dorchester - Talk.
- 920 CKBQ BC Quesnel - Country music.
- 920 WVOH GA Hazlehurst - Southern Gospel.
- 920 WBAA IN West Lafayette - The Purdue University station now airs news and jazz.
- 920 WTTM NJ Trenton - Spanish at nigh.




Now and Then John D. Bowker

Dial changes in AM markets, from 1930 to 1948 to 1992

SACRAMENTO MARKET





AM Station Map Book, 2nd ed.
\$8.00, postpaid.

Edited by DDXD editor Bill Hale, this book of station location maps is a companion to the AM Radio Log. Now easier to read than ever, the 170-page book is three-hole punched for a ring binder. Data is accurate as of 2-1-93, and updates of individual pages will be available at a nominal cost when a sufficient number of changes have occurred. Order from NRC Publications - Box 164 - Mannsville, NY 13661. NY orders, please add sales tax.

- 940 KWFM AZ Tucson - Oldies // FM.
- 970 KBEE CA Modesto - Unis standards.
- 980 KF50 CA Fresno - SMN Oldies, talk.
- 980 WRNE FL Gulf Breeze - Urban and Black Gospel.
- 990 WHOO FL Orlando - Caribbean noon to 8:00pm.
- 990 WCMF NY Rochester - Ex-WRMM, now rock//WCMF-FM.
- 1010 KZRC OR Milusie - Hard rock and sports talk.
- 1020 KASR OK Perry - Country music.
- 1030 WNVN IL Vernon Hills - All Polish programming.
- 1050 KRRX OK Lawton - SEN Sports, EFM Talk.
- 1050 KCAS TX Slaton - Classic country music.
- 1080 WSSI MS Carthage - Sun talk.
- 1110 WKDZ KY Cadiz - SMN Real Country Music//FM.
- 1110 WTBQ NY Warwick - Adult standards, FTP Talk.
- 1140 CFXL AB Calgary - Adult contemporary.
- 1140 WAKK MS McComb - Urban AC.
- 1140 KVSP OK Oklahoma City - Urban "Power Jams 1140" (Honest!!).
- 1150 WHUN PA Huntington - SMN Real Country Music.
- 1150 WJZS SC Orangeburg - FTP, Sun, EFM Talk.
- 1170 WARW NY Cornwall - JSN country music//WRWD, 107.3, Highland, NY.
- 1180 WBND OH Florence - Urban AC "Blend".
- 1190 KKNO NV North Las Vegas - Travel Info "Casino Radio".
- 1220 WMDC MS Hazelhurst - Christian programming, country music.
- 1230 KZLO MT Bozeman - Country music.
- 1240 WKIQ FL Eustis - Oldies, talk//WTRR.
- 1240 WFTN NH Franklin - Super country music//WSCY-FM.
- 1240 KMAV MT Billings - The May Technical College station, it airs classic rock.
- 1250 WLEM PA Emporium - Oldies, country music//FM.
- 1250 KKDZ WA Seattle - To be locally-produced children's programming.
- 1260 WGVN MS Greenville - Talk.
- 1280 WKXX GA Macon - SEN Sports.
- 1280 WFCY MI Alma - Unis Hot Country Music.
- 1280 WSQV PA Bervick - Satellite-fed adult contemporary.
- 1280 WANS SC Anderson - Hot AC//WWMN.
- 1290 KAZA CA Gilroy - Regional Mexican.
- 1290 WAMX MI Saline - New adult contemporary.
- 1290 KOIL NE Omaha - Country music//KXKT.
- 1300 KLAR TX Larado - News, talk.
- 1310 WTIK NC Durham - SEN Sports.
- 1320 WTOP NC Washington - Black gospel.
- 1320 WXYU VA Lynchburg - SMN Oldies.
- 1330 WETZ WV New Martinsville - Southern Gospel.
- 1340 WNBH MA New Bedford - Unis oldies.
- 1340 KKAM TX Lubbock - All talk.
- 1340 KRBA TX Lufkin - Oldies, Southern Gospel, talk, country gold, Spanish.
- 1350 KCKC CA San Bernardino - Unis CNN Headline News.
- 1360 WMFL AL Monroeville - Christian country music.
- 1360 WMAC GA Metter - Adult contemporary.
- 1360 KNIR LA New Iberia - Unis standards.
- 1360 WHBG VA Bridgewater - JSN Oldies.
- 1370 KPCC CA Quincy - Country, rock.
- 1370 WELV NY Ellenville - Talk.
- 1370 WDEF TN Chattanooga - Easy listening.
- 1380 KMUS OK Muskogee - Urban programming.
- 1380 KMUL TX Mule Shoe - Country music.
- 1390 WNTL GA Reidville - Southern Gospel.
- 1390 WEED NC Rocky Mount - JSN CWM, talk.
- 1400 KIXT CA San Luis Obispo - All advertisements, Home Shopping Network approach.
- 1400 WJWF MS Columbus - Contemporary Christian//WQNN.
- 1400 WNNF NY Buffalo - BRN Business News.
- 1430 KQLL OK Tulsa - Talk, SEN Sports.
- 1440 KPUR TX Amerillo - FTP, SEN, Talknet, MBS Talk.
- 1450 WADV IN Vincennes - EFN, CBS, MBS Talk.
- 1460 WUFI IL Rantoul - All talk.
- 1470 KUTY CA Palmdale - Spanish.
- 1480 WCNV NC Charlotte - Unis CNN Headline News.
- 1480 KMRT TX Dallas - Regional Mexican.
- 1480 WFOY VA Salem - Urban AC.
- 1510 KJLA MO Independence - SMN Standards
- 1520 KAMX NM Albuquerque - CHR//FM.
- 1520 WJMP OH Kent - ASN Sports.
- 1520 WVOI OH Toledo - Black gospel as it was in its WGOR days.
- 1520 WREA TN Dayton - CHR.
- 1530 KCLR TX Ralls - Spanish AC.
- 1550 WLOR AL Huntsville - Black Gospel.



KPRZ, 1635 S. Rancho Santa Fe Rd.
Suite 201
San Marcos, CA 92069-5158

- 1550 KRGO UT West Valley City - All Spanish.
- 1550 KAPL CA Apple Valley - SMN Kool Oldies.
- 1550 WVAB VA Virginia Beach - BRN Business News.
- 1570 WIFF IN Auburn - Talk, sports.
- 1570 WBUX PA Doylestown - 70's oldies, adult contemporary.
- 1590 KDAE TX Sinton - Unis Standards.
- 1600 KVRD AZ Cottonwood - Satellite talk.
- 1600 WBLV OH Springfield - Talk.

Thanks to the M Street Journal for virtually everything above. And get your local format changes in to your formsts column. Now, courtesy of Jerry Starr, a Dial Scan from Youngstown, OH.

- 570 WKBN OH Youngstown - Full service news, talk, sports.
- 600 WSOM OH Salem - Country music.
- 830 WKTU OH Cortland - Christian Contemporary, ethnic.
- 1200 WBZY PA New Castle - Contemporary Christian.
- 1240 WBBW OH Youngstown - Talk, sports.
- 1280 WKST PA New Castle - Sports.
- 1330 WZKC OH Youngstown - Sports.
- 1390 WHOT OH Youngstown - Easy listening, sports.
- 1440 WRRO OH Warren - Pop, rock oldies.
- 1500 WGFT OH Youngstown - Contemporary Christian.
- 1540 WNRB OH Niles - Adult urban.

Thank you, Jerry. Wow, a long column! See you in a month, with many more contributions from YOU (hopefully).

73's. *Jz*



P.O. Box 220
Warrenton, MO 63383

Contests

Rick Dau

917 E. College St., #6

Iowa City, IA 52240-5513

Promotion of the DX hobby through competitive listening.

Final 1992-93 Contest Standings

	A	B	C	D	E	F	G
Rick Dau, Iowa City, IA	2381	contest manager					
Rob Kramer, Chicago, IL	2236	876	100	300	960	0	0
Earl Higgins, St. Louis, MO	1362	592	20	600	150	0	0
John Tudenham, Joplin, MO	510	390	0	120	0	0	0
Bill Hardy, Aberdeen, WA	191	141	20	10	20	0	0
Nancy Hardy, Aberdeen, WA	159	114	20	10	5	0	10

- A = total points
- B = state & province points
- C = "Most Wanted" stations
- D = other new loggings
- E = sign-ons & sign-offs
- F = stations coming on the air for the first time
- G = stations returning to the air after a 3+ months silence

Even though I technically finished in first place in the standings this year, I am, as contest manager, excluding myself from any prizes. So, by that criteria, Rob Kramer of Chicago is awarded first place for 1992-93. Both Rob and Earl Higgins (last year's winner) will be getting prizes from NRC headquarters. My special thanks to all who entered, and I hope to see these same names (and many more!) for the 1993-94 NRC contest. THAT one will begin on October 1st, and rules will be posted in a September issue of DX News. See you next fall! 73 de RWD.

DID YOU KNOW that Texas stations occupy the most number of AM broadcast channels of any state? They have stations on every frequency except 640, 670, 780, 1020 and 1170. California appears to be second; they're missing six channels.

Bruce Conti
46 Ridgefield Drive
Nashua, NH 03062-1174

DX'ing 'smart', with shared tips and requests by NRC members

An excellent introduction to the geomagnetic summary was featured in the For Beginners column in the April 19, 1993 DX News (Vol.60-No.24). Target DX follows up with a report on the effects of geomagnetics, along with tips and targets.

GEOMAGNETIC CONDITIONS

First, a review of the material covered in the aforesaid For Beginners column. Current conditions and the geomagnetic forecast are announced at 18 minutes past the hour on WWV (2.5, 5, 10, 15, and 20 MHz shortwave). Conditions are measured in terms of three indices; the Solar Flux Index (SFI), K-Index, and A-Index. The A-Index is most relied upon by medium-wave DXers to gauge conditions, but the SFI and K-index also provide meaningful information. The K-index is a measure of geomagnetic activity in units of gammas (particle energy) on a one-cycle logarithmic scale from 0 to 9. It's updated every three hours, and therefore provides us with the most immediate information. However, because the scale is logarithmic and readings are frequent, it's harder to visualize or accurately interpret the data. So the A-Index is obtained by converting the K-Index log scale to a linear scale, and taking an average of the day's three-hour interval K readings. The resulting A-Index allows us to better visualize day-to-day fluctuations in activity as shown in Figure 1.

The SFI is a measurement which correlates more or less with the sunspot number, providing a smoother curve for analysis of sunspot cycles. A third curve is also shown in Figure 1, which is an average of the SFI. Note from Figure 1 that when the SFI is up, impulses in the A-Index can occur, but that's not always the case. A major solar flare can cause the A-Index to peak even though the sunspot number is down, so the SFI is mostly a long-range forecasting tool for determining position in the current sunspot cycle when compared to previous cycles.

WNCT AM FM

P.O. Box 7167
 Greenville, North Carolina 27835

PLAYING THE NUMBERS

Many dedicated DXers set aside a certain amount of time every day to record the indices and forecast, whether they DX on that day or not, just to keep track of conditions. Then they plan ahead based upon the index trends. This is sometimes referred to as "playing the numbers". To play, use Table 1 as a geomagnetic activity gauge. Listen to WWV at :18 past the hour and write down the current indices along with the geomagnetic forecast.

K-INDEX	A-INDEX	ACTIVITY LEVEL
< 2	< 7	Quiet
3	20	Unsettled
4	30	Active
5	40	Minor Storm
6	50	Major Storm
> 7	> 50	Severe Storm

TABLE 1: The indices vs. activity.

The best or most unusual DX will occur at A-Index peaks or on the falling edge of an A peak. Stronger levels of activity usually occur on the falling edge of the sunspot cycle. However, the current sunspot cycle (cycle 22) is bottoming out, and decreasing levels of activity are expected from now into 1997.

In general, when activity is quiet, trans-continental DX seems to be improved. Alternatively, active conditions quell high latitude reception, allowing low-angle skip to come in from the south. This is because the Sun's particle emissions are directed to the polar regions, as evidenced by the commonness of aurorae at higher latitudes.

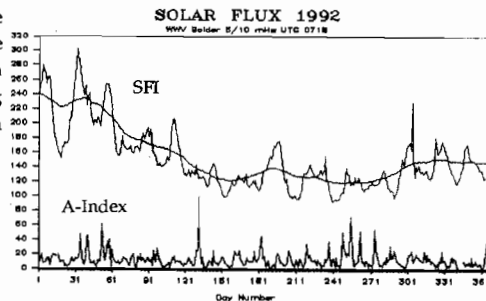


Figure 1

Another tip: Activity is usually greatest during the Spring and Autumn equinoxes, when the Earth is best aligned for intercepting energy particles. In the winter, many DXers have actually reported a lull in DX reception, known as the "midwinter anomaly", which may be attributed to the lower geomagnetic activity and higher overall ionospheric density. Of course, the same diminished conditions occur in the summer, combined with increased noise from lightning storms, making DX even more difficult.

TARGET LISTS

If you haven't been keeping track of conditions, then you can get started by referring to the *Geomagnetic Summary* in DX News. Compare your personal logs to the summary to get a feel for how conditions effect your reception. Then generate target lists of stations for different geomagnetic conditions. I've come up with two examples of target lists based upon my own observations.

If you would like to contribute more on the topic of geomagnetic conditions, send your tips and target lists to Target DX. Target lists and observations from other regions are encouraged!

REFERENCES

- Smith, Henry J., and Else V.P. Smith. *Solar Flares*. New York: The Macmillan Company, 1963.
- Taylor, Peter O. *Observing The Sun*. Cambridge, UK: Cambridge University Press, 1991.

Bruce Conti, Nashua, NH; R70, DX400, MWDX-5, (2) 60-ft wires.

QUIET CONDITIONS:

- * 540 XEWA MEXICO Monterrey
- * 600 WMT IA Cedar Rapids
- * 620 WTMJ WI Milwaukee
- * 640 KIT CA Los Angeles
- * 740 KRMG OK Tulsa
- 900 XEW MEXICO Mexico City
- 940 XHQ MEXICO Mexico City
- * 1000 KOMO WA Seattle
- * 1090 KING WA Seattle
- * 1130 WISN WI Milwaukee

ACTIVE to STORM CONDITIONS:

- * 580 WKAQ PR San Juan
- 700 JBC JAMAICA Montego Bay
- 740 WIAC PR San Juan
- 750 R.Caracas VENEZUELA Caracas
- 760 R.Doble Q VENEZUELA
- * 830 R.One BELIZE Ladyville
- 860 R.Clarin DOMINICAN REP.
- 895 VON ST.KITTS & NEVIS
- 970 WSTX US VIRGIN ISLANDS
- 1000 RCN COLOMBIA Cartagena
- * 1020 Mundial Margarita VENEZUELA
- * 1500 R.Dos Mil VENEZUELA Cumana
- * 1580 VOA BELIZE Punta Gorda

* indicates not heard.

HELP WANTED

Clifford Schnauffer from New Jersey is looking for information on loop antennas. He's interested in purchasing a two-foot loop with good nulling characteristics. If anyone would like to build a loop antenna, or has one for sale, drop me a line at Target DX and I'll forward the info. 73s

Clifford

A DXers TECHNICAL GUIDE

Now in its 2nd edition, this 120 page book answers questions on receiver and antenna theory (how to improve their performance), how audio filters and loop antennas can improve DX (and hints on their construction), how to build a beverage and phasing unit, and much more. Only \$5.50 for NRC/IRCA members, \$6.50 for non-members (overseas airmail add \$2.50). Order your copy today from: IRCA Bookstore, 9705 Mary Ave NW, Seattle WA 98117

**WHAT A TIME SAVER
 THE NATIONAL RADIO CLUB'S**

COUNTY CROSS REFERENCE

You're on 1400 with a very weak signal saying " and today the Fremont County Sheriff arrested..." and fade into nothing.. You have to go looking through page after page of atlas information to find Fremont County in Colorado. Now you can turn the pages of the National Radio Club's County Cross Reference and find all the states with Fremont County at a glance! It's a matter of referring only to stations in the states that have a Fremont County!.....Non-Member.....\$8.95 Member.....\$4.95 Order Item CCR.....Order from National Radio Club Publications Center P.O. Box 164 Mannsville, NY USA 13661-0164

Bandscans

Eric Bueneman
631 Coachway Lane
Hazelwood, MO 63042-0000

Audible stations from a DX'er's location at given times.

Once again, the torch has been passed. In 1983, this column started under the editorship of Terry Klasek, who is now honing his journalistic skills at Florissant Valley Community College, where he works for the campus newspaper, The Forum. Four months later, the editorship went over to yours truly. In order to concentrate on my studies at Flo Valley, I passed the editorship to my hand-picked successor, John Malicky, in the summer of 1985. Chris Cuomo, who has been doing the column since 1988, is busy with his own studies, so I took it upon myself to volunteer for this column once again. Since I last did this column in May of 1985, a lot has changed. I did FM DX DIGEST for two seasons (1989-90), also edited for WTPDA, and DXed from Georgia, where I heard great DX. I also received my Technician Class ham ticket (of the no-code variety) in October 1992, and will be receiving an Associate of Arts degree in Broadcasting this summer from Florissant Valley Community College.

My return column includes two bandscans taken by yours truly, both daytime scans. Signal ratings are as follows: 5-Local, 4-Very Good, 3-Good, 2-Fair, 1-Poor, \$ Stereo (after the signal rating number). Locals are in CAPS.

(EB-MO) (Daytime)	6/93	(EB-GA) (Daytime)	6/92
540	PTS St. Louis, MO 3	530	(clear)
540	KMMI Fort Dodge, IA 2	540	WSTH Columbus, GA 3\$
550	KUSA ST. LOUIS, MO 5\$	550	WDUN Gainesville, GA 4\$
560	WIND Chicago, IL 2	560	WVOC Columbia, SC
570	KWTO Springfield, MO 2	570	WAAX Gadsden, AL 4
570	WKYX Paducah, KY 3	570	WNCN Asheville, NC 1
580	WILL Urbana, IL 3	580	WGAC Augusta, GA 2
590	KIZK WOOD RIVER, IL 5\$	590	WKHX ATLANTA, GA 5
600	WMP Cedar Rapids, IA 2	600	WCVP Murphy, NC 2
610	WMAF Kansas City, MO 2\$	610	WPLO GRAYSON, GA 4\$
620	WMM Milwaukee, WI 1	620	WZZK Birmingham, AL 1
630	KXOK ST. LOUIS, MO 5	620	WTRP La Grange, GA 3
640	WOI Ames, IA 2	630	WAVU Albertville, AL 2
650	WCRV Collierville, TN 2	640	WGST ATLANTA, GA 5
660	WSM Nashville, TN 2	650	WSM Nashville, TN 2
670	KCRO Omaha, NE 1	660	WESC Greenville, SC 3
680	WMAQ Chicago, IL 3\$	670	(WCNN splash)
680	KFEQ St. Joseph, MO 2	680	WCNN NORTH ATLANTA, GA 5
690	KSTL ST. LOUIS, MO 5	690	WJOX Birmingham, AL 2\$
700	WLW Cincinnati, OH 2	700	WLW Cincinnati, OH 2
710	WHB Kansas City, MO 2\$	710	WROM Rome, GA 4
720	WGN Chicago, IL 3\$	720	WMOY Hogansville, GA 3
730	KWRE WARRENTON, MO 5	730	WLIL Lenoir City, TN 1
740	WVLN Olney, IL 2	740	WMTI Montgomery, AL 1
750	KJEL Lebanon, MO 2	750	WSB ATLANTA, GA 5
760	WJR Detroit, MI 1	760	(WSB splash)
770	WEW ST. LOUIS, MO 5	770	WZEL Young Harris, GA 2
780	WBEM Chicago, IL 2\$	780	WZZX Lineville, AL 1
790	WRMS Beardstown, IL 3	790	WQXT ATLANTA, GA 5\$
800	KREI Farmington, MO 3	800	WHOS Decatur, AL 2
810	KCMO Kansas City, MO 3	810	WHIC Royston, GA 2
820	WSCR Chicago, IL 1	820	WAPQ Jasper, TN 2
830	KBOA Kennett, MO 2\$	830	KBOA Kennett, MO 1
840	WHAS Louisville, KY 1	840	WHAS Louisville, KY 1
850	KFUO CLAYTON, MO 5	850	WYDE Birmingham, AL 2
860	WSON Henderson, KY 1	860	WABC ATLANTA, GA 5
870	KAAN Bethany, MO 1	870	WORX Valley Head, AL 2\$
880	WINU HIGHLAND, IL 5	880	WBKZ Jefferson, GA
890	WLS Chicago, IL 2\$	890	WLS Chicago, IL 1
900	KFAL Fulton, MO 3	900	WJTH Calhoun, GA 4
910	KLCN Blytheville, AR 2	910	WEPG South Pittsburg, TN 2
920	WAKO Lawrenceville, IL 2	920	WAFS ATLANTA, GA 5
930	WGNU GRANITE CITY, IL 5	930	WJBY Rainbow City, AL 3\$
940	WYAD Quincy, IL 3	940	WMAZ Macon, GA 2
940	WMIX Mount Vernon, IL 4	950	WGTA Summerville, GA 2
950	KLIK Jefferson City, MO 2\$	960	WRFC Athens, GA 2\$
960	KZIM Cape Girardeau, MO 2	970	WNIV ATLANTA, GA 5
970	WMAY Springfield, IL 3\$	980	WKLY Hartwell, GA 2
980	KSCM Chester, IL 3	990	WEIS Centre, AL 2
990	WCAZ Carthage, IL 2	1000	WTAK Huntsville, AL 2



KEWI
AM 690
ESTN Radio

(EB-MO) (Daytime)	6/93	(EB-GA) (Daytime)	6/92
1000	WLUP Chicago, IL 1	1010	WGUN ATLANTA, GA 5
1010	KXEN ST. LOUIS/FESTUS, MO 5	1020	WRXJ Homeland Park, SC 3
1020	WCIL Carbondale, IL 2	1030	WJKZ White Bluff, TN 2
1030	WKSS Memphis, TN 1		WNOW Mint Hill, NC 1
1040	WHO Des Moines, IA 2	1040	WQBB Powell, TN 2\$
1050	WDZ Decatur, IL 3	1050	WPBE Conyers, GA 4
1060	WMCL McLeansboro, IL 3	1060	WKNG Tallapoosa, GA 2
1070	RHMO Hannibal, MO 3	1070	WFLI Lookout Mountain, TN 2
1080	WRYT EDWARDSVILLE, IL 5	1080	WFTD MARIETTA, GA 5
1090	WCRA Effingham, IL 2	1090	(WFTD splash)
1100	WWWE Cleveland, OH 1	1100	WLEB Carrollton, GA 3
1110	(KMOX splash)	1110	WEBS Calhoun, GA 3
1120	KMOX ST. LOUIS, MO 5\$	1120	WBNM Gordon, GA 2
1130	WSJP Murray, KY 1		KMOX St. Louis, MO 1
1140	WVEL Pekin, IL 2	1130	(clear)
1150	WGGH Marion, IL 3\$	1140	WBXR Hazel Green, AL 2
	KRMS Osage Beach, MO 1	1150	WGOV Chattanooga, TN 3
1160	WJJD Chicago, IL 3	1160	WAMB Dorelson, TN 2
1170	KUGT Jackson, MO 2	1170	WHNE CUMMING, GA 5
	WLEH Mattoon, IL 2	1180	(WGKA/WHNE splash)
1180	WLDS Jacksonville, IL 4	1190	WGKA ATLANTA, GA 5\$
1190	KHAD De Soto, MO 4	1200	(WGKA splash)
1200	WOPA Chicago, IL 1	1210	WSBT Static, TN 1
1210	WILY Centralia, IL 3	1220	WZOT Rockmart, GA 3
1220	KLPW Union, MO 4	1230	WBLJ Dalton, GA 3
1230	WHCO Sparta, IL 4	1240	WOGA Gainesville, GA 3\$
1240	WTAX Springfield, IL 2		WLAG La Grange, GA 1
	KFMO Flat River, MO 2	1250	WZOB Fort Payne, AL 3
1250	KBTC Houston, MO 1	1260	WUJH East Point, GA 4
1260	WIEV BELLEVILLE, IL 5		WNOO Chattanooga, TN 2
1270	WKBF Rock Island, IL 2	1270	WIXC Cartersville, GA 4
1280	KYRO Potosi, MO 3	1280	WPID Piedmont, AL 2
1290	WIRL Peoria, IL 3\$	1290	WCHX CANTON, GA 5
1300	WFRX West Frankfort, IL 2	1300	WIMO Winder, GA 2
1310	KOKK Keokuk, IA 2		WNEA Newman, GA 2
	KBMV Birch Tree, MO 1	1310	WXLJ Decatur, GA 4
1320	KSIV CLAYTON, MO 5		WDOO Chattanooga, TN 2
1330	WVH Evansville, IN 1	1320	WHIE Griffin, GA 3
1340	KXBO Mexico, MO 3	1330	WKZD Murrayville, GA 2
1350	KSLQ Washington, MO 2		WPPI Carrollton, GA 2
	WJED Salem, IL 3	1340	WIGO Atlanta, GA 4
1360	KBKX Fort Madison, IA 2	1350	WRWH Cleveland, GA 3
1370	KWFT Boomville, MO 1	1360	WTRH Rome, GA 2\$
1380	KASP ST. LOUIS, MO	1370	WDEF Chattanooga, TN 2
1390	KJPW Waynesville, MO 1	1380	WAOK ATLANTA, GA 5
1400	KJCF Festus, MO 4	1390	WMAA Anniston, AL 2
1410	WTIM Taylorville, IL 3	1400	WAZX ALPHARETTA, GA 5
1420	WINI Murphysboro, IL 2	1410	WLAQ Rome, GA 3
1430	WRTH ST. LOUIS, MO 5	1420	WWEV Decatur, GA 3
1440	WGEM Quincy, IL 3	1430	WGFS Covington, GA 2
1450	WRMB Springfield, IL 3		WLSQ Dalton, GA 3\$
1460	KIRL ST. CHARLES, MO 5	1440	WBKI Bremen, GA 3
1470	WMBD Peoria, IL 1	1450	WBHF Cartersville, GA 4
1480	WJEM Jerseyville, IL 4	1460	WCEM Buford, GA 4
	WTHI Terre Haute, IN 1	1470	WRGA Rome, GA 4
1490	WESL East St. Louis, IL 4\$	1480	WYZE ATLANTA, GA 5
	KTTR Rolla, MO 2	1490	WYZZ Jasper, GA 4
1500	WPMB Vandalia, IL 3	1500	WDPC Dallas, GA 4
1510	KJLA Independence, MO 1	1510	WLAC Nashville, TN 1
1520	KMPL Sikeston, MO 3	1520	WDCC Douglasville, GA 4
1530	KPCR Bowling Green, MO 3	1530	WPTI Dalton, GA 3
1540	WSMI Litchfield, IL 4	1540	WRSM Sumiton, AL 2
1550	KAPE Cape Girardeau, MO 2\$	1550	WYNX SMYRNA, GA 5
1560	RTUI Sullivan, MO 2	1560	WAGC Centre, AL 2
1570	WEGZ ALTON, IL 5	1570	WASS Morrow, GA 3
1580	WBRA Pittsfield, IL 3	1580	WBRM Columbus, GA 2
1590	WAJK Galesburg, IL 2	1590	WQCH La Fayette, GA 3
1600	KATZ ST. LOUIS, MO 5	1600	WAOS AUSTELL, GA 5

(EB-MO) Eric Bueneman (N0UIH), Hazelwood, MO

(EB-GA) Eric Bueneman (KDX(STL/4) Marietta, GA (all with Realistic DX-200, TM-152 & SM-2)

73. Eric-N0UIH



NEWSRADIO 99

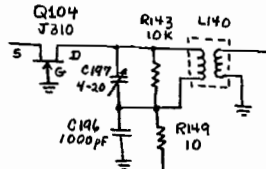
Puuhui Tower, Suite 660
1001 Bishop Street
Honolulu, Hawaii 96813

Drake R8: Increased Dynamic Range ... by Dallas Lankford

As R8 owners know, just about every night you can get lots of 3rd order intermodulation distortion products (IMD3) in the 1.8-2.0 MHz range with the preamp on using rather modest antennas. And it is not uncommon to get IMD3 during the daytime in that frequency range with the preamp off. And at night in the 15.6-15.8 MHz range it is not uncommon to get 2nd order intermodulation distortion products (IMD2) from 6 and 9 MHz SW broadcaster with the preamp off or on. In a previous review of the R8 I had speculated that the cause of the IMD was the first mixer, although I did not completely rule out the 1st IF amp as a possibility. Denzil Wraight had discussed the problem with me, and he was more inclined to suspect the 1st IF amp. Because of that, and because the 1st IF amp is easier to modify than replacing the 1st mixer, I modified the 1st IF amp before trying anything else.

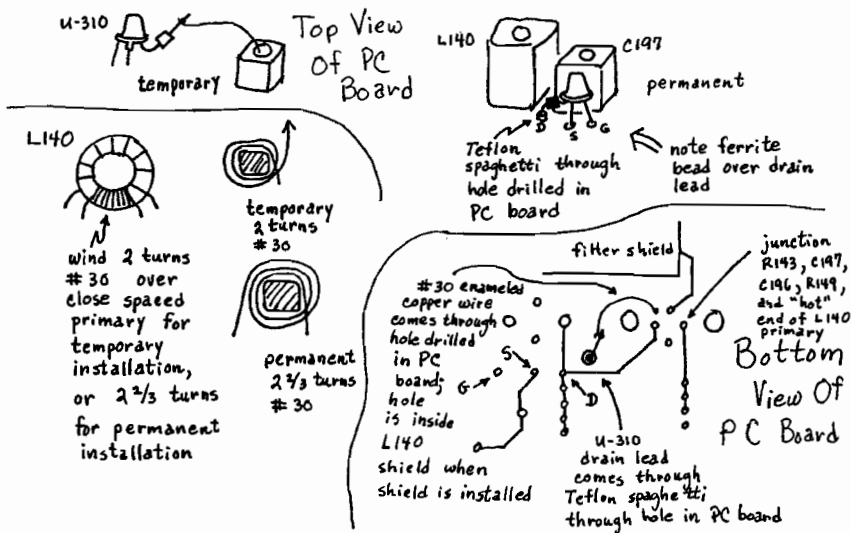
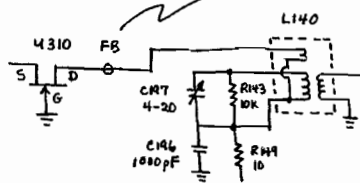
The basic idea was to present the J310 with a lower load impedance, which would in theory increase the 3rd order intercept (ICP3) of the J310 amp. To avoid drilling holes in the PC board, my first mod was temporary. The J310 was removed and a U-310 was installed in place of the J310 with the drain lead of the U-310 curved up (dangling). The U-310 leads are stiff enough so that there is no danger of the lead flopping around and shorting the +10 volt DC line. The L140 shield was carefully removed so as not to break the flimsy #30 enameled copper wire leads, and a two turn link was threaded around the bottom of L140 without removing L140. One end of the short length of #30 enameled copper wire was tinned in advance, and solder was removed from the PC board hole for the "bottom hot" side of the L140 primary. The tinned end of the short length of #30 was threaded through that PC board hole and

Before:



Amidon FB-101-64 ferrite bead

After:



soldered. The the two turn link was wound, the shield can was reinstalled (with the other link lead coming out through the hole in the top of the shield), the link lead was trimmed to length, tinned, and soldered to the drain of the U-310.

When I turned on my modified R8 for the first time last Saturday afternoon, I knew the mod was a winner. With preamp off, there was no sign of my usual KRUS + KWKH (2x1490 - 1130) IMD3 with preamp on, and with the preamp on the IMD3 was barely there, about as strong as it had been with the unmodified R8 and preamp off.

After realigning the IF transformers (C197, C179, C174) I began making tests and observations. Signal levels were down about 12 dB, but surprisingly the sensitivity of the R8 was hardly changed, from about 1.1 uV before to 1.5 uV after the mod for a 6 KHz BW and AM mode with preamp off.

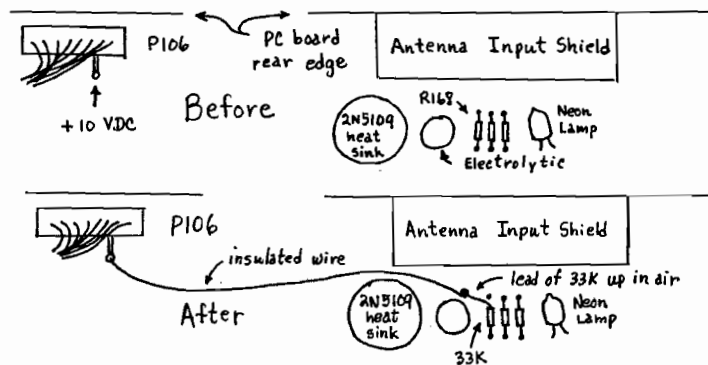
Later, for a permanent installation I used a 2 2/3 turn link, and signal levels were down only about 8 dB, but with sensitivity still down slightly at 1.5 uV for a 6 KHz BW and AM mode with preamp off.

The preamp off ICP3 is now below the local oscillator (LO) phase noise at the standard 20 KHz spacing with 6 KHz BW and AM mode. In other words, the ICP3 is LO phase noise limited. A good measure of the ICP3 can be gotten by measuring the ICP3 at wide tone spacings within one of the broadband front end filters, for example 2x1000 - 520 = 1480 KHz, 2x2000 - 1520 = 2480 KHz, and so on. With such spacings I got +16.5 dBm for AM mode and 6 KHz BW with preamp off. With preamp on the standard 20 KHz spacing ICP3 could be measured, and it was found to be about +2 dBm, about the same as for an unmodified R8 with preamp off.

Even with the temporary mod, it was obvious to me that this mod would be a permanent part of my R8. There is not much space to bring the U-310 drain lead through the PC board. The top side is blocked by the shields for L140 and C197, and the bottom side is fenced-in by the original traces to the drain of the J310. I don't like hole drilling or trace cutting, but in my opinion hole drilling is better than trace cutting. The available space is so restricted that one side of my hole just about touched the trace from the original drain to L140. By working a small drill bit around the hole I enlarged the hole just enough so that some #20 Teflon spaghetti could be jammed through the hole. I trimmed one end of the Teflon tubing to a point so it could be threaded into the hole and forced through, and then used miniature needle nose pliers to pull it through further. The ends of the Teflon tubing were then cut flat with miniature diagonal cutters. About 1/8 inch of the Teflon tubing sticks up above and down below the PC board surfaces. With the L140 shield removed, a small hole was drilled through the PC board to pass through one end of the #30 link. The hole is very near one inside corner of the shield with the shield installed. When winding the 2 2/3 turn link you should be careful not to move L140 too much because #30 wire is easy to break. At some future date I'll probably rewind L140 because I moved mine around a lot while working out the mod. I may use #26 for the link because that would give a sturdier and more reliable installation.

Further testing with with several other IF amps and further alignments of the 45 MHz tuned circuits and image reject circuit at the 2nd mixer revealed that there can be considerable variation in ICP3 depending mainly, it seems, on the alignment trimmer settings and image reject trimmer settings. For best 45 MHz crystal filter shape and maximum 100 KHz image rejection, the preamp off ICP3 tends to be in the +10 - +12 dBm range, and the preamp on ICP3 tends to be in the -1 - +3 dBm range. At present I am using a pair of U-310's mounted on a small adapter PC board instead of the single U-310 mod described at the beginning of this article. It may be possible to raise the preamp off/on ICP3 to +17/+5 dBm by using a low pass filter between the diplexer and the 1st 45 MHz IF amp, but I have not finished these tests. The point is that this mod should be regarded as preliminary, and further significant improvements may be possible.

With the higher dynamic range there is no longer any reason (if there ever was one) to disable the preamp below 1.8 MHz. For the last week or two I have been running my R8 with the preamp turned on for all bands, and I have found no significant IMD3 products. The simplest way to turn the preamp on is to remove R168 (10 K). Install one lead of a 33K ohm resistor in the front panel side PC board hole which formerly mounted R168, and run a short length of insulated wire from the other lead of the 33K ohm resistor to a +10 VDC plated through hole in front of P106. With this mod, the preamp is on when the R8 is on. The preamp push button on the front panel may still be used to obtain 10 dB attenuation, and the front panel light still cycles through OFF, ATTN, and PRE. However, in both OFF and PRE the preamp is on.



This is, of course, not the proper way to do the preamp mod. One should fabricate some kind of tiny PC board adapter which is soldered into the R8 PC board where R168 was originally. I plan to fabricate a small adapter with a 3 prong header and movable jumper (and 10K and 33K ohm resistors) so that I can switch between the original preamp operation and preamp permanently on. This mod could be accomplished with a switch mounted on the rear panel, but then it would be more difficult to remove the RF PC board.

Unfortunately, improving the ICP3 of the 1st 45 MHz IF amp does not improve the 2nd order intercept (ICP2) of the R8. The R8 ICP2 seems to be entirely determined by the 1st mixer, which has a wideband ICP2 of about +41 dBm, plus some additional help from the broadband front end filters, which brings it up to the +45 - +50 dBm range with preamp off, and +35 - +40 dBm range with preamp on. This means you will still observe SW IMD2 products in the 15.6 - 15.8 MHz range many evenings, and perhaps at other frequencies, such as 500, 510, and 520 KHz and 3000 - 3200 KHz for MW IMD2. The only way to substantially improve the R8 2nd order performance is to replace the 1st mixer. And there is really only one MiniCircuits mixer which would, in principle, substantially improve the ICP2, namely the TUF-3H with a broadband ICP3 of about +29 dBm and broadband ICP2 of about +68 dBm. However, the TUF-3H requires +17 dBm LO drive, so additional amplification of the LO would be required. In addition, the R8 preamp would probably have to be replaced with a balanced amp to achieve a +68 dBm ICP2. Nevertheless, the advantages of such improvement may be worth pursuing.

Drake R8: Type B Spurs Elimination ... by Dallas Lankford

In my review, "Drake R8: A Second Look," I discussed several types of spurs which afflict the R8. One kind, which I called type B, are found on virtually all weak signals below 10.5 MHz at certain tuning settings, and sound like hets, warbling hets, or noise. The type B hets change frequency much more quickly than ordinary hets as you tune across them, so you can often tune away from them. However, weak signals are difficult enough to hear anyway without additional noise and hets provided by type B spurs, and it is sometimes not obvious that a type B het is present so that you can take evasive action. Moreover, the AM synchronous detector can sometimes lock onto type B hets.

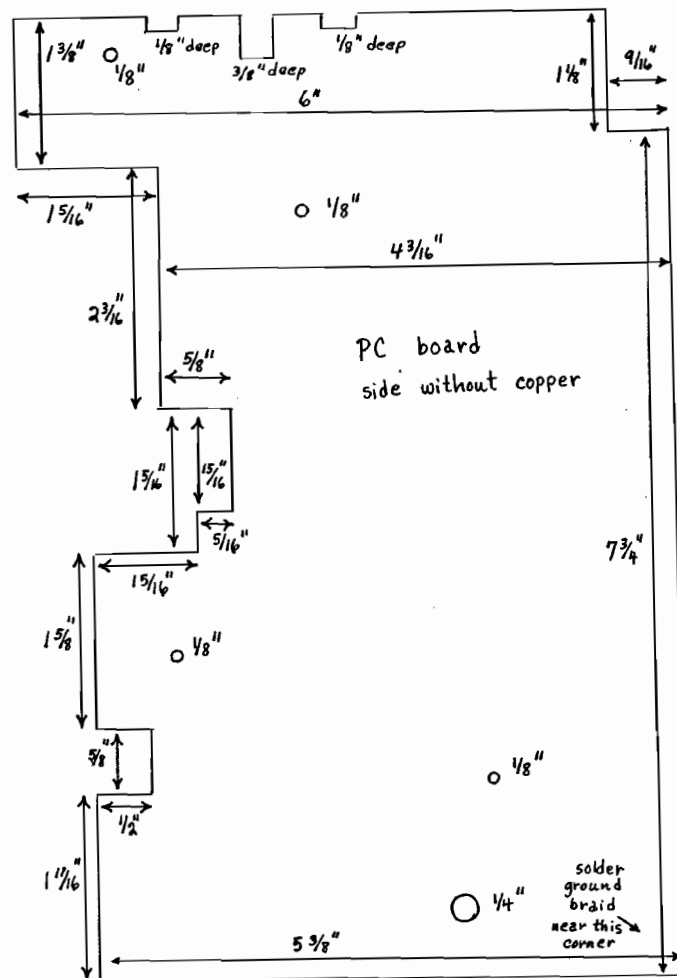
The type B spurs (hets and noise) seem to be caused by some kind of RFI radiated from parts of the AM synchronous detector and picked up by the PC board leads of the front end filters. To find the source of the type B spurs I used a 3 turn 2 inch diameter loop made from insulated wire and connected the small loop in series with my usual antenna. A type B spur was tuned, and the small loop was used to probe various locations on the R8 IF/audio PC board until an increase in the intensity of the type B spur was observed. Type B spurs intensities increased only when the small loop was in the vicinity of U112, which is one of the integrated circuits for the AM synchronous detector.

The front end bandpass filters have an unusual aspect which is apparently related to the type B spurs, namely diode switches CR112 and CR117 which isolate the input and output leads (PC board traces) for bands 1 - 7 filters (below 10.5 MHz) from the input and output leads for bands 7 - 9 (above 10.5 MHz). No type B spurs are observed for bands 7 - 9 (above 10.5 MHz), while type B spurs are observed on virtually all weak signals at certain tuning positions

for bands 1 - 6 (below 10.5 MHz). Moreover, if CR112 and CR117 are jumped, and all input and output diodes for bands 1 - 6 are doubled (to maintain original filter isolation), then type B spurs are also observed for bands 7 - 9.

Although interesting, the CR112/CR117 kludge obviously does not solve the type B spur problem below 10.5 MHz. The correct solution, which eliminates all type B spurs completely, and which seems to reduce the intensities of some of the other spurs, is to place a grounded shield between the RF and IF/audio PC boards as close as possible to the bottom side of the RF PC board.

I started with a 6 by 9 inch single sided fiberglass PC board and nibbled away on it until it could be mounted with fiberglass side flush against the bottom side of the R8 RF PC board (or rather flush against the ends of component leads). The exact dimensions of my final shield are shown below. If there was more space between the RF and IF/audio PC boards, then all that nibbling might have been unnecessary (if the type B spurs were still eliminated with a wider spaced shield). Since the copper side of the PC board shield faced down and rested against many of the plugs on the IF/audio PC board, and since the copper side of the PC board shield is grounded, the back sides of all plugs and tall electrolytics were taped over with Scotch 27 Glass Cloth Electrical Tape (available from Amidon). The PC board shield was attached to the R8 RF PC board with four 1/2 inch long 4-40 stainless steel screws and nuts with flat nylon washers used for insulating spacers. Depending on the size of the flat nylon washers, you may have to cut off parts of the edges of the



flat washers with diagonal cutters so that the flat washers will clear nearby components. The four mounting holes I used are shown on the shield diagram as 1/8 inch diameter holes. Note that a 1/4 inch hole through the shield is needed so that the RF PC board can be reinstalled with the shield attached. Note also that the four mounting holes I used to mount the shield to the RF PC board mate with four of the alignment access holes on the RF PC board. This means that to align the R8, the shield must be removed.

The PC board shield extends about 9/16 inch beyond the right side and about 1/4 inch beyond the front of the R8 RF PC board. A 9/16 by 1 1/8 inch notch at the right rear corner of the shield allows P107 cable to clear the shield. There was enough slack in my P107 cable to wind 2 1/2 turns of the cable around an Amidon FT-114-75 ferrite toroid core, which seems to reduce the intensity of some of the other spurs. The dimensions of the PC board shield may be unnecessarily large. I was not inclined to nibble away on the PC board to determine the minimum size necessary to eliminate type B spurs.

To ground the shield, a short length of miniature coax braid was soldered to the indicated corner of the PC board shield, the other end of the braid was soldered to a #4 ground lug, and the ground lug was attached to a pressed-in 4-40 nut near the front of the R8 chassis with a 1/4 inch 4-40 screw and lock washer. The convenient pressed-in nut near the front of the chassis is probably for installing the optional VHF converter. You may need to cut a small notch in the right-front corner of the PC board shield so that a screwdriver blade can access the ground lug mounting screw.



Register before June 30th, 1993, and your registration fee will include a FREE copy (\$30 value) of the all new Grove Shortwave Directory, 8th Edition! (available in September 1993)

SCHEDULE

Friday, October 15

11:00 am to 5:00 pm
Registration Open
12:00 to 5:00 pm
Exhibits Open
7:00 to 9:15 pm
"Hobby Talk"

Saturday, October 16

8:00 to 11:30 am
Registration Open
9:00 am to 12:30 pm
Exhibits Open and Morning Seminars
12:30 to 3:00 pm
Exhibits Open/Lunch Break

Saturday cont'd

3:00 pm
Exhibits Close
3:00 to 5:15 pm
Afternoon Seminars
7:00 to 9:00 pm
Banquet—Served at table
9:00 pm
Transmitter Bug Hunt

Sunday, October 17

9:00 am to 12:30 pm
Morning Seminars

Convention Closes at 12:30 pm

Enjoy accommodations at the Atlanta Airport Hilton and receive the special nightly rate of only \$69 (save over 50% off the regular \$140 per night rate) which includes the following:

- Same rate single or double!
- Free parking!
- Complimentary airport shuttle!
- Baggage check-out for Delta!

Call 404-767-9000 or 800-HILTONS to make your room reservation now!

Be sure to mention Monitoring Times when making your reservation to receive the special room rate.

An Introduction to Computers
Monitoring SW Military/VHF and USB
ELF—Are We Being Fied?

Choosing a Scanner/SW Radio
Monitor the Feds

Beginner's Introduction to Electronics
The Intermediate Listener:

- Scanning—When to Accessorize
- Shortwave—How to Improve reception
- Filters—When and How?

LOWFERS—Earthquake Monitoring
Monitoring Military/VHF/UHF

Advanced Antennas—Design and Theory

Shortwave Broadcasting: The Future
A Beginner's Guide to TVRO
Communication Satellites
An Introduction to Digital Communications
Surveillance Techniques

The Strange and Unusual:

- Monitoring numbers stations, digital signals, etc.
- Advanced Digital Communications
- How to decipher the "weird ones"
- Troubleshooting

Meet the International Broadcasters
Pirate Radio Monitoring
Public Safety Monitoring

The Ideal Scanner Set-Up
Broadcast DXing: AM/FM/TV
Aero Monitoring: VHF/UHF/HF
Catch the Clandestines
Beginners:

- Aero Monitoring
- The Frequency Spectrum—Below 30 MHz
- The Frequency Spectrum—30 MHz and Up
- Get Started in Scanning
- Utility Monitoring
- Q&A for Beginners
- Get Your Ham License

Dozens of exhibitors including:

Advanced Computer Controls
All Ohio Scanner Club
Bay Area Scanner Enthusiasts
Bearcat Radio Club
Cellular Security Group
Christian Science Monitor
R.L. Drake
Grove Enterprises
ICOM America
International DXers Assn.
Optoelectronics
ScanStar
Shortwave Paradise
Sony Corporation
SPEEDX
Worldcom Technology
Universal Radio



REGISTRATION FORM

[] Enclosed is my \$50 registration fee! Includes a free copy of 1993 Shortwave Directory

[] Enclosed is my \$21.95 banquet fee!

Name: _____

Address: _____

City: _____ State: _____ Zip: _____ Phone #: _____

Method of Payment: [] Check/MO [] Visa/MC/Discover

Card# _____

Exp Date: _____

Signature: _____

MONITORING TIMES CONVENTION
P.O. BOX 98
BRASSTOWN, NC 28902
(704) 837-9200

EQUIPMENT PROFILE

DENON TU-680NAB "SUPERRADIO"

Audio Magazine
—via Rocky Stone



TO MY EARS AND OTHERS,
THE AM ACTUALLY
SOUNDED BETTER THAN
AN FM SIMULCAST!

SPECS

FM Section

Usable Sensitivity: 11.3 dBf.
50-dB Quieting Sensitivity: Mono,
15.3 dBf; stereo, 37.2 dBf.
Frequency Response: 20 Hz to 15
kHz, +0.5, -1 dB.
S/N: Mono, 88 dB; stereo, 82 dB.
THD at 1 kHz: Mono, 0.06%; ste-
reo, 0.1%.
Capture Ratio: 1.3 dB.
Image Rejection: 80 dB.
Lf. Rejection: 100 dB.
Alternate-Channel Selectivity:
Wide, 50 dB; narrow, 75 dB.
Separation: 50 dB at 1 kHz.
AM Suppression: 60 dB.

AM Section

Frequency Response: 50 Hz to 7.5
kHz, +1.5, -3 dB.
Channel Separation: 32 dB at 1 kHz,
50% modulation.
THD for 50% Modulation at 1 kHz:
Mono, 0.3%; stereo 0.5%.
S/N: Mono, 53 dB.

General Specifications

Power Requirements: 120 V, 60 Hz
a.c., 12 watts.
Dimensions: 17 1/2 in. W x 2 1/2 in.
H x 1 1/2 in. D (43.4 cm x 7.4
cm x 28.7 cm).
Weight: 6.8 lbs. (3.1 kg).
Price: \$650.
Company Address: 222 New Rd.,
Parsippany, N.J. 07054.
For literature, circle No. 92

For some years now, I have bemoaned the fact that the AM circuitry in most "high-fidelity" tuners and receivers does not take advantage of the signal quality that AM stations are capable of transmitting. As readers of *Audio's* tuner reports know, AM frequency response typically rolls off at around 2.5 kHz or, in exceptional cases, at 4 or 5 kHz. Yet AM broadcasters can transmit signals whose response extends far beyond this limit.

To show how good AM could be, the National Association of Broadcasters (NAB) commissioned a "SuperRadio" tuner from Denon, originally made for NAB members but now available to audio enthusiasts. The project resulted from the improved AM broadcasting and reception standards developed by the National Radio Standards Committee (a joint effort of the Electronic Industries Association and the NAB). The NAB has also set up a certification standard, called AMAX (AM at its maximum) for high-fidelity tuners. To get

THE DENON TU-680NAB
IS BOTH A BYPRODUCT
AND A JUSTIFICATION OF
TODAY'S IMPROVED AM
BROADCAST STANDARDS.

AMAX certification, a tuner must have frequency response from at least 50 Hz to 7.5 kHz, with correct NRSC de-emphasis; it must also have automatic noise blanking to reduce impulse noise, manually or automatically selectable audio bandwidth, connections for an external AM antenna, and the capacity to pick up all stations on the newly expanded AM band (now 540 to 1,700 kHz). If stereo is included, an AMAX tuner must be able to decode the Motorola-developed C-QUAM system. According to Denon, the TU-680NAB is the first tuner to incorporate all of the AMAX requirements, and the NAB is offering it directly to its member stations.

Both the FM and AM sections of the TU-680NAB have selectable bandwidth but not in quite the same way. The FM section has selectable wide or narrow *if* bandwidth, with the narrow setting used for increased selectivity in areas where stations are closely spaced on the dial. The AM section has selectable *audio* bandwidth, the "Wide" setting has a total bandwidth of 7.5 kHz, while the "Narrow" setting varies automatically with signal strength, narrowing as far as 3 kHz when conditions call for it. The AM section also incorporates a noise-blanking circuit that significantly reduces interference from such sources as fluorescent lights and electric motors. According to Denon, this circuit detects and suppresses impulse spikes, filling in with a portion of the preceding signal. The button that actuates noise blanking in AM mode also switches in the multiplex filter for FM. Coincidentally, Denon has labelled this button "HF/FH," implying that the multiplex filter is some sort of noise reducer; actually, the only connection to "NR" is that the filter enables a tape deck's Dolby noise-reduction circuit to work properly when tapping a signal from this tuner.

Up to 30 channels of either AM or FM can be stored in memory for instant recall. A remote control, capable of handling virtually all the tuner's functions, is supplied. The remote control also has a "Preset Scan" button that is not found on the tuner's

A NOISE-BLANKING
CIRCUIT SIGNIFICANTLY
REDUCES AM ELECTRICAL
INTERFERENCE.

front panel. Supplied accessories include the usual stereo interconnect cable, FM ribbon antenna, and snap-on AM loop antenna. Separate connections are provided for an external AM antenna, so the loop need not be disconnected when an outdoor antenna is used. (According to Denon, disconnecting the loop antenna from this or most other

AM tuners will change the resonance of some front-end circuits, preventing proper operation even when an external antenna is substituted for the loop.) The tuner's AM frequency band extends from 520 to 1,710 kHz, covering the expansion of the AM band recently authorized by the FCC.

Musings of the Members

Dave Schmidt
P. O. Box 11502
Wilmington, DE 19850-1502

*Times are local per Muse; submit double-spaced only.
Thoughts from NRC members ... the opinions expressed in this column are those of the individual writer
and do not necessarily reflect those of the editors, publishers, or the National Radio Club, Inc.*

BILL TOWNSEND - 4500 CONNECTICUT AVE., NW - WASHINGTON, DC 20008
Greetings once again from the Land of Pleasant Living! It's time for my annual reintro; I'm 62, single and live on the top floor of my apartment building overlooking UDC and the National Cathedrals "Gloria in Excelsis" tower in the background. I work as a computer programmer for the National Weather Service (don't blame me for crummy weather-hi!) in a pile of concrete and steel (DX buster for AM) in Marlow Heights, MD, just inside the beltway (I-495), 15.6m/25km SE of my pad. We got zonked on 3/13 with snow, T-storms and all time low pressure (28.55in/966mb). We got off lightly in comparison to the 2/79 storm which gave us 18" (our snow depth was 12"). The 2/79 storm I dub as the 'WMA/WORI Storm' because of the sunset catches at the start and end of the storm. I plan to be in Hartford over Labor Day for the 60th anniversary of the NRC, a month after I get back from Central and E Europe. 73's de WPT

RUSS EDMUNDS (WB2BJH) - 753 VALLEY ROAD - BLUE BELL, PA 19422-2052
Greetings, again. 1992-93 was a reasonably poor season for me on AM, mostly owing to less time at the dials, in part due to more work and more work related travel. I only added 12 new loggings and 9 call changes from 11/1 to 4/1. In fact, I think I only fired up the Hammerlund once or twice this winter. On FM last summer, things were better, with 27 new stations plus 4 call changes from 4/1/92 to 3/31/93. Included are 6 newly-on-the-air stations. I've done more in less time FM DXing on my trips to our office in Macon, GA, details are and will be in FMDXD, as I'm on an every 3-5 week schedule through at least October. Also spent about 27 hours in Austin, TX in May but was only able to check out a few FM changes. Will try to do more next time there, later this summer. Several trips were made to Andover, MA Dec.-March and likely one or two more in Summer and Fall, but no DXing done due to minimal time, and lots of other DXers there to keep up on changes. At present, owing to the frequency of job travel, as well as its proximity in time and decided lack of proximity geographically to the convention, I don't expect to be there unless one of my Andover trips somehow coincides. I guess that the combination of competition for space in DXN and lack of interest have led to the noncontinuance of the Off Air stations list. If anyone wants a copy, send an SASE capable of handling 6-8 pages and specify geographical or frequency sort. If you want it on a diskette, I require IBM-compatible 3 1/2 inch formatted (we appreciate mailer & postage). By the way, since I forgot to include it in my just sent FMDXD report, does anyone in the S recognize a new station or call change on 94.3 to WGOR sloganizing as 'Oldies 94' and 'The Gorilla'? 73's

STEVE FRANCIS - 1620 LODGE STREET - ALCOA, TN 37701-2024
I had a wonderful time joining ERNIE WESOLOWSKI on a March trip to GA & FL. Like HANK HOLBROOK, it was my 1st visit to FL in 33 years. Station highlights included stops at WCNN-680 in the CNN complex in Atlanta, WMBM-1490 in Miami Beach, whose owner said he is willing to do a DX TEST for us next season, WFG-1300 in Marathon, and WKIZ-1500 in Key West. During the drive through Marathon at mid-day, Cuba's Radio Taino-1180 was clearly audible under the Radio Marti signal! Afetr dark in Key West, we focused Ernie's camcorder on the dial of his receiver and did a video bandscan of all 107 frequencies! English was detectable on fewer than 20 of them, KAAV and WBT being the strongest. We got to see JOHN D. BOWKER's impressive DX & recording set-up at his winter home in the Tampa Bay area. A quick side trip to Grove Enterprises in rural Brasstown, NC before Ernie deposited me in Alcoa and continued N to KY. Thanks to WAYNE HEINEN, JEFF TYNAN & J D STEPHENS for arranging so many fine CPC tests this season. I'm confident that both of J D's tests from KGWA-960 were on as scheduled. On 3/1, I taped weak but unmistakable code periods at 3:31AM & 4 AM under WFIR/KZIM. Glenn Hauser, then living in Enid, confirmed the 2nd test was on during the World of Radio that aired the weekend of 3/6. He stressed once again on the 4/17 program that both tests aired. WECO-940 & WVMI-1330 were heard well here plus a possible WCPM-1280 with tone only. Tried hard for WLKW-790 but no go. Happy summer!

RICH FRCHO - 5105 STRAWBERRY LANE - WILLOUGBY, OH 44094-4329
Yo! Its been a while since I've MUSED, so here we go. First a reintro: I'm 43, have been DXing since about 1961 (on & off) and work as a systems programmer on an IBM mainframe system (MVS/ESA operating system) specializing in Assembler language programming. The last DX season has been good, netting me 3 new states/provinces (CKWX-BC, KGHL-MT & WSKW-ME). I was also happy to hear 2 new ones from AB, CJCA & CBX. But TA reception was not as good as expected, with Saudi Arabia-1521 being the only TA with audio heard this past season (as

opposed to just heard). It does seem that conditions into the summer (I write this in June) are better than last year, I assume due to falling sunspot numbers. Hopefully this is an indication of a good season to come. I bought a Drake R8 last fall and am really happy with it. Despite the clunky economics, it is a great performer on HW. Before trading in my R7A for it, I compared both the R7A and R8 side-by-side on MW. I could find no real difference in selectivity between them. Somewhatly on the R8 seemed a bit better and the R7A's audio runs rings around the R7A. However, the R8 did show some overload problems on very strong MW signals from stations very near the store where I did the comparison. The R7A suffered no overload problems. But at my location, I have no overload problems on the R8 or it wasn't a concern for me. It should be noted that the R8 is a fantastic LW performer, much better than the R7A. I only wish it tuned down past 100kHz. Note, however, that my JRC NRD515 with Collins mechanical filters still beats both the R&A & R8 selectivity under severe interference conditions. Another note here is a Kiwa all core MW loop, the one they announced earlier this year. I've only had it about a week now, but I can say that it is absolutely fantastic! It beats every ferrite-core loop I've ever had (including the SM1, SM2 and Cyclomar loops). The amplification is very good, at least that of the SM loops and the amplifier is DEAD QUIET, hiss is just about non-existent. The nulling capability of this loop is amazing. I can get sharp nulls with the Kiwa loop that were impossible with the ferrite loops. I can even null out local WJLA-TV and dig stuff out from underneath it, and I'm less than 2 miles from their tower! Since I've never had a air-core loop such as an NRC 4' or a Sansone, I can't say how the Kiwa would compare to them. Its construction quality is very good, this was not built in someone's garage! Related thanks to CHARLES RHO for helping me out with past UNID's! Both Chuck & I anxiously await the coming demise of WYR-710, a terrible pest for both of us! 73's!

BRUCE CONTI - 10 RIDGEFIELD DRIVE - NASHUA, NH 03062-1174
Looking forward to the 60th convention. Hopefully, the team of GLENN COOPER, BILL GRANT, PHIL SULLIVAN & I can be reunited, to use deceit, cunning, logic, and shrewd methods, as prescribed by the SWAT team to outsmart the others in the bumper sticker hunt. I'm sure PAUL SWEARINEN's team remembers us from the 50th convention in Enfield-hi! (I don't think BILL GRANT is still a member, Bruce, you'll have to get him to join!-DWS) They found the fake bumper sticker in the yard of the ironhorse, planted by us after we found the real one! From the DX logs, "The Rochester's 990 was simulcasting FM with the ID of 'Outlaw Radio 96.5, WOL, the home of rock n' roll' at 9PM and no mention of WRMM. 5/26 WELI-960 heard with Sunday Night Hall of Fame, taking oddball requests at 288-WELI at 9:26PM. CHS-960 was also in there with 'Good Time oldies' ID at 9:30PM. 6/4 WZZD-990 came in along with ID 'In AM Stereo, this is Contemporary Christian Radio WZZD-Philadelphia' 4:30PM. WHJJ-920 was noted carrying Pawtucket Red Sox minor league baseball 6/7 WNYG-1440 was breaking through WVEI at times with oldies music at 8:05PM. A nice graveyard surprise, new WOL 1490 bombed in with a deep voiced ID & about middle, 8:29PM in WKXL null. WXVA 1350 was in briefly at 8:55PM with Cougar baseball over WARD. WACM-1490 made it over WPOP with mentions of Springfield and Holyoke and latino music, all in Spanish, 9:05PM. Someone carrying CNN Headline news was also in there. To JOHN HANFISON, your "4 very large towers" spotted in West Belmont while visiting Boston belong to WSSH-1510, located on Waverly Park Road (Route 60) between Trapelo Rd & Hoaver St. WRCA-1330 has been advertising available blocks of time at "very reasonable" rates for anyone interested in entering the radio business. WRCA has "Radiolandia Super Stereo" Spanish weekdays and goes Franch Caribbean (Balkan) weeknights. And as LAURENCE KEARLY mentioned in DDXD, they also have an excellent soca music program on Saturday nights, bilingual in French and English. Laurence, the Spanish you heard may have been WWRV 1330, a pest here some nights mixing with WRCA, or "Me Vacilla", a popular Spanish soca song. The DJ's like to joke around sometimes trying to speak Spanish, often ending with "no hablo espanol". If you enjoy the music of the West Indies, this show's worth a listen. It's carnival time every Saturday night on WPCV! 73's

KERMIT GEARY - 1266 RIVERVIEW DRIVE - WALNUTPORT, PA 18088
At the close of the 92-93 DX season, the time has come for a recap. The highlight of the season was the great array of DX programs arranged by both clubs, which brought me veries from such beauties as KAZM-780, KAAM-1310, KEYZ-660, WERK-990, KLEK-1480 & KKR-1180. KWCK-1100 was also heard with a great signal but no verie despite a follow-up. Other veries of note were received from WCCC-1590 (DX Test), WYBG 1050, WMDH-1550, WVEK-1240, WVUV-900, WHLP-1360, & WJOM-1560 to bring my total veries to 6191. With 14 unanswered reports, I'm still hoping for 6200 by the start of the new season on August 1st. Courtesy reports brought duplicate veries from WMAM-570, WNTK-1020, WANN-1070, WMT-600, WMUS-1090, KPCR-1530, WVEN-740 (including 3 water), WECO-940, WLKW-790, WZAP-690 WBIV-1060 & CKCB-1400, most on DX Tests. Of course, there were disappointments of not being able to bring in the DX Tests from KNZZ-1100, KEW-690, WABK-1280, WNNW-1110, WKGF-1480 & KOFI-1180, the latter because they failed to go non-directional. Postage contributions have been sent to both clubs in appreciation of their fine work in arranging DX tests. Thanks also for the invaluable assistance from members JACK WOODS, JOHN SHEEHY & our editor DAVE SCHMIDT in getting my

HQ180 back in service, allowing me to sideline my power hungry R389 and bringing my electric bills back to normal. It's comforting to know that our editors sidekick, JOHN TIEDECK, is available to help with any future problems with our tube sets. It was a pleasure to meet BEN DANGERFIELD at the ANARC Winterfest in Kulpsville, PA on 2/19 and to get-together again with NRCers ANDY RUGG, BOB STONIER, DAVE SCHMIDT & others. Recent catches have been WYYM-1380 on 5/4 6:40-7:26AM & CHYR-710 on 5/10 2:57-3:35AM. All things considered, this has been a memorable DX season. Best wishes to all for a fun-filled summer. We'll be looking for another great DX year, with reduced sunspot activity. 73 & good DX to all.

RON MUSCO - P O BOX 118 - POQUONOCK, CT 06064

--- The answer is TULIP BULBS! Sounds strange, doesn't it, but it got me a v/l from WMMV-1160. A copy of my 1/90 report sent to the NRC QSL BUREAU netted me a nice combo v/l/CM. Wonders may never cease because 4 days later I got a nice v/q from WWJZ-640, again thanks to the NRC QSL BUREAU. THANKS TO ZEN & ZON for their help in accomplishing this formidable task. I think the NRC SWAT TEAM should examine these two! Nothing much else is happening in this thriving metropolis but convention plans are proceeding nicely with less than 3 months to go. Attendees are asked to notify me if they are going to be at the Banquet as I need a head count by mid August. This I forgot to mention in the convention blurb and I hope the cognizant members read this and get back to me with their intentions. (Edited for broadcast-DWS)

HANK HOLBROOK - 407 ARUNDEL ROAD - FAIR HAVEN CLIFFS - DUNKIRK, MD 20754

--- My wife Mary Ellen & I took our second trip to FL (last time was in '61 so if we follow this pattern, our next trip will be when we're in our 90's-hi!) 3/6 headed for the CAA basketball tournament in Richmond, VA to watch the American University Eagles (where I worked on the staff for 28 years). 3/8 departed Richmond and stopped in Florence, SC for the night. Out of Richmond, noted the NC Division of Highways TIS on I-95 S at 12:09PM at the VA/NC border and at 4:24PM at the NC/SC border, 530 khz, both with the same message except for a phone # they gave for emergency. We reached Florence, SC on I-95 around 5:25 PM but missed a turn. This was fine for me but the wife was upset! I was hearing a very weak signal on 1610khz while on I95 and when we hit the city limits, we caught WNNM882, a TIS from Francis Marion University, giving info on courses, events open to the public and restaurant info. Next morning, we left for Savannah and finally Jacksonville, where we picked up my brother-in-law (purpose of the trip). On 3/11, we left for Crescent Beach, and while on A1A, a weak signal was noted on 525khz, 11:31-11:34AM, peaking when we passed Blanding Blvd., Beacon 'CIVV' which my brother-in-law said he believed to be a National Guard operation. Stayed in Crescent Beach for about a week and missed the "Storm of the Century" on the 13th but saw damage done in later travels. We took a trip at the NASA John F. Kennedy Space Center at Cape Canaveral and noted their TIS on 1610khz. While driving through Orlando, noted a good signal on Route 4 from a WMMT (Not sure of call) from Exit 32 to 31 advising of a major area event, parking, etc. on 1620khz. The Walt Disney World TIS was heard on 810khz, signals were in/out suggesting several transmitters in use. My listing shows Disney stations on 900, 1030 & 1200khz and while we did not cover the whole complex, I doubt if any of these stations were still in operation as there would be to much QRM, ie: 10-30 had a powerful Cuban pounding through at this hour! On a visit to Tampa, the long route was taken and the Tampa Airport TIS was noted on 1610khz with parking info. Heading home on 3/20, on I75 caught a station on 530khz with traffic info and on 1610khz for southbound info. (the 530 had northbound info). In Charleston, SC, got a nice signal from the Charleston Police Dept., Travel Advisory station on 530khz, heard 11:36AM-12:36PM, carried many miles N of the city. In Wilmington, NC, we stopped and took a tour of the USS NC, noted my WW2 RBL LW receiver in the museum radio room aboard the ship, my RBL5 is from '44 and still perking like new! Later, we ran into a flock of TIS stations in the Norfolk area, IDing as KNJR849/KNJR841/WWAN682 for I64 W traffic, N of Norfolk, picked up KNJR837 & KNJR839, all ID'ed as the VA DOT. Turning off at Williamsburg, found KPCT47, inviting us to Jamestown, VA. Back on I95 near Richmond, heading for home, we caught unneeded TIS stations on 530 & 1610 for Prince William County & Prince William Forest, VA. In all we covered 2823 miles, going as far S as Tampa. 16 reports went out to the TIS stations (not to be counted in my regular totals, but to have as souvenir items from the trip) with a nice verie letter back from Francis Marion University, Florence, SC. My wife assisted, taking notes and operating the tape recorder while I was driving. (Thanks for the WMIZ report, Hank, it'll be back on DA by the time you get this!-DWS)

BEN DANGERFIELD - 202 GOVERNORS DRIVE - WALLINGFORD, PA 19086

--- This is my initial attempt to use my wife's computer and I shall have to get used to it. I know I haven't MUSED since JOHN TIEDECK tuned up my HQ180 in March but I do want to say that he did a fine job and the old set is sharper than ever! And he lives right here in Wallingford! And while John worked on the HQ180, I travelled to London and Paris with my wife and another couple. We stayed in apartments in both cities and I DXed with my Sony SW1, augmented by the plug in whip antenna and local electricity. Also, the ear plugs im-

prove the volume, not to mention saving the volume in our party from having to listen to my 'noise'. I also like the feature of punching in any desired frequency, a great help in quickly IDing 2 or more parallel stations. Of course, I had it set for 9kc separation. But on the night of 1/27 (in London), I temporarily reset to 10kc for a reason. At about 9PM, I was getting all kinds of hets and I knew they must be TAs from the American side. It was too early for Canada and the US but right for Brazil. Sure enough, I topped Brazilians on 740 (Salvador), 1000 (Radio Record, San Paulo), 1110 (Joao Pessoa), 1200 (Fortaleza), 1240 (Recife) and 1330 (Belem). All had Portuguese talking & music. Plus an in-trifling het on 1070 (against France 1071) that just might have been French Guiana, right next to Brazil. CBA was a possibility but it would have been 1 hour before sunset in Moncton. I kept a log of all the stations heard over the re with at least one on every frequency and I will try to send it to IDX in time for falls next DX season. The London location was the more interesting for DX. The locals include 558, 720, 909, 1009, 1192, 1211, 1458 and 1548 with semi locals on 693 & 1052. By day you can also hear at least 20 area locals, Wales Regional-882, Ireland-567, BBC European Service 648 and 1296, plus Netherlands-675 (which is shutting down), 747 & 1008, Belgium on 540, 621 & 927, France on 585, 711, 864, 1071 & 1377, and Germany on 549. By late afternoon, the Germans and 4 high powered Scandinavians are booming in, and the evening finds Spanish stations all over the dial, plus quite a few from the other European countries and North Africa. The digital tuning makes clear, sharp signals on all frequencies. The new all rock Virgin Radio 1015 was testing while we were there and is now on regular service with good signals in London & Paris. It has UK boosters on 1197 & 1242 which I at first thought were spurs. So, on to Paris. There, I had trouble with a buzz much of the time but managed to find some quiet times to go on with my reporting. There are only about 20 MW stations that can be heard in Paris during the daytime hours, none of these are pretty weak. Paris has locals on 585, 738, 864 & 964, of which the first is a daytimer, the second does foreign language and notatally and the 4th (Sorbonne) is only on a couple of hours a day. Paris-864 is like other Network B stations in France, has somewhat irregular hours and signs off fairly early at night. It is not always parallel to the other Net B stations and they often have regional programs. Other French MW's heard days are Lyon 604, Rennes 711, Nancy-837 & Lille-1071 & 1377. Like most other European countries, just about all of France's regionals and locals are now on FM. Other countries heard days in Paris are UK on 648, 693 & 909, Netherlands on 675 (going off) & 747, Belgium on 540, 621 & 927, Switzerland on 531 & 765, Germany on 549. At night, conditions are similar to those in London (but without the British locals) but with more signals from Central Europe such as Romania-855 & 1152, Ukraine 1377 (with Lille off), Slovenia-1170 (broadcasting in Italian) and Yugoslavia-1413. Laayoune-711 Morocco was quite strong with Rennes off. Many from Spain, Italy & Germany. I logged just about all of the European LW stations at both London & Paris, of which several are good day & night. We're back home until July and still hearing a few TA's. Nothing particularly interesting in this area except the DE Turnpike TIS (WNXP-450) which is loopable over the Valley Forge TIS. And with WJNC-1360 off at 1:45PM on 5/9, I logged WHLP with a good signal atop the frequency. (We were working on the studio-transmitter link that day-DWS). I also note that WUST-1120 seems much stronger these days, maybe they're new CP is on. I'll MUSE again this summer when I get enough material to write about. (Thanks for the fine report, Ben-DWS)

THOMAS H. WHITE -1002 MAYFLOWER DRIVE #2H - WILMINGTON, NC 28412

--- 1st off, thanks to PAUL SWEARINGEN for the work he did in setting up my recent radio history articles for DX NEWS. I work with computers so I know how much effort it takes to get the columns neat from proportional fonts. And thanks to PERRY CRABILL for adding his thoughts about DX radio. As a re-in-tro, I'm 36 years old and moved to Wilmington in August, to take a job as the manager of the 2 person information systems department at the Coastal Area Health Information Center. Wilmington is located near the coast in SE NC. Because of the poor groundwave conductivity and sparse population, the AM band is pretty quiet here. However, there is a direct sea path down the coast so it is interesting to be able to hear a few FL stations including WQAM-560 on groundwave. The March storm hit here with the force of a Tropical storm and I was disappointed with the emergency information provided by the local stations. At one time, all the AMs and most of the FM's were off the air. My power was out for 34 hours and as I started my 2nd night without electricity, I was not impressed when the local news-talk station, WWAV-980, suspended its storm coverage and started a talk segment with a local psychic (the psychic got somewhat testy when a number of cold, tired people called in wanting to know when their power was going to be restored, a topic which he had no insights), I don't want to be around here if a hurricane strikes. By the way, WWIL-1490 came back on the air in March with a religious format. 73

ELLIOT R. STRAUS - 980 COOPER DRIVE - TOMS RIVER, NJ 08753

--- Hi gang! Very little to report of interesting DX as it is now Mid May and conditions are deteriorating quickly. Also, DXing every evening now there seems to be a baseball, basketball or hockey game on almost every frequency right up the dial. I know baseball pretty well so that aids in figuring out who

it is but IDs are infrequent. Verie returns have picked up lately but a lot of follow ups or 3rd reports/prepared cards have gone out. Recent veries: WCHB, WABS, WPAZ, WBSK, WSSJ, WERI, WZRC, WMZQ, WWCN, WRRR, WPDC, CHSJ, WNIS, WMYT, CUCL, WKDM, WXXI And JBC-700. That makes a total of 82 veries this season to bring me up to 867. I'd like to have 900 by the start of the fall season. I hope to meet lots of you good folks at Enfield on Labor Day. I had been considering the purchase of a Drake R8 for the fall but \$1000 seems pretty steep considering that I had my R390A completely refurbished. I'll probably get one of those new Kiwa loops to go with the Quantum Loop & LW's. If the signal is there, the R390A will have it so I'll just keep upgrading the antennas and accessories for a while. I'd really like to have a radio with a memory but I can wait. Maybe I'll hit the lottery and get one of those Watkins-Johnson's that run for \$4800. Well, you have to have a dream, right? I'm going to make an effort to do some summer DX this season if possible, I usually put things away in May and don't think about DX until early October, but I've still got a LOT of catching up to do and I'm not burned out yet so I'll see what the summer brings. Best 73's to all from the BIG E!

DAVE SCHMIDT - P O BOX 11502 - WILMINGTON, DE 19850

Had to make a very quick trip to FAIRMONT, WV this week and pick up a load of equipment from the recently-returned to the air WMMN-920. A trip was made to the transmitter sight, viewing the 3 very old towers atop a hill just outside Fairmont and the original Western Electric transmitter which they hit the air with in the 30's (it's still there and 99% intact!). My understanding is that it is slated to be moved to a museum in that area. I had to drop a couple of reports which were not DX or even close to being radio related this issue. Remember, that's the rules, we've got to put the limits on what shows up here somewhere. By the way, reports to WMMN-920 can be sent to the studios of WPCS-1490, where the station operates from (CNN Headline news). 73's

How to place mail orders ...

Write to NRC Publications - P. O. Box 164 - Mannsville, NY 13661-0164. Enclose check or money order; NY residents, add state and local taxes. Please allow 3-6 weeks for shipping.

For Beginners

... the world of DX'ing can be confusing. And that's why Jack Woods' column, "For Beginners", was created. If you have a DX question, just mail it to Jack at P. O. Box 1003 - Waldport, OR 97394-0514, and he'll answer it in a future column. Remember - you're not alone - we all started at the beginning - once!

Join the verification game!

You can help out with station tests. Here's how: Send Jeff Tynan - 10359 Severance Dr. - Parker, CO 80134-9104 524 instamps per station, and the NRC CPC will print and mail an effective test request letter for you. Stamps and donations are appreciated, too! Be sure to specify station and time. Increase your veries and help other NRC'ers at the same time ... join the verification game!

Need to renew?
Expired? The mailing label will tell you.



Member of the National Radio Club
DX News and DX Audio Service
Largest MW Radio Organization Established 1933

Dear Mom:
Yep, I'm writing you on my new Official National Radio Club Stationery. I'm trying to save money ... I only paid \$5.00 for a 100-sheet pack when I ordered it from NRC Publications - Box 164 - Mannsville, NY 13661. Not only that, I didn't have to pay sales tax, because I don't live in New York now, but in Jersey, where things are expensive. I send requests to radio stations for verifications, and I think my return rate is going to go up, because this NRC stationery is so professional-looking. I even use it when I write to the Unemployment Office. Oh, by the way, Mom, could you send a few bucks ... I'm running out of postage stamps. Gotta run; it's about 7D time and I think I have Alaska coming in tonight. Thanks, Mom!

Regards, Junior



The 60th Anniversary

The National Radio Club is pleased to announce that its infamous SWAT TEAM has returned from a recent deployment, just in time to host the NRC's 60th Anniversary Convention. The Convention will be held Labor Day Weekend, September 3rd, 4th, 5th, and 6th at the Harley Hotel of Hartford/Springfield in Falls Church, Connecticut.

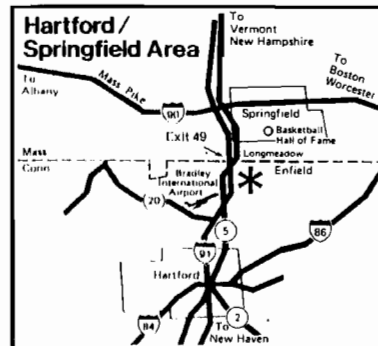
Contrary to previous statements, the SWAT TEAM is not incarcerated yet. And just as in the past, it will endeavor to make this year's Convention a BIAST! Join us for a glorious weekend ... enjoy a "Hillbilly Banquet" on the patio, the NRC Auction, "The Quiz", the "Find the Sticker" contest. John Bowker, Mark Connolly, and Tony Fitzherbert will do their thing and the SWAT TEAM will do theirs.

The Harley is located at 1 Bright Meadow Blvd., Enfield, Connecticut 06082 (I-91 at U.S. Route 5, Exit 49). I-91 runs north-south between the Massachusetts Turnpike (I-90) and the Connecticut Turnpike (I-95).

The Harley has a shuttle bus between Bradley International Airport in Windsor Locks, CT and the hotel. The hotel's phone number is (203) 741-2211.

A form is included for room reservations. The single or double price is the same, \$59 per night, plus 6% state tax. Reservations must be made directly with the hotel. The NRC Convention Committee will not be getting involved with room reservations/room sharing.

A registration fee of forty dollars (\$40), which includes the banquet, may be paid in advance. Checks payable to the "National Radio Club" may be sent to NRC Convention - P. O. Box 118 - Poquonock, CT 06064.



* We will attempt to honor your room request. However, bed types are subject to availability and cannot be guaranteed.

We're going to be your favorite hotel

HARLEY HOTEL
OF HARTFORD/SPRINGFIELD

A DIVISION OF HELMSLEY HOTELS
1 Bright Meadow Blvd., Enfield, CT 06082
CT: 203-741-2211 MA: 413-737-3206

ROOM: 59 DOUBLE (2 double beds) RATE: \$59.00
AMBASSADOR ROW (King bed)

NAME: _____ STATE: _____ ZIP: _____

Guests who do not establish credit will be asked to pay full room and tax plus a \$20.00 phone deposit.

RESERVATION: 48 HOURS (CASH) ALL RESERVATIONS MUST BE GUARANTEED OR PREPAID
RESERVATIONS ARE NOT GUARANTEED BY MASTERCARD, VISA, DISCOVER CARD, AMERICAN EXPRESS OR DINERS CLUB.

ARRIVAL DATE: _____ DEPARTURE DATE: _____
CHECK IN: 4:00 P.M. CHECK OUT: _____

GROUP NAME: National Radio Club
CHECK IN: 3:00 P.M. - CHECK OUT: _____

Hotel must receive this card by 8/23 to guarantee rate.

The Harley of Hartford/Springfield is pleased you have chosen us for your upcoming visit. We look forward to serving you while you are in our area.

The Harley Hotel regrets that we cannot link your reservation after 4:00 p.m. on the day of arrival without guaranteeing the reservation with a method listed below.

To guarantee a reservation, we request that you either:

- 1) Enclose a check or money order covering the first night's stay. Deposits will be refunded only if cancellation notification is given up to 24 hours prior to arrival.
- 2) Print below the entire number of your credit card. We accept the following: MASTERCARD, VISA, DISCOVER CARD, AMERICAN EXPRESS or DINERS CLUB. Please include the expiration date.

Questions, suggestions, etc., may be sent to Box 118; an SASE is required if an answer is desired. Bring items for the Auction. The 50th Anniversary Convention had about 70 attendees; let's try to better that mark.

-THE WIZ

Mr. Tact sez: "Be sure to register by August 15 if you want to eat at the banquet with the rest of us!!"