New

Serving DX'ers since 1933

Volume 62, No. 24 - April 10, 1995 (ISSN 0737-1659)



nside...

- .. AM Switch
- 4 .. WTIM Fire
- 5 .. DDXD

23 .. IDXD

- 31 .. Amplified Whip Antenna
- 45 .. Formats
- 46 .. Confirmed DX'er

CPC Test Calendar				
(KUSA)	1660A	pril 9-13?, 1995	?-?	
KGYN	1210	April 10, 1995	0200-0230	
KFDF	1580	April 15, 1995	0200-0300	
KNZZ	1100	April 16, 1995	0300-0330	

(KUSA)-1660 - Various DX'ers, including Ernie Cooper, Mike Hardester, and Wayne Heinen sent information on this experimental station, which already has been heard testing with analog broadcasts and will also broadcast in digital stereo. You might try calling 702-896-0341 for more information. The station is on the air in conjunction with the annual NAB convention.

The KFDF and KNZZ tests listed above are rescheduled tests: mailing info has already appeared in DXN and has not changed.

From the publisher ... Musings had not appeared in my mailbox by deadline time, but we have a DXpacked 48-pager for you again this time. Remember to keep your loggings fresh when sending them to the editors, as space is at a premium

We received notice that NRC member David F. Evans, Cornwall, Ontario, passed away suddenly March 2. Our sincerest sympathies to his wife and

DXChange ... PeterPompe is looking for a Zenith Trans Oceanic, Royal D7000Y in good condition; he'll pay air freight. Contact him at 38, Val du Price -B-1950 Kraainem - Belgium, or FAX 322 / 731.62.84.

Publications ... Bruce Elving's FM Atlas is back in print. Check out p. 44 for the price. Also available from NRC Publications is a list of all New Zealand stations, complete with addresses and slogans for \$1.00. KNLS - P. O. Box 473 - Anchor Point, Alaska 99556 is offering two books by Carl Mann, DX Tips for Beginners, and Radio Propagation for Beginners. Both are free, but please enclose two IRC's for each book. And the correct address for ordering the Zenith Transoceanic book by Drs. Cones and Bryant is The Radio Professors, P.O. Box 592, Stillwater, OK, 74076. It's available at \$24.95 plus \$2.00 S&H.

Welcome to these new members ... Sam Dellit

(rejoins), Pimpana, Queensland, Australia; Tom Anderson, Laingsburg, MI; James Cl Clar, Rochester, NY; Will Varnell, Birmingham, AL; Bill Flynn, Cave Junction, OR; Kent Winrich, Waukesha, WI; Brandon M. Artman, West Chester, PA; Benjamin Bilyeu, Cookeville, TN; Ron Kashner (rejoins), Hayden, CA; Malcolm P. Hunt, New Milford, CT; C. Ř. Johnson, Casselberry, FL; Lee V. McKinnis, Jr., Godley, TX; John Urban, Ocean Springs, MS; Chris Clementson, West Hollywood, CA; Richard. R. C. Hamersly, Jr., Emmaus, PA; Geoff Wolfe, Bomballa, New South Wales, Australia; Gerald Ragland, Franklin, OH; John C. Thresher, Wakefield, RI; and Neil T. Kazaross, Barrington, IL (rejoins).

DXN Publishing Schedule, Volume 62

Deadline Pub. Date 25. Apr. 14 Apr. 24 28. July 7 July 17

26. May 12 May 22 29. Aug. 4 Aug. 14 27. June 9 June 19 30. Sept. 8 Sept. 18

DX Time Machine

From the pages of DX News:

50 years ago ... from the March 17, 1945 DXN: 2NA, Newcastle, Australia was reported on 3-9 by Dr. Richard Wood, Hawaii and? Garber, Nebraska ... from the March 24 issue: Because of the lack of reports, the NRC's CPC, until Victory, would schedule DX programs only from new stations, exceptionally hard-to-hear stations, or stations offering to put on DX tests. Editor Ray Edge reported receiving 7 veries in 2 days ... from March 31: Dave Thomas, Proctorville, OH, reported a verie from KFI-640 for a full daytime report from 7 am to 7 pm that stated, "Yours is the all-time record for daytime distance".

25 years ago ... from the April 11, 1970 DXN: Dr. Richard E. Wood, ., Honolulu, HI reported receiving veries from KNOX-1310, KOZE-1300, WOKY-920, WMEX-1500, WTRU-1600, WCBL-1290, CHTK-560, KRNR-1490, KWKY-1150, KFGO-790, KFPW-1230, and a loug personal letter from WSM-650.

10 years ago ... from the March 18, 1985 DXN: Dr. Richard Wood, Hawaii, reported a 17,000-mile catch in 747-Namibia on 2-18 ... from the April 1 issue: Kermit Geary, Walnutport, PA reported receiving a verie from KPF-941, Yonkers, NY.

AM Switch

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

10CO WITT

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

CALL LETTER CHANGES

CALL I	RUTTUR C	HANG	IAN	
Old cal	l New call			
540	WRIC	VA	Richlands	WGTH
700	FAUR	t A	farledad	EVRG
770	F 1 11 .1	WA	Geattle	FRPM
8.30	WWKE	114	Pales	WEAT
1070	FUNVA	HV	Langhlin	1-1-4-1
141213	AVIMLA	MA	Distince	WIII"
960	FAN	$\in A$	Apple Valley	EINIV
1090	1- 11 lt .	WA	'arallla	F II II (
1110	WAM	V: V	Hortoll	WEFER
1190	WORD	14	Poyal Palm Beh	WLAZ
1.440	WHILE	14	Pine la Center	WHQ
12.10	WIFE	14	Pennacola	WZNO
1240	WINE	$\Theta\Pi$	Youngalown	WHBW*
120	F.744	TX	San Antonio	KZDC.
1270	WYAF	540	Surbude Beach	WCKN
1.280	WEGA	} }[€	Seaford	WJPY
1280	WOULE	LA	New Orleans	WODT
1290	KLLI/	TX	Wichita Falls	KWFS
1300	KDOV	OR	Phoenix	KAPL
1320	WOMG	SC	Columbia	WISW
1340	WMQX	NC.	Winston Salem	WPOL
1360	KHAK	1A	Cedar Rapids	KTOF
1370	WPRC	IL	Lincoln	WNCY
1380	WKBQ	MO	St. Louis	KRAM
1380	WCQL	NH	Portsmouth	WTMN
1380	WSFL	NC	New Bern	WCOO
1410	WOHT	MS	Cleveland	WKZB

North Las Vegas

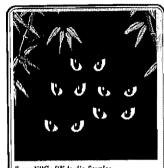
Greenville

Allentown Mission

Canyon

Miami Beach Bala Cynwyd

New Albany



From NRC's DX Audio Service ...

'After Dark 5'

You wanted receiver reviews ... graveyard station Travellogs ... airchecks ... Harry Caray, Clark Weber, Shotgun Tom Kelly, and Fred Richards ... paging cows ... DX techniques ... eclipse DX., and a round-table discussion? Then order "After Dark 5" today! 12 C-90 tapes in a holder: \$19.95 postpaid from NRC Publications Box 164-Mannsville, NY13661. NYorders, please add sales tax.



1600 WNST WV Milton
*Note: WBBW-1240 never changed to WTFN

APPLICATION FOR NEW STATION

NV

SC

KS

FL

PA

TX

IN

670 OR Woodburn: 1000/250 U1

GRANTS FOR NEW STATIONS

None

1410 KFMS

1440 WSSL

1480 KBEA

1490 WSBH

1540 WPGR 1550 KAKS

1570 WZCC

1470 WXKW PA

WQTW RADIO 800 Ligonier Street Latrobe, PA 15650

APPLICATIONS FROM EXISTING FACILITIES

740	WLWI	AL	Montgomery: reduce day power to 10000 watts
810	WJJQ	WI	Tomahawk: reduce power to 980 watts
880	WBAJ	SC	Blythewood: to 890 kHz with 11000/1 (9000 CH) (CP for new station,
			not yet on the air)
920	KCPL	WA	Olympia: day power to 3000 watts
990	KRMO	MO	Monett: city of license to Cassville, MO
1060	KIJN	TX	Farwell: power to 10000 watts
1090	KJJK	MN	Fergus Falls: to 1020 kHz with 2000/1000 U3
1100	KNZZ	CO	Grand Junction: CH power to 3600 watts

KKDD

WGVL

WKAP

KCAZ

WMBM

WNWR

KZRK

WXLN

WZZW

1260	WJJJ	VA	Christianburg: day power to 2800 watts
1340	WLDY	WI	Ladysmith: powers to 1000/1000 (CP for 610/610 is on but they wish
			to return to original powers)
1420	CJVR	SK	Melfort: to 750 kHz with 10000/10000 U3 (fills in missing
			power/antenna information from last issue)
1460	WPNX	AL	Phenix City: powers to 4000/140, antenna to U1
1490	KBIX	OK	Muskogee: reduce powers to 580/580
GRAN	TS TO EX	ISTING	FACILITIES
640	WLVJ	FL	Royal Palm Beach: reduce powers to 7500/400
710	KBMR	ND	Bismarck: reduce CP day power to 10000 watts (KBMR still operating
			on 1130 kHz)
740	WMIN	WI	Hudson: day power to 850 watts, relocate transmitter site
900	WCBX	VA	Bassett: change CP for 1100/180 to show antenna as U4
1160	WVNJ	NJ	Oakland: day power to 20000 watts
1190	WMIW	SĈ	Atlantic Beach: to 1200 kHz with 5000/9 U1 (this is a CP for a new
			station, not yet on the air)
1510	KMND	TX	Midland: power to 2400 watts
1520	WLUV	1L	Loves Park: add 125 watts nights, antenna to U1
OTHE	RNESS		
	CIAO	ON	Brampton: will remain on this frequency, has dropped plans to move
			to 1430 kHz
620	WTMJ	WI	Milwaukee: CP for 50000/10000 U4 is on
700		CA	Soledad: silent station is ON THE AIR
850	KWOF	IA	Waterloo: silent station has new ownership and will be returning to
			the air
850	WPFD	TN	Fairview: reported to be silent, station is ON THE AIR (WPFD seems to
			have a sporadic schedule with extended periods of inactivity which
			probably accounts for the frequent conflicting reports that they are
			either silent or on the air)
890	WBPS	MA	Dedham: according to the station (confirmed by local monitoring of
17.54	11114 17	14171	their legal IDs) their city of license is still Dedham, not Wellesley as
			listed in MSJ Directory, they are presently using the five tower antenna
			system at silent WBIV-1060 kHz
910	WYLL	ОН	Marietta: station is SILENT (will return in May)
980	WWRC	DC	Washington: CP for 50000/5000 U4 is on
1050	WMSG	MD	O 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1130	WYXE	TN	Gallatin: silent station is ON THE AIR
1200	WILA		1600 11111
1280	. ,	NY	
	WIPY	NY DE	7
790	WJPY KLEH	DE	Seaford: relays WJDY-1470 Salisbury, MD
1290 1340	KLEH	DE 1A	Seaford: relays WJDY-1470 Salisbury, MD Anamosa: station is SILENT
1340	KLEII WMID	DE IA NJ	Seaford: relays WJDY-1470 Salisbury, MD Anamosa: station is SILENT Atlantic City: CP for 870/870 is on
	KLEH	DE 1A	Seaford: relays WJDY-1470 Salisbury, MD Anamosa: station is SILENT Atlantic City: CP for 870/870 is on Silver City: license CANCELLED and call DELETED by FCC action of
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they evidently went silent before they could change to WWKG which they requested in 1993)

"WVAA" SC

Burnettown; several members report monitoring this listed silent station with this call. The FCC has never released this call or status change and still lists the station as WRKU. Can anybody shed some held on this situation?

AR KB5R

Hardy license CANCELLED and call DELETED (KBSR returned its AM Incepse to the FCC for cancellation but will continue to operate its FM1)

1660 "KUSA" HV

Lan Vegas: experimental station licensed to USA Digital for demonstration purposes at the April NAB Convention was noted here in Ohio at 0100+ with Aerosmith CD and a beautiful S9120 signal. We called them and they report they were indeed running 40 kilowatts into a 160 foot tower, part of an abandoned five tower system near Las Vegas. This is obviously not the official assigned experimental call which would be alpha-numeric. Judging from the signal on this 3-24 lead this station will be well worth looking for during the NAB dates, April 10.13, 1995. The operating time schedule is unknown and it appears that this was a one-time test prior to 4-10. Since we forgot to and, cloes anybody have any idea who the "abandoned five tower system" used to belong to?

THANK'4 Land Land, Wayne Heinen, Ed Krejny, Shawn Axelrod, Christopher S. Bond (US behalog from Mr. who was instrumental in prying information from the FCC for us) Ralph Bellito and Mtd

"Faint Canal 115

() MY & BKF

audio was received

Jerry Starr & Buffalo K. Foonman

WIIM Back On-Air Two Days after Fire call. Miller called the unit and was able to turn the backup transmitter on, but no

Miller then called the station engineer,

Jim Dunn, a 25-year veteran of radio.

Dum advised him to go to the transmitter

site and unplug the receiving unit in case

On his way to the site, Miller noticed

the obvious lack of tower lights.

Assuming he would find a power failure,

Miller went through the woods to the

As he rounded the last bend, Miller's

anger over having to spend his time flip

ping a little switch turned into shock as he

saw black smoke billowing out of the back

of the transmitter building. He called the

Miller shut off power to the site in the

hopes of saving some, if not all, the equip-

ment. He watched, heartsick, as 25 years

of work seemed to be going up in smoke.

hie department from his cellular phone.

it locked up due to the power failure.

site set in a large clearing

in the western

EXPERIMENT OF his a pictorioth. anala, of baselia ring. At least that a the . a. transist to longe up for Maff. 14: Limes Labor nemotics and morning. los tot a fill the full fillers he panalog at surgenous time day but 24.

the trace is all bits for the central Bligged community of 1 (100) He hirsts. the ration people on from spiron until now to be by the nominal buildings. office his openion, and disch is denisthat contacts uphround add.

The last to be and apollo from trans-With he gotte clause on a det W section of the income means and the dis-Determin i illeite de benentter a new control and rathermorths not request to me a mobile or confille tear. manter or practing special adults

the day it or cancel out in quite a maand to hior to bandal tildler the stathere actual and properly manager Miller. decided to per one the office a hille endy metals care of papers oil before the north Head of please call began around Barn. Alter it me higher noteed that

The fire department arrived and spent about an hour putting out the blaze that had been raging inside the metal buildmy. Miller spent that time on his car phone, calling his insurance agent. The agent advised Miller to put together an inventory list and to start getting proposals from vendors. the following off the att the eithed Libbrarius, o his old him of Pennis.

Radio World vin Joiry Blate



M4Y IW9

By 8 a.m., Miller was in his office at the

station, talking with vendors and lining up proposals. The staff was busy fielding phone calls from listeners who were trying to tune in. During the time the station was off the air, it received hundreds of phone calls from listeners and many more from other area stations and media outlets. All expressed concern and offered help.

By noon on the same day, Miller had a complete proposal from one vendor and one almost-complete proposal from another. These were sent to the insurance company, who would be sending out an adjuster the following morning.

The next day arrived and the station began its second day of silence. Miller met with the adjuster who advised him that a new transmitter would have to be rented because the insurance company wanted a complete investigation into the cause of the fire. So Miller went back to work.

Lease first

The yendors were notified of the change and proposals were sent back and forth. The WTIM fax machine was hardpressed to keep up with the amount of paper being pushed through it.

At 2:45 p.m., an agreement was reached with Broadcast Electronics, and Miller was on his way to Quincy, a trip of 165 miles, to pick up a new transmitter. Even on the trip over, there were still phone calls and arrangements to make: the phone was almost as busy as the fax machine.

At 7 a.m. on Thursday, Jan. 26, Miller was met at the site by Dunn, two station employees and an electrician, to move the 400-pound transmitter into its new home. Once in the building, Dunn and Miller had the unit powered up and were testing it by 9 a.m. At 10 a.m., Millet called the station and told MeLemore to get ready to start programming. At 10:02 a.m., exactly 52 hours after going off the air, WTIM resumed programming.

Domestic DX Digest

West: Bill Hale MTFH12A@Prodig v.com 495 Creekview Drive - Meridian, ID 83642-3241

between East and Central time zones)

(Division line is

East: Dave Braun 73520,657@compuserve.com

11 Mill Bend Acres - Wyoming, DE 19934-9523

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

DDXD-W

MEDIUM WAVE RAMBLINGS

- ✓ Every once in a while a name from the past pops up. This week's "haven't reported in a blue moon" award goes to Doug Beard. Good to see you're still scanning the air waves, Doug. A BIG first-time reporter welcome goes out to Kent Winrich of Waukesha, Wisconsin. Kent promises more reports from the Badger State. Promises go into a safe deposit box for later withdrawal, hi. George reports still not having his outdoor antenna up. And that he is having eve surgery. which will allow him to read the fine print in DX News. We wish you the best. George. Morris Sorensen went to Jamaica, allegedly to visit Don Trelford, and between working on his tan and swapping "can-you-top-this snow shovelling" stories, managed a little Graveyard DX. Neal gives partial credit for recent good DX catches to tornadic activity. Well, someone has to take the credit. Dennis sez he's been working 1330 to midnight, so is missing SRS and SSS. But, working a 12-hour shift gives him a chance to do some DXing during the wee hours. Thanks to Jim Boehm and BB McClurkan for sending newspaper articles of interest.
- & Good news from the ratings front. WBZ-1030 and WRKO-680 placed one-two in the November thru January Arbitrends in Boston.
- Fig. 4. Here's something to ponder (not Steve, hi) until your next DX News arrives. Imagine, if you will, Davy Crockett doing play-by-play for the Hershey Bears minor-league hockey team.
- △Once again, here are the DDXD-W deadlines for the remainder of the Volume Year: Issue 26 -May 6; Issue 27 - June 3; Issue 28 - July 1; Issue 29 - July 29; Issue 30 - September 2. These are all Saturday deadlines, for postal delivery. E-Mail reports as late as the following Sunday morning will be picked up, too. See you in TWO weeks! Then it's into the monthlies.

REPORTERS

- Bob Karchevski [karchev@ntmtv.com] Sunnyvale Radio Shack 12-655 "TRF"
- GS-TN George Smith Decherd Superadio II barefoot (no external antenna)
- NAP-AL Neal Perdue Madison ICF-SW30 x 2 [for Stereo, hi- Ed.], McClintock Black Box
- Charles Taylor Grifton unID help CT-NC
- BW-OK Bruce Winkelman, AA5CO Tulsa (bwink@galstar.com)
- SA-MB Shawn Axelrod Winnipeg ICOM R-70 w/filter mods and PLAM board + 4' box loop/Quantum Loop/100' longwire
- KW-WI Kent Winrich, NI9U Waukesha (THFG18B@Prodigy.com) Ford/JBL Electronic Sound System with built-in antenna; Sanyo RP8700
- DB-IA Doug Beard Springville wife's old Motorola portable
- AM-WA Atsushi Masamune Seattle IRC-NRD-525 with KIWA air core loop
- WB-MO Walt Breville Wright City Kenwood R-1000, c. 1981 + Space Magnet; Zenith 9S262 9tube console, c. 1938 + 40' ceiling-mounted longwire; GE Superadio, c. 1980 barefoot
- MBDXP Shawn Axelrod, Wayne McRae, Lorne Chestnut Valhalla Beach rx: 2-ICOM ICR-70s with filter mods and PLAM board; Grundig 700; ant: 9 Beverages or longwires
- BBM-TX BB McClurkan Irving Kenwood R-1000 + KIWA Loop
- DB-DE Dave Braun Wyoming unID help
- MH-NC Mike Hardester Jacksonville unID help
- HEJA Jon Ellis Pella GE SRIII and Select-A-Tenna
- Jon Ellis Maple Grove (JSPT27B@prodigy.com) GE SRIII and Select-A-Tenna HEMN
- Dennis Elya Jefferson City (76472.2246@compuserve.com) SupeRadio III barefoot DE-MO and the Delco ETR
- PA-ID Frank Aden Boise modified FRG-7 + 4' box loop/180' L-longwire
- RD-IA Rick Dau Iowa City (rdau@blue.weeg.uiowa.edu) Kenwood R-1000 + Radio West
- (RCC) Craig Rathbone, NOBSA Denver (av568@freenet.hsc.colorado.edu) Hammarlund 11Q-140X + 4' box loop
- Fd. ID Editor Meridian

mun kini

780 UNID ?? - 3/12 (no time) - Poor, with dual ID heard as W??? and WAT 248. Under WBBM and unID Mexican. (MBDXP)

830 UNID ?? - 3/11 1900 - Someone with TBN in WCCO's null. No ID at top of hour. Fun to hear something on 830 besides WCCO! (JE-IA)

930 WFB? - 3/13 0200 - Someone fair, in a pause in the KWOC test, with Always Country WFB-, then C&W music. (DS-TN) [No help here. Maybe an FM call and slogan - Ed.]

1000 WDJL AL Huntsville - This is Dave Braun's and Dave Yocis' unIDs in Issue 21 (DDXD-East, mis-labelled "West" [Yeah. I just edit. Not label- Ed.][Blame the mislabel on the publisher -pls]). Their format has been changed to NOS. One Thousand Memories just about clinches it. (GS-TN)

1160 UNID ?? - 3/11 1930 - Fair-to-poor signal, with a basketball game. Partial ID as The all-new K(C or T) - AM. (MBDXP)

1180 UNID - 3/14/95 1533 - Spanish speaking station frequents here. The only SS I see in the NRC Log book is VOA (yea sure). Any ideas? Thanks! (KW-WI) [Well, a couple of months ago I read on the Internet where VOA Marathon had gotten a power comph to 100 kw. But, I haven't seen anything in IDXD to verify it. Even communicated with Jim Renfrew about it, who said "no". So didn't say nuttin'. It might have been a harmonic? Or intermodulation? - Ed.]

1510 WVAA SC Burnettown - This is the unID "WVAA", per reception and call to station. Burnettown is midway between Aiken and North Augusta on US 1. (CT-NC) [Frankly I was puzzled why I got an unID ID for a DDXD-E report. But looking closely at Issue 21, I found DDXD-W, and DDXD-W. Aha! Thanks, Charles. I hope the folks from the "right" side of the country read this column, hi - Ed.]

1520 UNID - 3/21 0200 - Poor-to-fair at times, but faded at ID time. Heard The best in 24 hour gospel, WJCL(?). Can't be sure. Nothing in Log fits. Couldn't get a QTH. (GS-TN)

1610 - "Overville" or "Operville" - [See NDBs in March 20 Issue. The second Issue 22, hi - Ed.] I have nothing in my master TIS file, including updates to 3/12. However, a couple of thoughts. I did searches of my files, and came up with WPFP929 in Naperville, IL. on 1610. The log was on 1610, the call sign ends in -929, and the last part of the city is a "ville." Just a guess. (MH-NC)

1641 MIN MN Aitkin - The MBDXpedition's UNID on 1641 is indeed MIN in Aitkin, MN, operated by Lyle Koehler. This, per the Medfer list in the LWCA's March, 1995 issue of "The Lowdown". They don't show an "IH" on 1680. (DB-DE)

MIN MN Aitken - I suspect that this is a MEDFER (listed) on 1641.97 kHz with a "new" call sign of MIN (x-LEK). If so, it's operated by Lyle Koehler, KLR, Route 1 Box 263, Aitken, MN. 56431. (MH-NC)

1680 IH - I suspect that this, too, is a MEDFER, but I have no information on the station, but am checking. If I learn anything, I'll pass it along. (MH-NC)

DX AND EQUIPMENT TESTS

620 WTMT+KY Louisville - 3/13 0104-0130 - Poor, under WRJZ (which promptly went off at 0130 after the DX test ended, only to return at 0200 . . .), with tentative WTGH. Frequent IDs, CIDs, TTs, music, and station address as in Log. (DS-TN)

WTMT+KY Louisville - 3/13 0100-0130 - 85-90% copy for whole period. Announcer gave his name and HAM call. Polkas, oldies, station history, TTs, CIDs. In WRJZ-TN null. (NAP-AL)

WTMT+KY Louisville - 3/13 0120-0130 - Weak CID at 0125; stronger CID at 0129. Heavy thunderstorm activity here. (BBM-TX)

WI'MT+KY Louisville - 3/13 0120-0130 - Fighting WRJZ Knoxville's religion, and usually losing. (WB-MO)

WTMT- KY Louisville - 3/13 0100-0130 - Tried, but not heard. KOTK in background. (FA-ID)

750 KIRR+ MT Polson - 2/20 0200-0230 - Good, over KXL, with VID as This is 750 KERR, Polson, Montana on the air with 50,000 watts for an equipment test. 1-800-750-5377 was number announced for contact. (AM-WA)

"10 KWOC+ MO Poplar Bluff - 3/13 0200-0215 - Usually way atop, but disappeared into hash at 0215, surfacing again briefly at 0224. No CIDs heard but frequent VIDs mentioning DX Test, and distinctive music. (DS-TN)

WI Jackson - Now these CLs and Z-54. Ex: WYLO. Maintains Christian 540 WZER format. (KW-WI) KS SALINA - 3/4 0900 - With The Talk of the Great Plains and The Big One 5-50, 550 KRFM

KFRM slogans. Now full time talk, ex- C&W music. (BW-OK) ON Toronto - 2/27 0403 - Good, in CKY null, doing a Canadian sports wrap-up, 590 CICL? then The Fan IDs. Now here, ex: 1430. Not sure if they traded CLs with the

frequency. No "legal" ID heard. (SA-MB)

WI Milwaukee - 3/21 - AM 620 WTMJ, Your Information Station is now promoting 620 WTMJ their 50kw signal. It sounds like the are beaming north as they are promoting the

fact that they should have a better signal in northern Wisconsin. (KW-WI) Oshkosh - With Christian format No longer silent. Ex: WXOL. (KW-WI)

690 WVCY WI WA Seattle - 3/12 2250-0005 - Live broadcast of Tacoma Rockets until 2355, then 770 KRPM // K106 FM. They now announce as KRPM-AM Seattle-Tacoma. Call change from KULL suspected. (AM-WA)

Waterloo - Uses slogan K-Woof. (JE-IA) #50 KWOF ĪΛ

Miami - Per phone call to station, they are now 24 hours NSP. (BW-OK) OK

910 KVIS MN St. Louis Park - There are rumors that this station (which is // to FM) will 950 KHO change format on 3/30. If anyone hears any strange things on 950, it could be KJJO changing formatt (HSMN)

NF Plathmouth The word out of Omaha (Ernie Wesolowski, NRC's videotape 1070 KOTD king) is that this station is running D1 500. Seems they ordered a 1 kw transmitter and a 500 walter arrived on the front porch. Have not heard them here yet, but will Loop trying. They sign on at 0700 PEE. (RD-IA).

than WIMO IA New Orleans 4/18 2078 II) an All new stereo WLNO, New Orleans' most poor eful christian radio dation. Fo WNOE and C&W. (GS-TN)

WITHO IA New Orleans 3/19 7739 All new Steves 1060 WENO, New Orleans most powerful chiridian station. Most have taken over WNOR. (KW-WI)

THRE LETAR IA Hed Clab These are the correct calls for this station. FM changed to KCSL Large of Prillers. Don't know about formal because they were carrying a sports ook at relien Husurd it. (HETA).

WA treattle 1/17 1/00 2200 The now announce as All news, all the time. All There s 1000 FRR Jor your information. Still AP News format. (AM-WA)

ON Hunder Bay "Heven people have been fired at CJLB. Seems the "other" 1730 (113) station in town, CEPR, approached NEW CAP (parent company of LB) and suggested they 'merge' and let CKPR manage the station for NEW CAP. Three in the news room, C.M. Secretary / receptionist, traffic, copy, and 4 jocks GONE just like that! The next day, CHB was operating out of CKPR's building. As far as the public in concerned not much will be different, LB will still be there at 1230 playing country music but the building has been gutted and will probably NEVER return!" [Internet]

IA Cedar Palls - Station is silent following sale from Cedar Valley Broadcast Co. 1250 KCH to J'tte Communications. Went silent at noon on Tuesday 3/7. The new owners expect to return station to air with similar format after the FCC approves the sale. (H-IA) (RD-IA)

Anamosa - 3/1 - Off the air, probably for good. Property was sold in a 4290 KLBH sheriff's sale to the owner of an adjacent mobile home court. (DB-IA)

Cedar Rapids - 3/3 - Ex: KHAK, is now REL plus some local sports. Call and 1360 KTOF IA format moved from FM. (DB-IA)

Cedar Rapids - The CLs and REL format that had been on 104.5 are now KTOF here, so scratch the // of KHAK-FM's C&W format from your logs. (RD-IA)

OK Tulsa - Still the WEIRDEST format in AM radio - now CLASSICAL music 1430 KQLL M-F 1200-1700 CLT, sports talk the rest of the day and 24 hours on weekends, The Sports on Q slogans. (BW-OK)

1660 KDAB? NV Las Vegas - 3/22 2335+ - Excellent signal. Lotsa pop music, but didn't hear any voice announcements. More next issue after confab. Thanks to Wayne Heinen for phone tip. I sent out Internet messages to several NRCers, but got a couple back ("return to sender, address unknown", etc). [Ed.-ID]

1660 KDAB? NV Las Vegas - 3/22 2345+ - DAB test station from NAB convention site. Very strong. (FA-ID)

- KWOC+ MO Poplar Bluff 3/13 0200-0230 Pretty good copy for first 15 minutes, with cartoon (Looney Tunes, Underdog, etc) themes, announcements, TTs, CIDs. GM, who requested info on my ICF-30SW, said second 15 minutes was at 500 watts, not 5000 as per DX News Vol. 62 #21. Only heard occasional bits of 2nd half. (NAP-
- KWOC+ MO Poplar Bluff 3/13 0210-0230 Faint CID at 0211 and again at 0225. Heavy static limited readability. (BBM-TX)
- KWOC+ MO Poplar Bluff 3/13 0200-0230 VIDs heard. (JE-MN)
- KWOC+ MO Poplar Bluff 3/13 0210 All I heard in the entire half hour was a very weak VID This is KWX on 930. Lots of ORN and a lot of KSEI. (CR-CO)
- KWOC- MO Poplar Bluff 3/13 0200-0230 Tried, but heard it not. KSEI dominant. (FA-
- 960 KZIM- MO Cape Girardeau 3/6 0200-0230 Not heard. Only WERC and three or four unlDs. (NAP-AL) Tried, but no luck. (BBM-TX) Not heard, but according to J.D. Stephens, test is (re)scheduled for 4/3. May not have run at all on 3/6. (FA-ID)
- 1230 KVAK- AK Valdez 3/25 0430-0500 Nothing heard in GY mess. Had hoped it would make it. (FA-ID)
- 1250 WKBRt NII Manchester 3/6 0103-0127 Weak-to-fair with TTs heard at various times, plus a possible CID at 0127. Reported as tentative because the signal was so weak at times. A verie has been sent to Peter George, so I'm crossing my fingers. (RD-IA) [You mean . . . a verie request, don't you? Ed.]
 - WKBR- NH Manchester 3/6 0100-0130 No luck on my try for NH #1 L. The frequency sounded like a GYer, with no IDs heard. (NAP-AL) Not heard. (JE-MN) Not heard, but tried. (I/A-ID)
- 1340 KTCR+ WA Kennewick 2/26 0415-0430 Fair-to-poor, with TTs, technical information on both KUJ and KTCR. (AM-WA)
 - KTCR- WA Kennewick 2/26 0400-0600 No luck. had two receivers tuned to the two // frequencies in case I might just get a snatch of it, but no-o-o-o! (NAP-AL)
- 1400 KSIM- MO Sikeston 3/20 0100-0130 Nothing heard. (FA-ID)
- 1420 KUJ+ WA Walla Walla 2/26 0359-0415 Good, with TTS of various frequencies. VID mentioned IRCA. (AM-WA)
- KUJ- WA Walla Walla 2/26 0400-0600 No luck, but caught new WOC, Davenport, IA here. (NAP-AL)
- 1460 WZEP- Fl. De Funiak Springs 3/20 0400-0445 Not heard. (JE-MN) Not heard. KMWX dominant. Test actually ran from 0500-0545, according to J.D. Stephens. (FA-ID)
- 1580 KFDF- AR Fort Smith 3/4 0200-0245 Not heard. KCWW (with C&W music) and KBLA (with Korean talk) trading frequency dominance. (BK-CA)

TIS & OTHER STUFF

- 1610 WPBC251 IL Bureau County 3/11 2158 Good, with the group. Fade up with Thanks for tuning in to WPBC251, 1610 on your radio dial. New!! Thanks to Mike Hardester for the great listing which sure helped with the TISs heard on this and other DX'Peditions. It makes listening much easier. (MBDXP)
 - HAR IL Chicago 3/11 2150 Fair-to-good, mixing with others, with a computerized update for traffic and time on various freeways in the Chicago area. This is updated regularly to give new situations as they arise, so the announcements vary over time. (MBDXP)
 - WPFP929 IL Naperville 3/11 2146 Good, with the Caribbean Beacon and at least two others, giving local announcements and info on the Main Street and Eagle Street bridge detours. (MBDXP)
 - KOC745 WY Fort Laramie 3/12 0616 Good, with info on the Fort Laramie site. Alone. New!! (MBDXP)

HARMONIC HAPPENINGS

- 1440 KQRS MN Golden Valley To clear up any confusion about this station: their "real" frequency is 1440 but there's also a weak signal coming out on 1700. Apparently the signal's a lot stronger via skywave in Viking Heaven than it is at this QTH via groundwave! (JE-MN)
- 1660 WCCO MN Minneapolis WCCO's second harmonic, which has been getting worse and worse over the past few years. MBDXP heard this one? (JE-MN)

MIDNIGHT TO 0800 HOURS ELT

- 560 WQAM FL Miami 3/6 0624 Good, with Sportsradio 560 WQAM ID. My 11th Florida catch, and Miami #1 from this QTH. (RD-IA)
- 610 WDAF MO Kansas City 3/5 0310 Kansas City's official number one country music station, WDAF, 61 Country (new slogan for Log). (NAP-AL)
- 620 WTJHt SC Cayce 3/13 0107-0200+ Poor, u/WRJZ & with WTMT test, with B:GOS. No IDs but only WTGH(?) makes sense. (DS-TN)
 - WRJZ TN Knoxville 3/13 0030 CLs and REL. Very good. Glad it wasn't so good in WTMT test. (NAP-AL)
- 680 WCNN GA Atlanta 3/2 0654 Sports talk, traffic for Georgia, 680 The Fan ID, and ads. With KFEQ nulled. (JE-MN)
- 710 WUFF GA Eastman 2/27 0630 Good, with repeated slogan: Big Wolf Radio several times. Ad for Flat Water Trophy and Hunting Supply, into C&W music. (GS-TN)
- 740 KATK NM Carlsbad 3/12 0100 Good, with lively Mexican music, ads for the M & M Record Shop. CL ID by woman in EE. New!! (MBDXP)
- 790 KURM AR Rogers 3/22 0752 Good, with ad for pharmacy located in Rogers. (RD-IA)
- 830 CKKY AB Wainwright 3/23 0656 Fair, under WCCO, with C&W song by Crystal Gayle. No ID heard, but there was a strong opening to the southern parts of Alberta and Saskatchewan. Plus the only other C&W station listed on 830, KOTC, didn't sign on until 0715. (RD-IA)
- 860 KONO TX San Antonio 3/6 0204 Good, with Al Green's Show and Tell followed by 101 KONO jingle ID. (RD-IA)
- 900 WATV AL Birmingham 3/22 0324 UC music. No Mexican here (everywhere else, though). Local KFAL signs off at 0100. New for me. (DE-MO)
 - KHOZ AR Harrison 3/22 0738 Fair, with ad for Reliant Security Patrol in Harrison. Phone # 743-xxxx. (RD-IA)
- 930 CJCA AB Edmonton 3/13 0231-0235 VID and mention of CRN on CBC, and 800 number to call. S7 signal. (BBM-TX)
- 960 WFIR VA Roanoke 2/28 0515 Fair, with ID: Your news station, WFIR. Basketball scores and discussion of British bank that failed. (GS-TN)
 - WFIR VA Roanoke 3/14 0405 Poor, with CLs, news, and an insurance ad. Competing with equally strong WERC. (GS-TN) [Getting to be a regular, huh? Ed.]
- 990 KWAM TN Memphis 3/12 0645 Announcement about local REL services, CLs, promo for Sonny Lewis Program in morning. (NAP-AL)
 - CKIS PQ Montreal 2/26 0630 Good, in new, extended CBW SP (they sign-on between 0630 and 0645 on Saturdays and Sundays). This has been going on for three weekends in a row. Hope it is permanent, as the frequency is open for 60-75 minutes more on the weekends. (SA-MB)
- 1000 WDJS AL Huntsville 3/15 0716 Been hearing this NOS for 2 weeks, but finally heard an ID. New. (DE-MO)
- 1020 KCKN NM Roswell 3/22 0700 Heard with promo using call "KCKN" and legal ID
 1020 KCKN Roswell into ABC/E news. Thought this one had changed to KBCQ??
 (JE-MN) [Been KCKN for many, many moons Ed.]
- 1070 WIBC IN Indianapolis 3/20 0558 Poor, with ID, weather, ad for herbicides, mention of that night's basketball game, into news. (GS-TN)
 - CHOK ON Samia 3/20 0421- The Golf Show on 10-70 CHOK. Well over WTSO, WIBC. (KW-WI)
- 1110 WBT NC Charlotte 3/2 0648 Barely audible under KFAB with Charles Osgood, weather, ads, and sports . . . here on WBT. NC #1! (JE-MN)
- 1190 KJEM AR Bentonville 3/13 0722 In a span of 5 minutes heard IDs on WOWO, KHAD, KFEZ and this one came rolling in over the others. NEW. (DE-MO)
- 1220 KLPW MO Union 3/22 0706 Good, with ad for Ace Hardware on Highway 100 in Washington. (RD-IA)
- 1240 KNSS KS Wichita 3/18 0052 Good, with KNSS Newstalk 1240 ID. 2nd GY catch from Kansas here. (RD-IA)
- 1250 KURB AR Little Rock 3/6 post midnight Very brief fade-up, with Little Rock, B-98.5 (// FM). (NAP-AL)
- 1270 WEIC IL Charleston 3/6 post midnight The weather forecast for east-central Illinois . . ., CLs and down into mud. Only 2nd time heard. (NAP-AL)
 - WORX IN Madison 3/21 0610 Good, with weather forecast: Currently, we do have 45 degrees at WORX, Madison. (RD-IA)
 - CHAT AB Medicine Hat 3/23 0651 Good, with weather: That's the forecast on New Country, 1270 Chat. (RD-IA)

- Grand Rapids 2/27 0143 On top briefly, with CLs, talk. Rare here. (NAP-1300 WOOD MI
- WI Madison 3/8 0116 ID and sports update. (WB-MO) 1310 WIBA
- Grand Rapids 3/21 0830 . . . from the WBBL scoreboard. Grand Rapids 1340 WBBL ΜI mentions. Ad for auto show at the <u>Imperial Palace</u>. Local WLZR off. (KW-WI)
- WLOK TN Memphis 3/11 0052 Very good, with ID as WLOK Memphis. (RD-IA) 1350 WSMB LA New Orleans - 2/27 0006 - This is Talk Radio 1350, legal ID. First time this
- season. (NAP-AL) 1360 WAOZ OH Cincinnati - 2/26 Midnight - Legal ID & Radio Ahs. Earlier heard The Cincinnati Cyclones hockey network. Last heard as WSAI, and my second R. Ahs after KAHZ. Why not WAHZ??? (NAP-AL)
- 1370 WCOA FL Pensacola 2/24 0630 Fair, with ads for HBO, Mitsubishi, Hallmark Furniture and several others before I got a good ID: Newstalk Radio WCOA at 0700. (GS-TN)
- 1390 WGCI IL Chicago 3/11 0025 Slogan: "Dusty 1390" mentions of Chicago area. Usual pest WTJS wasn't heard. (DE-MO)
- ÎA Davenport 2/26 0400 ID, news. Not strong, but clearly heard. New!! I 1420 WOC wonder how many of the remaining 3-letter calls are only 5000 watts day and night. (NAP-AL) [Good idea for a research project for va' - Ed.]
- 1430 WRTH MO St. Louis 2/26 0215 NOS music, CLs, in KQLL null. Last heard as WIL (another 3-letter call down the drain L). (NAP-AL)
 - CKYC? ON Toronto 2/26 0620 Fair-to-good, with C&W music. IDs as Country Music Radio. Also running a message every 15 or so minutes telling you to tune to 590 for sports as they had moved. Calls not known for sure as they, as on 590, never use them. (SA-MB)
- Kewaunce 3/17 0630 AM 1450 WKEI News-Talk, then ABC news. (KW-1450 WKEI IL WI)
- 1460 KMWX WA Yakima 3/20 0500-0545 Lots of local ads. Oldies rock music. (FA-ID)
- Peoria 3/13 0601 CLs, local and state news, CLs again. First time this 1470 WMBD IL season. Was my 1st station on the frequency, back in 1981 - an "old friend". (NAP-
- AL) Whitehall - 3/21 0703 - With The Who. ID of Eagle 97. Bachman- Turner-1490 WEFG Overdrive. Format change to rock/oldies. (KW-WI)
- 1540 KXED CA Los Angeles 3/12 0720 Good, with Mexican music and, yes . . . news on the OI trial in SS. New!! (MBDXP)
- Harvey 3/3 0104 Atop, usually messy channel, with AM 1570 WBEE 1570 WBEE IL Chicago. (WB-MO)
- 1580 WDAB SC Travellers Rest 3/25 0559 Fair, with sign-on: WDAB now begins another broadcast day . . . (RD-IA)
- Chicago Heights 2/27 (no time) Fair, with CLs at the end of a traffic check. 1600 WCGO IL (RD-IA)
 - Cedar Rapids 3/20 0444 Ad for KCRG-TV. KCRG Newsradio 1600 slogan. KCRG IA (KW-WI)

0800 TO 1600 HOURS ELT

- TN Nashville 2/17 1300 Legal ID. Nice to pick up this one in the middle of the 650 WSM day. (KW-WI)
- WVCY WI Oshkosh 3/14/95 1530 With American Conservative Report. This station used to be WAGO, WLKE, WXOL. It was silent for a number of months, but a religious broadcasting organization must have bought it and put it back on the air. (KW-WI)
- Carthage 3/1 1340 ID and ad for a massage therapy place. (WB-MO) 990 WCAZ IL
- 1340 KKYD CO Denver 3/12 0835 Good, with Radio Aahs programming. New!! (MBDXP)
- 1470 KHND ND Harvey 3/12 0820 Good, with what can best be described as easy listening REL music, and ID. (MBDXP)
- NM Albuquerque 3/12 0858 Good, on top, with C&W music and KRLL 1580 KRLL Albuquerque ID. New!! (MBDXP)

1600 TO 2400 HOURS ELT

ON Brampton - 2/23 2330 - Oriental music and programming. In from 1600 to 530 CIAO 2400. (KW-WI)

580 WCHS WV Charleston - 2/22 2102 - Fair, with CBS News, ad for Anacin, slogan WCHS, Charles's News Authority, into local news. (GS-TN)

11

- ON St. Catherines 3/11 2210 Good, with programming in an Indian sub-610 CKTB continent language (Hindi or Pakistani??) and lots of ads for Scarborough and Toronto area merchants. Not AC as in Log. Some EE mixed into the ads. (MBDXP)
- TN Collierville 2/17 1735 Clear as a bell ID. (KW-WI) 640 WCRV
- 680 KNBR CA San Francisco 3/20 2303 KNBR, phone number starting 415-???-6800, ABC News. Discussion about Stanford sports. Call from Stan in San Jose talking about Eric Metcalf, Fairly good. First San Fran here. (KW-WI)
- 690 WTIX LA New Orleans 3/14 1947- Ads for mardi gras tee shirts at Pnosh. (KW-WI)
- Merrill 3/19 2400 AM 730 WJMT, then into NBC news. Not bad for 127 730 WJMT WI watts and WGN blaring from 720. (KW-WI)
- MO Kennett 3/11 1840 Fair, with C&W music, IDs as Cotten Country and 830 KOTC Country 830. KOTC ID on the hour. New!! (MBDXP)
- 850 WYLT IN Terre Haute - 3/19 1919 - Poor, with Arkansas vs Syracuse basketball game. Ad for Heavy Duty Truck Parts. ID at end of game. (GS-TN)
- AR Sheridan 3/14 1800 Legal ID. (KW-WI) 880 KGHT
- 920 KARN AR Little Rock - 3/20 2231- KARN Little Rock. Ad for Letterman on KARN. Flagship on the Arkansas Radio Network. Good. Local WOKY (6 miles away!) nulled. Fifth Little Rock Station. (KW-WI)
- 930 WEOL OH Elvria 2/21 1720 Clear ID. (KW-WI)
- CO Pueblo 3/11 1940 Good, on top of all others, with C&W music, several 970 KFEL Classic Country KFEL IDs. (MBDXP)
- MN Austin 3/20 2246 Fox Country 102.5. (KW-WI) 970 KNFX
- 1010 KBIS AR Little Rock - 3/14 1801 - Legal ID. (KW-WI)
- 1150 KLRG AR North Little Rock - 3/14 2026 - Absolutely pounding in! Not bad for 1 kw. Gospel Music, The Revival. March 14-17. 212 Main St. Jacksonville, Arkansas. Praise 1150 KLRG. (KW-WI)
- 1160 KSL UT Salt Lake City - 3/20 2244 - Ad for Alert Communications, 5318 South State in Salt Lake. Newsradio 1160 KSL. (KW-WI)
- 1200 WOPA IL Chicago - 3/10 1900 - Briefly strong atop channel, with EE & SS IDs into SS talk. (WB-MO)
- 1230 KFJB IA Marshalltown - 2/28 1715 - Talking about events in Blackhawk County.
 - NM Gallup 3/21 2215 Phoenix Suns basketball and VID as KYVA KYVA. KYVA
- 1240 KALY NM Albuquerque - 3/22 2255 - SS and Latin music and ID as Radio Kah Lee. (CR-CO)
- 1320 WILS MI Lansing - 3/16 2032 - Ford on Prospect in Kalamazoo. (KW-WI) [Wow Lansing is a ways away from Kalamazoo to be doing local ads. Not doubting your catch. Just an observation - Ed.]
- 1360 KMRN MO Cameron 3/11 1907 Good, with local news and weather and Missouri lottery results. New!! (MBDXP)
- 1370 WPRC IL Lincoln - 3/6 1952 - With ID and car safety PSA. (WB-MO)
 - KDTH IA Dubuque - 3/7 1932 - With Hawkeye basketball. Heard CLs. New. (DE-MO) KDTH IA
 - Dubuque 3/8 1949 ID and Hawkeye sports. (WB-MO)
 - WSPD OH Toledo - 3/14 2205 - CBS News, Radar weather for the Toledo area. Then into a psychologist call-in show. Just under local WKSH. (KW-WI)
- 1380 WOHK IN Fort Wayne - 3/16 2106 - Slogan as The Hawk. (KW-WI)
- Hazard 2/26 2055 CLs only, but clear, in a pile-up. Rare. (NAP-AL) 1390 WKIC KY
- 1460 WXOK LA Baton Rouge - 3/5 2335 - Very laid-back black announcer (almost put me to sleep), with . . . Right in the capital city, AM 1460 WXOK, then s-l-o-w REL music, on a Sunday night. (NAP-AL)
- 1480 KMEM NE Lincoln 3/23 2020 The station that brings you the memories, 1480 KMEM. NOS music. (CR-CO)
- 1490 KXLQ IA Indianola - 3/5 2007 - Atop briefly, with ID: . . . southern Iowa, Hot Country IC-106.9, then back into C&W off the bird. Cleans up Iowa on 1490 for me. (RD-IA)
- 1510 KCTE MO Independence - 2/25 1859-1900 - Good, at sign-off, with mention of "allsports", "10 kw", and slogan Kansas C ity TE am . New. (DB-IA)
- 1520 KMPL MO Sikeston 3/14 1944 1520 KMPL for great music. Over KOMA. (KW-WI)
- 1530 KMAM MO Butler 3/11 1915 Fair, with C&W music, and ads for local merchants. Still // their 92.1, with FM IDs. New!! (MBDXP)

(GS-TN)

1550 WBSC SC Bennettsville - 3/16 2126 - WBSC, Home of the South Carolina Bulldogs(?). (KW-WI)

1560 WSLA LA Slidell - 2/28 1950 - Fair, with discussion of severe weather, tornadoes and hurricanes. Promo for New Orleans Home and Garden Show in the Super Dome. Full-data sign-off at 2000. (GS-TN)

WQEW NY New York - 3/4 2325 - CLs and NOS. First time, though 50 kw. WPAD barely audible under. Also legal ID next morning at 0600. (NAP-AL)

WOEW NY New York - 3/11 1932 - Briefly over dominant WPAD-KY, with Make it a Big Band Night with WQEW ID. (WB-MO)

1570 WRJQ WI Appleton - 3/7 2300 - Caught CL's after hearing NOS. New. (DE-MO)

GRAVEYARD DX UPDATE

indicates North American record

Morris Sorensen RF-B65 barefoot

1240 kHz:

HTI Port-au-Prince

Morris Sorensen

Runaway Bay, JMC

324

WGBY CUB Guantanamo Bay

Morris Sorensen

Runaway Bay, IMC

177

ABBREVIATIONS USED IN DDXD

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

DDXD-East



NEWS AND VIEWS

Welcome to first time reporter Ed Krejny, from Strongsville, OH, who says he's returning after a 17-year layoff! Welcome also to Jim Clar, from Rochester, NY, a longlime DXer but new NRC member. And there is an interesting UNID report from Odd Jörgen Sandahl from Trondheim, Norway via the Internet. Good to hear from all of you.

In response to some questions posed by Jim, please submit your logs in a format as close to what you see in this column as possible. You don't need to cut your logs into strips - one of the changes in this job brought along by the advent of PC'al And FLA remed as the reference since what we are dealing with here are domestic broadcasters, and it prevents everybody having to convert times on both ends of the report 3 o these broadcasters, 1110 means less than diddly! And see the monthly column Confirmed DNer for awayging CPd. Information

Tom Beaton says "I put up a new ground system yesterday and don't know whether it's just a coincidence but the TE stations on Infit have been coming to one h better?"

There had some problems with my finding software toroutly my own errors, I'm afraid) and, as a result, have lost my address had from Product. There has a using the CompuServe address more lately, and have a good sized address list in that softeen to it you sent me mail via Prodigy over the had you and want me to relife your arbitress past send me a quicker note to DPHT10A and beat me over the head. Better yet semborreport where you shall

Opening deadline are York & May team him t

5PECIAL

half (IAC) (IN Brampton) In those of you trying to grad an ID in EE here try around the top of the hour theant the the televit (hou) (At) Radio...less talk, more music" this 13 pp | 1811 | 1811

- 540 WETC NC Wendell-Zebulon 2/22 0845 Noted with Morning in America on PRN. Add PRN and UPI News. (IK-VA)
- 570 CKGL ON Kitchener IDs as "Country 570" not in Log, runs Country Music Radio Network overnight along with BN News at :00. (RH-ON)
- 630 CFCO ON Chatham 3/2 2130-2200 With Detroit Red Wings vs. Winnipeg hockey //WJR and WTRX-1330. New Wings station. (TS-MI)
- 890 WBMA MA Wellesley 3/20 1000 ID noted as "WBMA, Dedham, WBPS". Perhaps an indication of a call sign and a city of license change to go along with their format change from ethnic to sports. (RWT-MA)
- 890 WBMA MA Dedham Calls are still WBMA, city of license is still Dedham. Their press releases, and consequently news stories about them, call them "WBPS," but the calls have not actually changed. Legal ID is either at :00 or :13, varies randomly. As of 2/22, legal sometimes given as "WBMA Dedham, AM 890, WBPS Boston's home of Prime Sports." City of license will apparently change when they build their nowapproved modified night pattern, which will cut out Dedham but boost night signal into new city of license of Wellesley Hills. (SF-MA)
- NS Halifax 2/20 0443 "For news, talk and information, it's Talk Radio 9-20, 920 CICH CICH on AM", Good, (DP-PO)
- 1060 WLNO LA New Orleans 2/22 0300 CW, America's Rodeo show and WLNO mentions. First time with new calls, way over usuals KYW and XEEP. (JK-VA)
- 1070 WNCT NC Greenville 3/5 2019 Noted with NOS/standards format. (JK-VA)
- 1110 WBT NC Charlotte - It was reported in the Charlotte Observer that WBT was moving to buy WDZK-99.3 in Chester, SC with the intent of simulcasting its AM programming on FM. WDZK is operated by the folks who have WBZK-980 in York, SC and shares some of the same programming. According to the small article, the FM calls would be changed to WBT-FM. Like WIST (see below), the advantage for WBT would be signal coverage. When WBT switches to its N-S night pattern, it cannot be heard in Gaston County to the west, which has become a major growth area, As of 3/18, WDZK and WBZK are still broadcasting hand-in-hand, (IM-NC)
- 1160 WAMB TN Donelson 2/28 2117 Runs SS at times these days. (JK-VA)
- 1160 WODY VA Fieldale 3/2 2349-0000 Heard with religion. I made out the PAR Network calls as WPIR and WPIN. Correct address per phone call to station is P.O. Box 192, Martinsville, VA, 24114. (EK-OH)
- 1200 WTLA NY North Syracuse Following up on Greg Coniglio's note, they are //WTLB-1310 most of the week, but break away for leased-time programming, including a polka show, weekend afternoons. (SF-NY)
- 1430 CKYC? ON Toronto As of 3/10 Country Music Network feed still running on this frequency. (RH-ON)
- 1480 WIST NC Charlotte - Is now simulcasting their Music of Your Life programming on 106.1-FM. A dual ID is heard at the top of the hour (WIST-WLWW) leading into ABC News. WIST airs numerous IDs each hour, but most don't include the FM call. The simulcasting appears to be permanent, as the station is playing up the improved sound and coverage area of the FM during its promos. The AM signal pattern stinks, at night I sometimes can't hear it until I'm a couple of miles from the station. Address and phone number are now 5732 N. Tryon St., Charlotte, NC 28213, 704-598-1480. These folks also operate WHVN-1240 at the same address. Address shown in the Log is the transmitter location. (JM-NC)
- 1560 WMRO TN Gallatin 2/20 0436 Two back-to-back IDs "Magic 1560 WMRO" and "24 Hour Magic, 1560 WMRO" into Johnny Rivers' Seventh Son, Love Potion No. 9, and Ain't No Mountain by Diana Ross. (RH-ON)
- 1570 WZCC IN New Albany 2/28 1903 Caught a positive ID on their FM "WZCC-AM, New Albany and WXLN-FM Eminence, Kentuckiana's Inspiration radio stations".(JK-VA)

DX TESTS

- 620 WTMT KY Louisville 3/13 0100-0130 Heard surprisingly well in semi-null of local WRJZ with voice IDs, code IDs and an Andrews Sisters song. Had been my only unheard Louisville for the past 22-1/2 years. (SF-TN) ... Code IDs heard at 0110, 0122. 1 kHz TT at 0120 very weak under WRJZ. (JL-OH) ... Not heard. (RA-MA) ...Not heard on frequency dominated by WHEN and WTMJ. (MB-ON)
- 730 KWRE MO Warrenton - 2/18 0100-0130 - Not heard. (DT-JAM)
- 750 KERR MT Polson - 2/20 0200-0230 - Tuned in late, heard UNID CW mixing with a CBC(?) talk station 0226-0334 under WSB. I assume that I might have heard CBGY

and CKGB? This was a little late for CBGY. Maybe I did hear KERR with the CW? (JK-VA) ...Nothing heard under WSB. (JL-OH) ...Nothing heard, just CKGB and WSB. (DP-PQ)

780 WWOL NC Forest City - 2/11 0200-0400 - Strong Radio Coro-Venezuela and WBBM way in the background, nothing else. (DT-JAM)

910 KIYU AK Galena - 2/6 0500-0530 - Not heard. (DT-JAM)

930 KWOC MO Poplar Bluff - 3/13 0200-0230 - Instant male voice ID atop the channel and a few more IDs before vanishing under WBEN around 0215. Mentions of IRCA. Couldn't locate the crib notes for this one, so didn't catch any programming aside from bits of NOS. (BA-PA) ...Started out with weather, then into a sequence of test announcements followed by music into another voice ID. Apparently did not use night pattern as there was no drop in power at the halfway point. No code IDs or tones heard. Music consisted of TV cartoon themes. (JL-OH) ...Not heard. (RA-MA) ...Not heard. (SF-TN) ...A no-show, just WFMD. (WPT-DC)

960 KZIM MO Cape Girardeau - 3/6 0200-0230 - Code IDs barely audible under CHNS and WFIR first half of test, nothing noted from 0215 on. (RA-MA) Follow-up - Weak code IDs reported earlier was not them per non v/l from station which also stated they would reschedule test for MM 4/3. Letter also states that the code I heard possibly came from a station in Cuba that sometimes transmits code IDs. (RA-MA) ...Started off with what sounded like a 5-year old female announcer giving details of test then into a beeping TT. Nothing else heard. (JL-OH) ...Not a trace, my (sob!) 50th unheard test since KWEY-1590 on 10/3. (SF-TN) ...Not heard. (WPT-DC)

1100 KNZZ CO Grand Junction - 2/12 0300-0330 - Strong HJAT, very weak WWWE, no KNZZ. (DT-JAM)

1210 KGYN OK Guymon - 2/13 0200-0230 - Strong WCMQ and weak WGMP, no KGYN. (DT-JAM)

1250 WREN KS Topeka - 2/14 0100-0200 - Code heard at 0113 and 0117, interference from WDAE. Very poor, first KS since 40's! (DT-JAM)

1250 WKBR NH Manchester - 3/6 0100-0130 - Weak under WTAE and UNID, possibly CHWO, with voice IDs, code IDs, periods of 1000 cycle TT. Many code IDs throughout test. (RA-MA) ...Good with code and voice IDs as well as TTs. There was also a phone number and address given. (TB-MA) ...Noted only because it was quite weak for me, often getting wiped out by WTAE and other UNIDs. (SF-MA) ...Code, possible NOS music with a lot of CHWO, which is unusual since usual dominant WTAE was very weak. The first 15 minutes seemed weaker than the second half. NH #3 in VA. How about some VT and ME tests now? (JK-VA) ...Heard only sporadically and with great difficulty only their code IDs. Severe QRM from CHWO with jazz and WTAE(?) with talk. (EK-OH) ...1 kHz TT at 0104 lasted 5 minutes, more at 0112, 0117 and 0123. Code ID at 0116. Poor-fair under CHWO and WTAE. (JL-OH) ...Nope. (SF-TN) ...Not heard, only WWDC slop and WTAE. (WPT-DC)

1330 WPPI GA Carrollton - 3/4 0500-0600 - Fair under WFBC with code IDs. Some "science fiction" type noises also heard which may have been them. (SF-TN) ...Heard only very weak code IDs. (EK-OH) ...Code IDs at 0503, 0513, final code ID at 0519 lasted 4 minutes. Poor-fair under WFBC. (JL-OH) ...Code ID at 0537 poor under pile. (WPT-DC)

1340 KTCR WA Kennewick - 2/26 0400-0600 - Code for a few seconds at 0400 and 0430, not sure if them. (DT-JAM)

1400 KSIM MO Sikeston ~ 3/20 0100-0130 ~ Not heard in jumble. (RA-MA) ...No luck with this one, as I go 0 for 5 with MO tests this season. (SF-TN)

1420 KUJ

WA Walla Walla - 2/26 0400-0600 - Heard oldies, WVJS and WRCG. At 0414 might have heard "KUJ, your <fade> station". Possible code at 0444. Also "WHO" REL UNID station. (JK-VA) ...Heard TTs of varying pitch at 0420 then male with what seemed to be test details but I couldn't make it out. Satellite program followed with confusing mentions of "Chicagoland", WJJD and an 800 number. Did I hear them? (JL-OH) ...Only WBRD. (DT-JAM)

1460 WZEP FL DeFuniak Springs - 3/20 0400-0445 - Not heard, only CKRB, WGMA and a third station, WCMB I think. Very weak TT and/or code possibly noted at 0409 and 0416 but doubt if it was them. (RA-MA) ... No sign of 'em. (SF-TN)

1580 KFDF AR Van Buren - 3/4 0200-0300 - Heard very faint code ID at 0226 under a dominant CBJ and that was it. (JL-OH) ...Listened full hour but no luck, just CBJ and WPGC. (RA-MA) ...Not heard. CBJ virtually unnullable. Would have been a potentially easy catch if CBJ still signed-off at 0100 like the CBC EE network. (MB-

ON) ...Not heard on spot checks, had to leave after 0207 due to dominant WPGC's rap music! (SF-TN)

UNID AND UNID HELP

610 UNID

2/28 2156 - Indian music under WIP and WGIR, very poor, almost inaudible.

Sound of talk at 2159, followed by musical tones at top of the hour. Couldn't decipher talk, but wagering it was Hindi. Could CKTB have added an Indian program block, joining CIAO-530 and CHIN-1540 in serving the large southeast Ontario Indian community? (AR-MA)

820 UNID

2/13 2205 – Live from Daytona Beach, talk about the upcoming Daytona 500 "on the Performance Racing Network", at 2307 Sports Byline USA program with Ron Barr, over/under CHAM. Also heard on 2/17 2110 with talk with actual and former Daytona 500 racers, mostly over WNYC and CHAM. Could it be WBAP? (DP-PQ) (I'd say so – db)

920 UNID 2/20 0438 - "The greatest hits of all time, on KHJ early rise classic hour" slogan at 0440. (DP-PQ) (CJCJ-Woodstock, NB, which is //CIHI-1260 and CKHJ-FM at times - db)

960 UNID 3/11 1750 – Very good signal with ID "From the Oldies to the 90s, WGFB 100", no AM call letters announced. (AR-MA) (WEAV-NY – db)

1050 WFBL NY Baldwinsville - This is Bill Andres' UNID from last issue, but they haven't been "WSEN" for a couple of years - they grabbed the WFBL calls and format from 1390 when that station went REL. (SF-NY) (Ye olde editor should have caught that! - db)

1080 UNID

3/12 0028 - CW music heard under WTIC, talk between songs inaudible. Previously received 2/11 2352 with mention of a place on Route 295. (AR-MA) (Probably WEEP, see elsewhere this column - db)

1090 UNID 2/25 1847 - Someone with PRN. WKCV? (JK-VA) (They're still shown as silent. I'd guess one of the NC stations - db)

1200 WTLA NY North Syracuse - Appears to be my UNID in No. 21, since heard. (RJE-PA)

1200 UNID 3/5 2026 - Someone with PRN over dominant WOAI. (JK-VA)

1240 UNID 3/12 2250 - AC or oldies station with "X marks the spot for music, 1240 WTSX(?)".

Nothing in Log seems to fit, and no such call letter for this frequency. (AR-MA)

1390.14 UNID 1/26 2000-1/27 0200 - I had a presumeably northeast station on the frequency of 1390.14 kHz. The same station was heard in Sweden at the same time, but none of us were able to identify it. It was heard over a timespan of 6 hours. The frequency was stable. When I heard the station at about 2015 it was running some sort of a religious program or promo(?). It continued with a talkshow at 2025 originating from Washington, DC. The talk show hosts name was something like John Thorogood(?) and the 800-number was 456-1227. However, as you know, you can't call an 800 number from abroad. What brings me to the east coast is an ad for a Diabetes Foundation(?) at 2030 giving a phone number on Long Island (516-802-8486(?)). According to the contents in the ad it sounded like it was directed to the vicinity of that area. I may however very well be wrong! The station was fading a lot, and was of course far down when there should be any chance of ID. On 1390 I had 1-2 other stations, also making the whole thing more difficult. A Swedish DXer heard the same station 1/27 0155 quoting a phone number like "452-5503" and maybe a call like "...HOB"(?). (OJS-NOR)

1420 UNID 2/26 0503 - Someone with REL, mentions of WHO, while looking for KUJ test. Is this WOC? (JK-VA)

1440 UNID 2/26 1628 - Sports results, "Sports radio, The Team" slogan at 1629, then buried by UNID others. (DP-PQ) (Probably WWTM-MA - db)

1480 UNID 3/4 2141 - "Join us for more high school basktetball action on 1480, The Fan" was all I heard. Is this WADR? (RH-ON) (Probably - db)

1560 UNID 2/20 0459 – WQEW noted back on at 0459 with UNID beacon in null, which had three separate tones broadcast every 22-25 seconds. Tones were the same. Ideas anyone? (RH-ON)

1580 UNID

3/11 2054-2145 - Poor-fair with deep fades, ethnic/Jamaican programming, "Reggae Dance Hall extravaganza", cultural calendar including mention of "Jamaican Domino Club", "Ft. Lauderdale" and "West Palm". Time checks and promos, "1580, the sounds of the Islands". No ID heard, possibly WSRF? (JC-NY) (Yep - db)

1600 WXMY VA Saltville - My Gospel UNID in No. 23 likely was them, for which I will now try again. (RJE-PA)

1600 UNID 3/10 1750 - "All sports, all the time, W???", over/under WWRL and CHNR. Too early for WSFN, but might be WNST, which is now sports talk per Formats column. (RJE-PA)

0000 to 0800 ELT

- 540 WWZN FL Pine Hills 3/10 0030 Weak. End of Florida Gators basketball game. "Rights to broadcast authorized by the University of Florida." Followed by national sports talk show. (PG-MA)
 - CBEF ON Windsor 3/4 0418 Continuous classical music, some FF talk, but no ID heard, //CJBC. Some downfading but all alone. (RH-ON)
- 550 CHLN PQ Trois-Rivieres 2/12 0210 FF talk, well over UNID SS station. (RH-NJ)
- 570 WKBN OH Youngstown 3/7 0459 ID heard in null of CKGL as "WKBN Youngstown" then into CBS News, weak. (RH-ON)
- 600 CFCH ON North Bay 2/12 0255 Hard rock, local spots, ID. (RH-NJ)
- 610 WTVN OH Columbus 3/10 0539 Local weather and call letters in null of CKTB, which was running live and local NOS/EZL overnight. (RH-ON)
- 630 WMAL DC Washington 2/20 0325 Interview with Dr. Robert Manney, professor at the University of Vermont, ID at 0330 "Good morning, WMAL traffic and weather..." over/under CHLT. (DP-PQ)
 - WPRO RI Providence 2/26 0005 End of ABC News, local weather. Local at home in MA, but first time I've heard it in Rochester, and in fact RI #1 for me there. CFCO or WMAL are more usual. (SF-NY)
- 710 WFNR VA Blacksburg 2/27 0706-0709 Heard with local ads. (EK-OH)
- 740 WMBL NC Morehead City 1/22 0200 Second time this season with their 100 watt night power, NOS music, news, Kobe volcano news, CNN News. (RH–NJ)
 - KRMG OK Tulsa 2/12 0155-0203 Financial talk show //WHAM, ID "KRMG 740, Tulsa", local activities, ABC News with Debbie Hamlet. (RH-NJ)
 - CHCM NF St. John's 2/20 0130-0135 Coming in strong with 3 AM news and weather, "This is the VOCM Radio Network, home of the St. John's Maple Leafs". (BF-MA)
- 750 CKGB ON Timmins 2/20 0204 CW songs, ID at 0214 "Today's hot new country, this is 7-50, CKGB". Good in WSB null. (DP-PQ)
- 770 WAIS OH Buchtel 3/12 0642-0657 New here, good signal but heavy QRM from WYRV. (EK-OH)
 - WYRV VA Cedar Bluff 3/12 0645 Noted at sign-on, in/out with WAIS. (EK-OH)
- 820 WQSI MD Frederick 2/17 0100 Weak "WQSI Frederick" ID, almost simultaneous with WIQT's, these two were under CHAM and a strong UNID, maybe WBAP, the one I'm looking for...(DP-PQ) (Sounds like a station slogan db)
 - WIQT NY Horseheads 2/17 0100 "You're listening to WIQT..." ID, weak. (DP-PQ)
 - WBAP TX Ft. Worth 2/26 0000 Top of the hour sung ID, "WBAP, Fort Worth-Dallas," into ABC News. Stronger than I've heard them in Rochester in years, wiping out CHAM without my having to do any nulling. Auroral conditions, perhaps? (SF-NY)
 - WGGM VA Chester 3/14 0235 Caught calls after REL segment during fortuitous fade of round-the-clock nuisance WQSI. (BA-PA)
- 850 WNIS VA Norfolk 3/10 0003 ID followed by chime and news. Clear signal under 50000w local WEEL (PG-MA)
- 870 WFLO VA Farmville 3/11 0633-0635 On top with weather and CW, QRM from WWL and suspected WHCU. (EK-OH)
- 910 CHRL PQ Roberval 2/12 0240 FF talk atop frequency. (RH-NJ)
- 920 KARN AR Little Rock 1/22 0220 Talk, ID, jumble under WHJJ and CFLS. First time up here. (RH-NJ)
 - KDHL MN Faribault 3/8 0406 Spot about advertising on KDHL with phone numbers in MN and WI cities, "Let KDHL work for you". (CC-PA)
 - WMNI OH Columbus 3/8 0411 Up briefly with "On the new home of the Columbus (?), AM 920 WMNI". (CC-PA)
- 930 WFMD MD Frederick 3/2 0635 Noted briefly atop WEOL. (EK-OH)
 - WSEV TN Sevierville 3/13 0215 Quick, clear calls during KWOC test. No other details. 930 sounded like 1400 for a good fifteen minutes. (BA-PA)
 - CFBC NB St. John 2/26 0152 GTO station, news at 0200, ID at 0204 "...93 CFBC" into Elvis' Return to Sender, Fair, QRM from WZNN and WBEN. (DP-PQ)
- 940 WINE CT Brookfield 3/4 0623 CNN News into local ad with Danbury mentions, fair. (AR-MA)
 - WNRG VA Grundy 3/2 0650-0700 Noted with CW, fair signal. (EK-OH)

- WKGM VA Smithfield 3/2 0729-0740 Occasionally very good. (EK-OH)
- WKGM VA Smithfield 3/8 0430 PSA to support the ministries you hear on WKGM, "The Ministry Station", over CBM, Radio Reloj. (CC-PA)
- 950 KKFNt CO Denver 2/22 0045 Tentative with sports, and thought I heard "The Fan" mentioned along with talk of the mile high city, under/over WWJ and WQBE. Strange, since pattern does not really go this way. (JK-VA)
 - WWJ MI Detroit 2/22 0213 "News radio WWJ, the more you listen, the more you know." Rare here. (JK-VA)
 - WQBE WV Charleston 3/2 0710-0715 In/out with WWJ, with talk show. (EK-OH)
- 1000 CFLP PQ Rimouski 1/16 0118 FF talk over WMVP. (RH-NJ)
- 1020 KDKA PA Pittsburgh 2/26 0100 Reception was unremarkable, but they were signing off "to make adjustments to our new antenna." Announced sign—on for 0500, but were already up and running when I tuned in at 0458. 1020 was dead after they left. (SF-NY)
- 1030 WUFL MI Sterling Heights 2/26 0702-0725 Noted with Meditation in Music, good signal with WBZ looped. (EK-OH)
- 1040 WOKT KY Cannonsburg 3/11 0659 Sign-on, good signal but mixed with WQBB. (EK-OH)
 - WQBB TN Powell 3/11 0654-0659 Noted with highly variable signal, occasionally strong and on top until 0659 WOKT sign-on. Also noted 3/11 1817-1831. NOS music both times. (EK-OH)
- 1090 CKKW ON Kitchener 2/22 0313 Over KAAY (who was unusually loud this morning) with "Oldies 1090" slogans. (JK-VA)
- 1140 CBI NS Sydney 2/20 0015 Weather, list of FMs, O Canada, to sign-off, good. (DY-CT)
- 1200 WCHB MI Taylor 2/21 0508 Sung ID noted up and over WOAI, mentioned call letters twice. (RH-ON)
 - WAGE VA Leesburg 2/21 0459 Up briefly with PSA by Leesburg attorney Barbara Williams, then male with ID "With the latest news, weather, sports and traffic, this is AM 1200 WAGE Leesburg" then gone. (RH-ON)
- 1290 WKNE NH Keene 1/22 0154 Local weather and ads over usual CJBK, Pat Boone's Moody River. (RH-NJ)
- 1300 WXPX PA West Hazelton 3/19 0008 Country music. Ad for a tape of Fluff the Bear Show and How to Play the Harmonica. 500w and clear over WJFK. (PG-MA)
- 1350 WIOU IN Kokomo 2/25 0824-0830 Fair-poor over usual pest CKDO with ID as "Oldies 1350 WIOU on a Super 70s Saturday morning", long run-down of birthdays and other events happening this day, promo to call WIOU at 455-3882 when you hear "the phrase that pays" into Supertramp's The Logical Song to kick off a grab bag of non-descript 70s oldies. (MB-ON)
- 1410 WGRD MI Grand Rapids 3/4 0559-0600 Fair, "WGR?" ID surfaced in for a few seconds on a SRS wave, then wiped out quick. (AR-MA)
- 1420 WKCW VA Warrenton 3/4 0600 Noted with vocal SSB over WHK. (EK-OH)
- 1510 WAUK WI Waukesha 3/19 0720 Good over WWHN with promo for Ned Jarrett's NASCAR Today "on Sports Radio 1510 WAUK". One of the WXVX morning DJs overslept enabling me to catch this new one. WXVX came on at 0724, 54 minutes
- 1560 WMRO TN Gallatin 2/20 0240 "Magic 1560 WMRO", Teddy Bear's To Know Him is to Love Him, Frankie Avalon's Venus and Everly Brothers All I Have to do is Dream. Got location from DX News, what's power on this guy? (RH-NJ) (According to the Log it is D3 1500, with a psra of 500 and CH power of 930. It seems to be on during WQEW's SP, don't know if that's the only time we can hear it or if it's doing it on purpose. Oops, see RH's log in Special! db)
 - WMRO TN Gallatin 2/20 0356 "Good Time Oldies, WMRO...is Magic 15-60" into news at 0400. (DP-PQ)
- 1570 WZCC IN New Albany 2/28 0633-0642 Noted with news, local ads and then religion, on top most of the time. (EK-OH)
- 1600 WBBD WV Wheeling 2/28 0718-0738 Heard with NOS music on top but only fair signal. Verified. (EK-OH)

1600 TO 2400 ELT

- 540 WLIX NY Islip 2/26 2115 Black Gospel preacher, weak but steady, audible signal in the mountains. (TF-NH)
 - WLIX NY Islip 3/16 2234 ID then mention of Bayshore, NY. SS. Fighting w/CBT. (PG-MA) (SS? db)

- 18
- ON Owen Sound 3/5 1854 Very weak behind splash from WGR-550 and 560 CFOS CKGL- 570. Sukiyaki by Kyu Sakamoto then ID AM 560 CFOS and into Association's Cherish. I believe CFPS-1490 was also mentioned in ID. Great signal daytime but this is my first logging of them after dark. (RH-ON)
- 590 VOCM NF St. John's 2/16 2350 Songs by Alan Parsons project, Lionel Ritchie, Rod Stewart, Elton John, ID at 0012 "Here's the VOCM ... giving NF temperatures on "VOCM Newfoundland weather report". Poor-fair, NF #3. (DP-PQ)
- CT Bridgeport 2/26 2030-2105 Old radio program, ID at 2100 "Service 60, WICC" followed by AP Radio News, good steady signal. (TF-NH)
- TN Knoxville 3/13 2042 Fair, How Can I Help religious program, book and 620 WRIZ audio cassette offer, "WRJZ...Knoxville Joy..." ID, promo and time check at 2045. REL music into more REL talk. (JC-NY)
- OH Akron 3/11 1735 Cluster of Christian music selections, then they were WHLO identified by the DJ, followed by an ID for "AM 640, WHLO", not heard here in a 640 while. (TF-CT)
 - WHLO OH Akron 3/12 2000 Fair with call letters, REL music, sermon. Local WBOW
- LA New Orleans 3/3 1915-1920 On top with ads. (EK-OH) 690 WTIX
- PO Montreal 2/24 2202 FF talk by man, probably news. Fair under WCPT. CKAC 730 (WPT-DC)
- MA Cambridge 3/3 1939-2000 Harvard-Cornell basketball, many PSAs during 740 WJIB the halftime reports, NRC member and station owner Bob Bittner IDed the station at 1956, 5 watt signal rolled in over CBL on a 20 mile stretch of I-495, 25-35 miles north of the transmitter! (TF-MA)
 - WRNR WV Martinsburg 3/13 1807 'Talk Radio' out of news and local weather. Many mentions of Morgantown. (BA-PA)
- 750 WMXH PA Olyphant 2/20 1725 Mix of standards and current music, ID for "Mix 750, WMXH, Olyphant, PA, where the music is all mixed up"! (TF-CT)
- 770 WWCN FL North Fort Myers 2/20 1958-2020 Talk show, ABC News, local ads, ID as "AM 770 WWCN, Fort Myers", poor with interference from UNID SS. (DT-JAM)
- WLKW RI Providence 2/13 2137 ID at 2142 "The unforgettable artists are here on WLKW, 7-90 stereo" into Olivia Newton-John song. Fair. (DP-PQ)
- 810 KCMO MO Kansas City 2/25 2005 Good with the Tom Leykis Show over WGY. There was an "echo" since WGY was running the same program "delayed". (JK-VA)
- CKVL PQ Verdun 2/28 2103 Strong with FF over usual KOA and WNIS. (JK-VA)
- WOAY WV Oak Hill 3/23 1819 Talk by man faded up 1816, "WOAY-AM" heard clearly 1819, but mostly not comprehensible. Over UNID UC:GOS (WBGR?) in CJBC null, heavy WREF-850 slop. (DY-CT)
- KPRM MN Park Rapids 3/9 1919-1930 Noted through WWL with CW, ID at 1930 and then lost - power cut? (EK-OH)
- WMDB TN Nashville 3/10 1857-1900 Noted at sign-off, WCBS looped. (EK-OH)
 - WMEQ WI Menomonie 3/11 1844-1850 Noted with weather and CW after WRFD sign- off, severe WCBS QRM. (EK-OH)
- PA Cashtown 2/25 1715 REL/GOS music, ID at 1722. Signal getting stronger 890 WFKI until sign-off at 1745. (DP-PQ)
- 900 CKTS? PQ Sherbrooke 3/11 1923 Announcement of up-coming Rangers and Canadians hockey game, followed by "You're listening to CJAD-800" in null of CHML. OK, does anyone know what's going on here? (RWT-MA) (Tis CKTS, which relays CJAD, at times anyway - db)
- 920 WMEL FL Melbourne 3/10 1854 ID by man, sports talk show. Good. (WPT-DC)
 - WIRD NY Lake Placid 1/31 2338 "Here's your Olympic weather forecast", could only be this one, not KQEU-Olympia, WA. (RH-NJ)
- WCPC MS Houston 2/22 1844 Good with mentions of "Clear channel 9-40 WCPC", GOS, and the Mississippi Network. Gone with power cut at 1845. (JK-VA)
- NY Utica 2/24 2346 ID at 2358 "Join us right here on News Talk Radio WIBX", WIBX 950 CBS News on the hour. (DP-PQ)
 - PA Philadelphia 2/24 2346 Ad for a furniture store in Philadelphia, NOS songs, WPEN ID, over/under WIBX. (DP-PQ)
 - SC Spartanburg 2/28 2000 Up briefly with "AM 950 WSPA, Spartanburg" IDs. WSPA
- KY Prestonburg 3/6 2157 With "WXKZ-WPRT" IDs during auroral conditions WPRT over WFIR. Good at 25 watts. (JK-VA)

- WAAK NC Dallas 2/28 2015 REL, USA Network, along with "WAAK, Dallas" mentions. (IK-VA)
- WAAK NC Dallas 3/4 1812 Poor with Real McCov dance hit Another Night under WELI and UNIDs. Some WROL slop. (AR-MA)
- WHYL PA Carlisle 2/24 1750 Standards, ID at 1800 for "WHYL Carlisle-Harrisburg". way over WELI. (TF-CT)
- VA Roanoke 2/19 1800 Promo for the "number one news source in western Virginia," ID, CBS news, very good. New. (DY-CT)
- 970 WJMX SC Florence 2/28 2200 Bruce Williams and "AM 970 WJMX and ... AM 1350" over/under the usually dominant "3WS" and "Wave 970". (JK-VA)
- 980 WTRY NY Troy 2/22 1724 OLD and mentions of "The Capital District". ([K-VA)
 - WILK PA Wilkes-Barre - 2/22 1723 - Doing a good job over usually loud WWRC with "G. Gordon Liddy on News Talk 9-80 WILK". (JK-VA)
- 990 WCMF NY Rochester 3/4 2305 Good with promo for Amherst hockey action vs. Hershey Bears at War Memorial Auditorium, "Sports Radio 990" ID into Sports Fan Radio Network. (TB-MA) (The Rochester AHL team is the Amerks that I think you heard, not Amherst - db)
 - WZZD PA Philadelphia - 2/22 1757-1808 - Talk, ID as "Christian Radio WZZD", poor with CBW interference. (DT-JAM)
 - MB Winnipeg 2/22 1740-1800 CBC talk show on Canadian Indians, good. **CBW** (DT-JAM) (So I have to go to Jamaica to get CBW, eh? - db)
- 1020 WRIX SC Homeland Park - 2/25 1818 - Sign-off mentioning "10,000 watts of power" and "AM 1020, Inc." along with a message to tune to FM. Under KDKA. (JK-VA)
- 1040 WSKE PA Everett - 3/11 1807-1815 - Heard with Ai News then CW, good signal until 1815 - power cut? (EK-OH)
- PA Pittsburgh 3/11 2345 Fair strength over/under a weak (as usual) WTIC, but 1080 WEEP mostly over, Mention of several Pittsburgh area topics. Numerous IDs as "Y108" (probably //FM-107.9). Country music. What's going on here? I seem to get a fairly strong "Y108" about once every few weeks or so, however no sign of them on most other evenings even though WTIC, although usually audible, is too weak to block "Y108" out. (RC-MD) (Probably one employee who doesn't want to take the time to turn off the AM! - db)
- 1110 WUHN MA Pittsfield 2/27 1715-1720 Coming in steadily, "Your oldies station in the Berkshires". Usually WHIM during the day before CKTY and WBT take over. (BF-
- 1160 WSKW ME Skowhegan 3/6 1931 Sports program, results, Prime Sports Radio slogans, "AM 1160 WSKW, Skowhegan-Waterville, it's 8 o'clock" into USA News. (DP-PO)
- 1180 WIIF RI Hope Valley - 3/23 1718 - ID "The Two State Country Leader". Weather hotline number "539-TEMP". "Radio Ranch" and "Country Music from the Country". (They must have a staff thinking up slogans...) 1800w, 1800 slogans? (PG-MA)
- 1190 WOWO IN Fort Wayne 2/23 0000-0300 Off the air after message saying they would be off for 3 hours for the installation of new equipment. Just weak SS and maybe TX stations heard while off. (JK-VA)
 - WIES SC Johnston - 3/5 2129 - On all night with mostly carrier and mentions of "More of the best oldies on 92.7 FM...Channel 12 weather with Bob Smith", etc. Good with 800 watts on top of 50 kw at times! (JK-VA)
- 1200 WCHB MI Taylor 2/20 1745 Talk, traffic, commercials, ID for "News Talk 1200, WCHB", gone at 1800, good signal. (TF-CT)
- 1240 WCEM MD Cambridge 3/8 1816 Atop frequency with Cambridge and Dorcester County mentioned a couple of times by female announcer leading into a CW song. I wonder if anyone mistakes this for a Boston-area station since Beantown has both a Cambridge next to it and a Dorchester as a section? (AR-MA)
- 1250 WMTR NJ Morristown 3/13 1755 Ad for "Financially Speaking, Saturday mornings at 9:30 on AM Stereo WMTR". Good but fading under WKBR periodically, then lost at 1800 due to power cut/pattern change. (AR-MA)
 - WGHB NC Farmville 2/19 1842 Suddenly rose atop with female DJ, ID "WGHB Farmville-Greenville," CW music, good. (DY-CT)
 - PA Pittsburgh 3/18 1929 Fair with CHWO QRM, "WTAE Weather Center" with Pittsburgh weather, ID, Amnesty International spot into "Sports Radio, ESPN" programming. (JC-NY)
- 1260 WEZE MA Boston - 1/31 2145 - Religious program from Grand Rapids, MI. (RH-NJ)
 - MA Boston 3/13 2004-2016 Fair with fading, mixing with WWDC. Hope for the Heart syndicated religious program, local ID "Christian Radio 1260 WEZE,

- Boston's Family Radio" along with time check, local weather and program notes at 2015 into *Gateway to Joy* program. (JC-NY)
- WBNR NY Beacon 2/25 1623 ID in a CIHI fade, under WEZE. NY #30. (DP-PQ)
- WNDR NY Syracuse 2/25 1634 ID in the CIHI, WEZE and WBNR mess. (DP-PQ)
- CIHI NB Fredericton 2/25 1611 Songs by The Box, Phil Collins, ID at 1640 "...new music, C-I AM and FM". Good most of the time. (DP-PQ)
- 1270 WSPR MA Springfield 3/13 1739-1742 Good-fair with salsa followed by SS announcement "Cobriendo partes de Connecticut, Massachusetts y Vermont". (AR-MA)
- 1280 WHVR PA Hanover 2/26 1720 Very strong with basketball promo, WONW QRM. (EK-OH)
- 1290 WHKY NC Hickory 2/28 2015 Heard with "Talk Radio WHKY" mentions. (JK-VA)
 - WQMC SC Sumter 2/28 2011 In with UC/GOS and "WQMC" mentions. (JK-VA)
- 1300 WBRO GA Waynesboro 2/28 2049 UC announcer and WBRO Birthday Club mentions.

 Great at 38 watts. (JK-VA)
 - WJFK MD Baltimore 1/31 2058 "Washington and Baltimore's Super Station", lots of crazy talk, somewhat a reminder of WFBR and the Dr. Demento Show. (RH–NJ)
- 1310 WDCT VA Fairfax 2/24 1736 Traffic report for an accident on the Beltway, other DC traffic, soon gone under WGH. (TF-CT)
 - WGH VA Newport News 2/20 1730 Sports talk with Allan ??, call 671-1313 to talk, IDs "The Score 1310" gone at 1745. (TF-CT)
- 1320 WWWB NC Greensboro 2/20 1700 "WWWB, Greensboro, The News Station" and then what sounded like CBS News. Mentioned being // to WMFR-1320, mixing with WLEE. Not AP? (JK-VA)
 - WKRK NC Murphy 2/28 1908 Local CW countdown show "The WKRK Top 7 at 7". Not bad at 62 watts. (JK-VA)
 - CJMR ON Mississauga 2/17 2236 NOS songs, "All day, all night, we're Golden Horseshoe Radio" slogan at 2242, good. (DP-PQ)
- 1330 WFBC SC Greenville 3/11 2200 Sports talk show on basketball tournament then ID by man. Fair-good. (WPT-DC)
- 1350 CKAD NS Middleton 3/9 2010 Fair-good with PSA for Annapolis County Big Brothers
 Association followed by a spot for the local Sears store. (AR-MA)
- 1360 WAOZ OH Cincinnati 3/18 2011 Fair-good, Indianapolis vs. Cincinnati Cyclones IHL hockey game, promo for "Cyclones Hockey Network" into ads and Radio Aahs ID.
 - CJVL PQ Ste Marie-de-Beauce 2/25 1750 Easy listening music, "CJVL" musical sounder at 1800, news in FF by female announcer, good signal. (TF-CT)
- 1380 WSYB VT Rutland 3/18 1758 Good just before sunset with NCAA basketball from CBS Sports, "When you're listening to sports, you're listening to 1380 WSYB Rutland," sung ID "WSYB 1380 AM", then apparent pattern change in mid-spot, as they vanished. First time heard here. (SF-MA)
- 1400 WSTC CT Stamford 2/27 1730-1735 Weakly above the pile with notices of storm closings in the Stamford area. (BF-MA)
 - WIRA FL Fort Pierce 2/7 1913-1930 Play-by-play of Gators basketball, heavy interference. (DT-JAM)
- 1420 WCED PA DuBois 2/27 1735 Advertisement asking students to take part in a contest to name the best teacher in the DuBois area. Coming in weak but steady with several other UNIDs. Woman announcer. (BF-MA)
- 1430 WNJR NJ Newark 3/4 2042 In well with SS salsa music but EE announcer and ads between songs. ID "WNJR Newark New York City." (IB-MA)
 - WEIR WV Weirton 3/16 2029 Fair-poor, program notes, promo into ID "Mountaineers and all your favorite sports on AM 1430, WEIR", time check, weather update and "Talk of the Valley, 1430 WEIR" into call-in program. (JC-NY)
- 1440 WLPZ

 ME Westbrook 3/18 2059-2115 Good with moderate fading, post-game show following Portland Pirates vs. St. John's Flames AHL hockey game. "Portland Pirates Radio Network" promos, ads for Tabitha Jean's Restaurant, "All Sports 1440, Portland's Sports Authority" IDs. (JC-NY)
 - WMKM MI Inkster 3/17 2046-2102 Fair with QRM, The Holy Words of Christ religious program, Gospel music into closing prayer. Program note/schedule info, Detroit address given for correspondence. ID/promo "All day, all night, all Gospel...WMKM, Inkster". (JC-NY)
 - WCDL PA Carbondale 2/26 1644 OLD songs, "AM 14-40 WCDL" ID at 1651, weather. Fair. (DP-PQ)

- 1460 WBRN MI Big Rapids 3/8 2040-2045 Logged on top with basketball. (EK-OH)
 - WPON MI Walled Lake 2/27 1645 Noted on top. (EK-OH)
 - WKDV VA Manassas 3/16 1800 ID. Sent verie in 4 days. Also services WKDL and WKDB. Above local WBET. (PG-MA)
- 1480 WSDS MI Plymouth Township 3/4 2133 CW format up and over "1480 The Fan" whoever they are. Calls heard twice on top, no sign of WHBC. (RH–ON)
 - WLEA NY Hornell 3/4 1739 Poor with NOS under WSAR. "Sigh", hoped to get the KK station in New York City. No such luck. Yugam imnida. (AR–MA)
 - WDAS PA Philadelphia 3/5 1716 Black Gospel preacher with many mentions of Philadelphia, show was *The Hour of...*, way under WZRC and WSAR, verie back in four days! (TF-CT)
- 1490 WJMO OH Cleveland Heights 3/7 1903 Up and over the din with "We are taking your requests at 1-800-395-????," then ID by male as "1490 WJMO". Great old soul format by the sounds of it, You Keep Me Hangin' On by the Supremes, etc. The 1-800 number may have been someone else, hard to tell on these channels sometimes! (RH-ON)
- 1500 WGFT OH Youngstown 1/28 1957-2000 Talk by man, news(?), ID in part as "...WGFT..." then disappeared, likely CHR and signed-off. Heavy interference from WTOP, very poor. (DT-|AM)
- 1530 WCRJ FL Jacksonville 1/28 1808–1850 CW music, very few announcements, sign-off at 1850 "This concludes the broadcasting day of WCRJ, Jacksonville...1530 kiloHertz as licensed by the FCC with a power of 50,000 watts...a member of the Auction(Action?) Radio Network" then into I Watched the World with my Transistor Radio, good. (DT-JAM)
 - WLSP MI Lapeer 2/25 1758 Very strong at sign-off with mention of "American Sports Radio," address, SSB, then WSAI coming up under them. Wasn't expecting them!

 (SF-NY)
- 1540 WPGR PA Bala Cynwyd 2/22 1810 OLD music and "Pure Gold Radio", then heard faintly after power cut to 500 watts. (JK-VA)
- 1550 WVAB VA Virginia Beach 2/22 1814 CNN News and mentions of the "Virginia Beach Community Phone Book". (IK-VA)
- 1570 WOKC FL Okeechobee 2/11 1920-1935 News and ads including one for Double A Video, "call 763-8320", ID as "Your Country 1570". (DT-JAM)
 - WKDB MD Towson 3/11 1805 ID for "AM 1570, WKDB, great music for great kids", story about a hen named Jacqueline flying an airplane to Seattle and riding a train (not Amtrak!), and an ID at 1715 for "The station that plays music for great kids and those who used to be", good signal atop frequency. (TF-CT)
 - WPGM PA Danville 3/12 2132 Noted with possible sign-off "WPGM is owned and operated by..." then faded out completely back into the muck. (RWT-MA)
 - WBUX PA Doylestown 2/22 1823 Mentions of a Saturday real estate show "on 1570 WBUX". (JK-VA)
- 1580 KBLA CA Santa Monica 2/11 1842–1900 Korean music, ads by woman announcer with accent in EE, poor, faded out by 1900. (DT-JAM)
 - WSRF FL Ft. Lauderdale 3/12 2359 Good with "sign-off" as announcer mentions end of programming for the day and a switch to simulcasting with WSHE-FM 103.5 until 8 AM the next morning. No sign of CBJ. A pleasant surprise. (AR-MA)
 - WLIM NY Patchogue 2/27 1705 Strong, all alone with several local ads. (BF-MA)
- 1590 WGGO NY Salamanca 2/27 1702-1710 On top, WAKR looped, good signal. (EK-OH)
 - WCSL NC Cherryville 2/28 1858 Basketball game and mentions of Lincolnton under/over usuals WKTP and WJRO. Not bad for 42 watts during auroral conditions. (JK-VA)
 - WFTH VA Richmond 2/25 1810 Blasting in here with Gospel music and ID for "All new AM 1590, WFTH", does anyone have a correct address for this station, Log is wrong, PO returned report. (TF-CT)
- 1600 WKWF FL Key West 2/11 1829 Broke through WPOM, now using ID as "From the Keys to...WKWF 1600", no mention of WKIZ. (DT-JAM)
 - WTZQ NC Hendersonville 3/21 2058-2100 Briefly atop WWRL, WKEN with soft instrumental music, then ID "1600, WTZQ, Hendersonville, Radio for Adults". This appears NOT to be my UNID of 2/28. (RJE-PA)

OTHER STUFF

530 TIS OH Akron – New TIS here with info on traffic during I–76 construction. (EK–OH)

MA Falmouth - 3/24 - Steamship Authority TIS with directions for island parking at 1610 TIS Woods Hole and last daily departure time. (TB-MA)

1610 KHA525 NH Conway - 3/23 1646 - White Mountains National Forest TIS with tips and precautions for people traveling through the area, announcement of an Indian artifacts exhibit on display and opening dates of nearby campgrounds. (TB-MA)

NY - 3/23 1947 - New York State Thruway Authority with info about flowers, 1610 WPAN997 warning not to drink and drive (included police car siren sound effects!) and a NOAA Weather Radio forecast for Western New York. (TB-MA)

OH Lorain - New TIS here. Lorain County Visitors Bureau. No sign of 1610 WMX7360 Cleveland Hopkins Airport (KNEB723) anymore, even directly opposite the airport. Presumed off, although highway signs are still posted. (EK-OH) (There's one in New Castle Co., DE the same way! - db)

REPORTERS

Bill Andres, Frackville, PA: 1954 Zenith, some timely skywave fades BA-PA

Ray Arruda, Acushnet, MA: SX-122, HQ-180A, loops RA-MA

Tom Beaton, Manchester, MA: Drake R-8, 2-100' slopers into Mini MWDX-5X TB-MA phasing unit

Mike Brooker, Toronto, ON: Panasonics RF-2200, RFB-45 MB-ON

Mark Burns, Terre Haute, IN: Drake R-8, Quantum Loop, 80' longwire MB-IN

Iim Clar, Rochester, NY: Drake R-8, Superadio III, longwire, Palomar Loop IC-NY (Thanks for the stickers - db)

Richard Clark, Rockville, MD: Sony ICF5900W, Select-A-Tenna RC-MD

Chris Cuomo, Verona, PA: Grundig Music Boy, Select-A-Tenna CC-PA

R.J. Edmunds, Blue Bell, PA: RJE-PA

Tony Fitzherbert, Fairfield, CT: ATS-803A atop Lazy Susan TF-CT

Tony Fitzherbert, Fairfield, CT, DXing on I-495 between Amesbury and Lowell, TF-MA

Tony Fitzherbert, Fairfield, CT, DXing in Bartlett, NH: GE Superadio TF-NH

BF-MA Bill Fortier, Worcester, MA: Superadio III, Delco car radio

Steve Francis, Alcoa, TN: Realistic TRF, SF-TN

Scott Fybush, Waltham, MA, fybush@world.std.com: Superadio I, Superadio III, SF-MA

GM/Delco ETR on the road

Scott Fybush, on vacation in Rochester, NY fybush@world.std.com: Sony 2003 SF-NY

PG-MA Philip I. Greenspan, Marshfield, MA:

Rich Harrison, Hewitt, NJ: Grundig Satellit 3400, SM-2, Select-A-Tenna RH-NJ

Russ Horton, Mississauga, ON: Sony CFS-710S (Thanks for the sticker - db) RH-ON

Jeff Kitze, Boydton, VA: Panasonic RQ-V60 JK-VA

Ed Kreiny, Strongsville, OH: HQ-180, 4' amplified box loop EK-OH

Jeffrey Less, Toledo, OH: Panasonic RF-5000A IL-OH

JM-NC Jeff Multer, Charlotte, NC:

Denis Picard, Trois-Rivieres-Ouest, PQ: R-5000, Quantum Loop (Your letter DP-PQ

dated 3/12 arrived here 3/17 - db)

Aaron Reed, Brockton, MA: GE Super stereo, random speaker wire AR-MA

Odd-Jorgen Sagdahl, Trondheim, Norway (63.36N/10.23E): OJS-NOR

Tom Sanders, Davison, MI: Pioneer car radio TS-MI

Bill Townshend, Washington, DC: Sony ICF-2010 WPT-DC

Don Trelford, St. Anns Bay, Jamaica: Your letter dated 2/28 was received here DT-JAM

Richard W. Turner, North Dartmouth, MA: Realistic STA-785, Recoton FM200 and RWT-MA

Select-A-Tenna Loops

DY-CT David Yocis, Darien, CT: R390A, Kiwa loop



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DX Digest

International Jim Renfrew Jim Renfrew@Delphi.com 61 Wilcox Street Rochester, NY 14607-3832

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

DEADLINES

Up-coming IDXD Sunday deadlines are as follows: APR 9, MAY 7, JUN 4, JUN 18 (early IDXD deadline), IUL 23 (early IDXD deadline), and SEP 3rd. Some material received a few days after these dates may get in, especially hot tips, but the rest will be held over for the next column.

Thanks to all reporters from last time; it was the second biggest column of the year, which

means my second biggest column ever!

Welcome to Lorne Chestnut, who joined Axelrod and McRae in a Jamaica DX frenzy. And "oops" for leaving Ohio off of our states list: Jeffrey Less reminds he did send two reports to IDXD from Toledo this year! We also have an interesting report from John Wilkins on the road in Arizona and California.

Please send all international QSL information to Ken MacHarg.

TRANS-PACIFIC DX 1476 ASIATIC RUSSIA Vladivostok (listed) MAR 9 1312 - with alternating male and female announcers with musical interludes in between, into steady talk by man at 1315. UnID language but didn't seem to be RR. Good sigs but awful, muddy modulation. [Helms-CA]

1566 SOUTH KOREA Cheju MAR 9 1327 - roaring through with (assumed) hymns in oriental

language 1327, stronger than domestics on 1560 and 1570. [Helms-CA]

1575 UNID, FEB 20 1128-1150 - Best reception ever, peaked 1139-1147 with a woman and a man speaking. Not strong enough to ID language. I'm becoming convinced that this is Thailand coming in over the pole. The carrier does not start coming in until almost LSS in Thailand (1123-1129 in FEB/MAR) unlike the "down under" stations which start coming in much earlier. Today, MAR 17, LSS in Thailand and LSR here coincided at 1129. A weak carrier noted 1124-1132 but not a single "down under" carrier heard. We'll have to wait til next OCT/NOV for another "window" for this one. [Moore-FL]

Harry speaks: "TPs are back and so am I. This morning was a great example of how "selective" TP openings are in frequency and geography. Most TP channels between 1476 and 1566 had carriers (there was a tremendous het against 1520, for example) but there was nothing on other channels, even usual powerhouses like Japan-774 or the North Korean jammer on 1053; no trace of any Aus/NZ stations either. Maybe my memory is playing tricks on me, but I seem to remember that TA openings were not quite as "focused," although there were selective effects as to frequency and geography there. Or is this a function of population and station distribution in Europe vs. Asia? I'd be interested in the thoughts of others who have DXed from both coasts."

Ray speaks: "... this is one of the worst TP seasons I have seen in recent years. Since the first of March, at the supposed height of the season, there has been almost nothing audible, not even weak carriers most mornings. Last year, by mid-March conditions had picked up with 10 to 20 carriers some mornings. The only exception has been the anomalous 1575 station. Hopefully, when conditions do improve they will hold up all summer as they did last year."

TRANS-ATLANTIC DX

- 171 MOROCCO? Nador MAR 4 0601 Sounded like AA talk by man, a lot of GWEN interference.
- 183 GERMANY Felsberg MAR 4 0556 Europe No. 1, FF talk by man. [Braun-DE]
- 252 ALGERIA? Tipaza MAR 4 0607 Popular music, man in UNID language with announcement between songs. Algeria most likely given power and conditions, but do they have this format?. [Braun-DE] (On shortwave, Algeria has been known to play a lot of western pop music, with a FF speaking DJ - Jim)

531 SPAIN/ALGERIA, MAR 12 0137 - bits of SS talk over AA vocal; poor over 530 & 532 QRM. [Connelly-MA]

549 ALGERIA Les Trembles, MAR 12 0134 - AA talk; in CFNB slop. MAR 13 0417 - AA music, in slop. [Connelly-MA]

558 SPAIN, MAR 12 0133 - SS talk over others; fair. [Connelly-MA]

576 SPAIN Barcelona, MAR 12 0139 - SS talk; over others. [Connelly-MA]

585 SPAIN RNE1, Madrid, MAR 12 0040 - Good, telephone talk and music // 774. [Conti-NH] MAR 12 0132 - man & woman in SS; easily getting by 12-mile distant WBNW-590. [Connelly-MA]

- 603 SPAIN Sevilla/Palencia, MAR 12 0140 man in SS; poor to fair. [Connelly-MA]
- 612 MOROCCO Sebaa-Aioun, MAR 12 0141 female AA vocal & strings; good. [Connelly-MA]
- 621 CANARY ISLANDS Santa Cruz de Tenerife, MAR 12 0148 fast SS talk by man; fair. [Connelly-MA] MAR 17 0233 man & woman in SS. [TB/BC/MC-MA]
- 621 CANARY ISLANDS/SPAIN RNE1 synchros, MAR 12 0530 Fair, acoustic vocals // 585 & 684, strong het on 620 kHz. [Conti-NH]
- 666 PORTUGAL RDP, Lisboa, MAR 13 0250 Fair, sometimes good, Portuguese and European light rock, news at 0300. [Conti-NH]
- 684 SPAIN, RNE-1, Sevilla, FEB 20 0502 News by man, good. [Yocis-CT] MAR 12 0515 Good, Arabic-style vocal accompanied by acoustic guitar, // 585. [Conti-NH]
- 693 SPAIN RNE1 synchros, MAR 13 0050 Fair, folk music and talk in Spanish // 585. [Conti-NH]
- 756 SPAIN R.Vitoria, Bilbao, MAR 11 0104 Fair, Radio Vitoria ID, but no mention of Euskadi, Spanish vocal. [Conti-NH]
- 765 SWITZERLAND RSR, Sottens, MAR 12 0025 Fair, usual classical music and announcements in French. [Conti-NH] MAR 26 0140 classical piano music; good to excellent. [Connelly-MA]
- 765 SENEGAL Dakar, MAR 16 2308 AA talk by man; good. [Connelly*G-MA]
- 774 SPAIN synchros., MAR 7 0502 man & woman in SS; fair over WABC slop. MAR 12 0156 woman in SS; fair to good. MAR 26 0141 man in SS; over others. MAR 27 0515 Moorish SS (AA-influenced) female vocal, then SS talk by woman & man. Slop from CFDR-780 C&W music was worse than that from WABC's talk. [Connelly-MA]
- 819 EGYPT (t), MAR 26 0134 AA male vocal that seemed // 1107; good, better than WNYC-820.

 What confuses me is: Why would 819 and 1107 (both in Batrah) run the same program?

 [Connelly-MA] (improves their chance of being heard by you? Jim)
- 837 CANARY ISLANDS // SPAIN, MAR 26 0522 quite an amorphous blob of stations here, then a woman in SS came up to good peaks over the pack. [Connelly-MA]
- 855 SPAIN Murcia et al., MAR 7 0508 man & woman in SS; fair to good with WEEI phased. MAR 12 0158 - female blues-style nightclub jazz vocal; good in null of WEEI-850. [Connelly-MA] MAR 21 2327 - SS talk by man, very poor. [Yocis-CT] MAR 25 0520 - man in SS; good with WEEI nulled. [Connelly-MA]
- 855 SPAIN / unil), MAR 26 0527 woman in SS over second station that had operatic vocal music. 0527 UTC seems a bit late for Romania this time of year. [Connelly-MA]
- 864 SPAIN (t), MAR 7 0512 SS-sounding talk. [Connelly-MA]
- 864 ECYPT (t), MAR 26 0115 bits of AA music, poor. Egypt most likely, but Morocco also possible. [Connelly-MA]
- 864 FRANCE Paris, MAR 26 0538 female rock vocal, then woman in FF // 945, 1206; excellent. [Connelly-MA]
- 882 ENGLAND Washford et al., MAR 26 0117 woman in EE; fair to good with WCBS phased. IConnelly-MAI
- 891 ALGERIA Algiers, MAR 7 0511 Koranic male AA vocal over other station (Portugal?) which had talk. MAR 12 0205 man in AA; S9 + 40! MAR 13 0432 AA male vocal & strings; excellent. [Connelly-MA] MAR 26 0059-0101 AA music with drums, talk by man, then AA news by woman; good, demolishing semi-local WBPS. [Connelly-MA]
- 909 BNGLAND synchros., MAR 26 0058 EE talk; briefly over slop. [Connelly-MA]
- 936 MCROCCO/SPAIN (t), MAR 12 0207 sounded like AA & SS talk mix; shredded by CBM-940 slop. [Councily-MA]
- 945 FRANCE Toulouse, MAR 26 0538 female rock vocal // 846, 1206; poor to fair. [Connelly-MA]
- 972 SPAIN/unID's, MAR 12 0209 multi-station mess, one had SS talk, another had classical music. [Connelly-MA]
- 981 ALGERIA Algiers, MAR 7 0517 bits over AA talk over other; in slop. [Connelly-MA]
- 999 SPAIN Madrid, MAR 7 0519 man in SS; fair through CFLP/CKBW/WMVP slop. [Connelly-MA] MAR 19 0420 Fair, telephone talk in Spanish, "deportivo... en la Cope!" promo, //1143. [Conti-NH]
- 1044 MOROCCO R.Medi Un, Sebaa-Aioun, MAR 13 0040 Good, Arabic vocals and talk in French, over SER-Spain. [Conti-NH] MAR 17 0009 AA male vocal & string instrument; HUGE loudest TA at the time. [Connelly*G-MA]
- 1044 MOROCCO, MAR 23 2351 male AA vocal; good, SAH of about 5 Hz present. MAR 27 0046 emotional AA vocal & violins; good. [Connelly-MA]
- 1071 SPAIN, MAR 24 0605 bits of SS talk, squeezing by huge CBA open carrier. [Connelly-MA]
- 1089 ENGLAND synchros., MAR 12 0216 man & woman in EE; fair. MAR 13 0445 EE talk by 2 male talkmasters and phone callers; fair to good over others. Regeneration improved

- reception. MAR 25 2340 spirited discussion by man & woman in EE; fair with WBAL phased. [Connelly-MA]
- 1098 SLOVAKIA Nitra, MAR 22 0505 Good with woman in Slovak. [Dangerfield-PA]
- 1107 EGYPT / SPAIN, MAR 23 2345 AA female vocal over/under SS talk. [Connelly-MA]
- 1107 EGYPT Batrah, MAR 26 0004 AA female vocal; good, over others. [Connelly-MA]
- 1134 CROATIA Hrvatska Radio, Zadar, MAR 10 0340 Fair, light rock and traditional vocals, Hrvatska ID at 0400, // 5895 & 7370, under/over COPE- Spain; MAR 19 0425 Excellent! Traditional music // 5895. [Conti-NH] MAR 21 0350 Has been quite strong lately and usually atop any Spanish stations, but with a mix. At time noted had man singing romantic songs with string accompaniment. Good way to check is to look for the weaker // on 1125 which is usually well mixed with any Spanish stations there. [Dangerfield-PA] MAR 23 0313 Slavic folk-style group vocals // 5895; very good to EXCELLENT! MAR 25 2358 female EE vocal (style of Christine McVie / Fleetwood Mac), // 5895; fair with WBBR phased. [Connelly-MA]
- 1134 SPAIN, MAR 24 0604 news in SS by man & woman, // 1143; fair. [Connelly-MA]
- 1143 SPAIN, MAR 24 0604 news in SS by man & woman; good. [Connelly-MA]
- 1152 SPAIN, MAR 24 0559 echoey SS talk; poor to fair. [Connelly-MA]
- 1197 LESOTHO Lancers' Gap, MAR 16 2330 "BBC World Service" ID popped up out of the WKOX slop. Morocco occasionally mixed in. Conditions were semi- auroral in immediate post-sunset period; they got "normal" later in the evening. [Connelly*G-MA] MAR 27 0059-0101 tentative, bits of music and talk seemed to be // 5975. There was too much TV buzz & WKOX slop to tell definitely. This would have been easy in Rockport. The propagation conditions were typical of those yielding reception of this station. [Connelly-MA]
- 1206 FRANCE Bordeaux, MAR 24 0553 blues-rock // 1377, 1404, et al.; good. MAR 26 0538 rock vocal, FF talk, // 864, 945; good. [Connelly-MA]
- 1215 ENGLAND Virgin R., MAR 24 0450 "My Sweet Lord" by George Harrison; fair to good.
 [Connelly-MA]
- 1242 UNID Mar 23 0515 Man talking but I couldn't make out the language. Seemed too early for France, though there was also a signal on 1278. Kiev, Ukraine possible, and Odessa has a 1278 outlet, but this would be at or after sunrise over there. I was not hearing any of the other Ukrainians at the time. [Dangerfield-PA]
- 1251 LIBYA Tripoli, MAR 22 0414 AA vocal; fair to good. MAR 24 0453 AA vocal & strings; peaking S9+30. [Connelly-MA]
- 1269 GERMANY Neumunster, MAR 24 0454 man in GG; to good peaks. [Connelly-MA]
- 1278 FRANCE Strasbourg, MAR 24 0555 rock // 1206; poor in WADO slop. [Connelly-MA]
- 1305 SPAIN RNE5 synchros, MAR 19 0440 Fair, discussion in Spanish, then Sam Cooke song //1125. [Conti-NH] MAR 24 0556 SS talk by man & woman; over growl. [Connelly-MA]
- 1314 NORWAY Kvitsoy, MAR 23 0323 NN-sounding talk; poor. MAR 24 0458- NN talk mixed with Spain (SS talk) and unID with test tones. [Connelly-MA]
- 1323 GERMANY Wachenbrunn, MAR 22 0507 Radio Russia relay very strong with a woman speaking in accented EE. Pretty certain she was also the speaker on 1548 being heard around the same time. [Dangerfield-PA] MAR 24 0503 EE talk; poor to fair in CKEC slop. [Connelly-MA]
- 1332 ITALY Rome, MAR 24 0502 II talk; to good peaks. [Connelly-MA]
- 1341 NORTHERN IRELAND Lisnagarvey, MAR 24 0500 EE news; poor to fair, over others. [Connelly-MA]
- 1349 MAURITANIA Nouakchott, MAR 26 2342 AA talk to fair peaks. Only African TA's were noted: this post-sunset period seemed quite auroral. [Connelly-MA]
- 1359 SPAIN Arganda, MAR 24 0557 SS teletalk show with man & woman; very good. [Connelly-MA]
- 1367 ANGOLA (t), MAR 16 2320 het, bits of audio. Other African hets noted on nearby channels included Mauritania-1349 and Guinea-1386. [Connelly*G-MA]
- 1368 unID, MAR 24 0505 classical music; briefly good. [Connelly-MA]
- 1377 FRANCE Lille, MAR 24 0553 fair with blues-rock // 1206, 1404, et al. [Connelly-MA]
- 1386 KALININGRAD Bolshakovo, MAR 22 0407 Very good with woman singing Eastern
 European type music, and later a man singing similar songs. [Dangerfield-PA] MAR 22
 0409 Russian or gypsy folk vocal; fair on peaks (but deep fades). MAR 23 2334 talk by
 woman; in slop. [Connelly-MA]
- 1404 FRANCE, MAR 24 0532 Strauss waltz // 1494, 1557, et al.; poor to fair. [Connelly-MA]
- 1422 GERMANY Hessweiler, MAR 20 0400 Very good with man in GG. He was still talking at 0434, so I wonder if this station has gone talk radio. [Dangerfield-PA]
- 1422 GERMANY / ALGERIA (t), MAR 23 2332 sounded like GG/AA mix; poor. [Connelly-MA]

- 1485 SPAIN SER MAR 4 0613 Music //1575/1584. First time audio heard here. [Braun-DE] MAR 23 2331 bits of SS talk in a graveyard-like jumble. MAR 24 0536 echoey SS talk. [Connelly-MA]
- 1494 FRANCE, MAR 24 0532 Strauss waltz // 1404, 1557, et al.; to good peaks. [Connelly-MA]
- 1521 SAUDI ARABIA Duba, MAR 12 0302 Koranic AA male vocal; strong peaks / wild fades.

 The top end of the dial had very fast ripply fading on all skip signals. MAR 23 0327 Koranic AA male vocal; LOCAL-LIKE, S9+50 (!), reducing WWKB to a slight background het. [Connelly-MA]

1530 SÃO TOME, VÓA, MAR 12 0230 - usual pre-sign-on 1 kHz test tones; in mix with WSAI & Vatican. [Connelly-MA]

1530 VATICAN, MAR 18 2329 - booming in with soft music // 5882. [Connelly-MA] MAR 22 0402 - IS, eastern European talk; atop WSAI. Weak het from something on 1527.98. MAR 26 0012 - classical piano music // 5882; over WSAI & second domestic (probably WOBR or WRTP). [Connelly-MA]

1544 CLANDESTINE (ALGÉRIA or MOROCCO), LV de la Sahara, MAR 16 2309 - AA chanting, poor. [Yocis-CT] MAR 16 2317 - woman in AA; fair through slop. [Connelly*G-MA]

- 1548 MOLDAVA Grigoriopol, MAR 22 0513 I continue to work this frequency and at this time I heard a woman speaking in EE and sounding // to the Radio Russia relay that was so strong on 1323. This is near sunrise in Moldava. [Dangerfield-PA]
- 1548 ENGLAND (2 stations), MAR 24 0544 one with mellow soul hit over/under other with BBC news // 5975. [Connelly-MA]
- 1557 MALTA Cyclops, MAR 23 2326 GG talk by man; fair to good with WQEW phased. [Connelly-MA]
- 1557 FRANCE Nice, MAR 24 0532 Strauss waltz // 1404, 1494, et al.; good. [Connelly-MA]
- 1566 unID, MAR 18 2327 powerhouse open carrier, over others. [Connelly-MA]
- 1566 TUNISIA Sfax, MAR 23 2323 AA talk by by man, then by woman; at low audio level on a massive carrier. SAH and bits of audio from another station, probably Azores. [Connelly-MA]
- 1575 SPAIN SER, MAR 4 0613 Music //1485, heard talk // 1584 at 0623, 1485 was gone by then. [Braun-DE] MAR 7 0529 SS talk; fair. [Connelly-MA] MAR 22 0356 SS teletalk; fair to good through CBJ slop. MAR 23 2320 loud with excited SS talk, including use of reverb. MAR 24 0545 man in SS; huge signal. [Connelly-MA]
- 1584 SPAIN SER, MAR 4 0617 Music and talk // 1485/1575. Man and woman in SS 0620.

 There was also a het on 1585.1, is that from Spain? [Braun-DE] MAR 7 0529 SS talk; fair.

 [Connelly-MA] MAR 16 2334 Two men talking and laughing in SS, good. [Yocis-CT]

 MAR 23 2319 man in SS; to good peak. MAR 24 0546 SS talk; het from 1585.2 still

 present. [Connelly-MA]
- 1585.2 unID (probably SPAIN or CEUTA), MAR 23 2319 possible SS talk, strong het against Spain-1584. [Connelly-MA]
- 1593 GERMANY Holzkirchen RFE, MAR 22 0500 Local-like signal with woman in Serbo-Croat.

 Now what happens to this station after MAR 25? [Dangerfield-PA]
- 1593 unID's (probably GERMANY / EGYPT), MAR 25 2321 talk by woman mixed with AA vocal. [Connelly-MA]
- 1602 SPAIN, MAR 22 0355 fast SS talk in jumble; to good peak. MAR 23 2318 man & woman in fast SS; in WUNR slop. [Connelly-MA]
- 1602 SPAIN / unID, MAR 25 2318 bits of SS talk mixed with AA-sounding vocal (Egypt ?).
 [Connelly-MA]
- VATICAN, MAR 7 0530 Romanian-sounding talk; loud. MAR 14 0517 Slavic talk by woman, then piano music; one of the few strong high-band TA's at the time. [Connelly-MA] MAR 22 0353 loud with Slavic talk by man. [Connelly-MA] MAR 26 0450-0500 Sermon or talk in Eastern European or Slavic language. Musical chimes repeated 4 times before ID. Clear "Radio Vatican" ID (in Italian?) on the hour. Quickly faded. At times very strong and made Anguilla and the others on 1610 the hets. New, country #61. [Kureth-MD]

PAN-AMERICAN DX

- 532 TURKS & CAICOS R. Visión Cristiana MAR 25 0507 Noted back here again, having been reported back on 535 last time! [Renfrew-NY] MAR 26 0150 It's back on 532 after having been on 535 for a few days. SS vocal; loud. Grenada weak, but in the clear, on 535. MAR 27 0032 SS preaching; good. [Connelly-MA]
- 535 GRENADA St. George's, MAR 12 0134 Caribbean EE talk; poor to fair. A few days later, Turks & Caicos moved back on 535. MAR 26 0148 - female vocal; poor, but in the clear with Turks & Caicos having moved back to 532. [Connelly-MA]

- 535 TURKS & CAICOS, MAR 16 2355 SS religion; loud -- Back on nominal 535 channel. [Connelly*G-MA] MAR 17 0019 Back on channel with SS religious talk, very good. [Yocis-CT]
- 550 MEXICO XEPL Cd. Cuauhtemoc CHIH, MAR 20 0416 Program "Noche Mexicana" with vocal music, male announcer with CST time checks, ads, frequent call IDs. [Wilkins*AZ1]
- 555 ST. KTTTS & NEVIS, ZIZ Basseterre, MAR 12 0139 rhythmic music with strong drum beat. [Connelly-MA] MAR 16 2353 EE talk; fair. [Connelly-G-MA]
- 560 JAMAICA JBC1 Kingston, MAR 12 0344 Poor signal under WIND, // 750, new. [DX*MB]
- 570 CUBA, R. Reloj, CMDC Pilón, FEB 14 0447 Usual format, way underneath WMCA. [Yocis-CT] 620 JAMAICA JBC1 Mandeville, MAR 12 0341 Poor signal with JBC programming // 750, new.
- [DX*MB]
 640 GUADELOUPE Arnouville, MAR 16 2356 man in FF; good / dominant (CBN & SS station
- way behind). [Connelly*G-MA]
- 700 JAMAICA JBC1 Montego Bay, MAR 12 0339 Fair signal // 750, managed to hear all of the JBC1 stations except for the 850 station! The opening was like an FM opening. [DX*MB]
- 700 COLOMBIA CARACOL, Cali, MAR 12 0145 Poor signal with LA music, // 750, new! [DX*MB] MAR 18 0220 Fair, "equipo Colombiano" futbol highlights // 5075. [Conti-NH]
- 710 MEXICO XEDP Cd. Cuauhtemoc CHIH, MAR 10 0409 Fair/good with sung ID, ads, rancheras, "La Ranchera de Cuauhtemoc". [Wilkins*AZ1]
- 720 VENEZUELA, YVQE Porlamar, MAR 16 2342 "R. Oriente" ID; blasting in over usual CHTN. [Connelly*G-MA]
- 730 COLOMBIA HJCU Bogotá, FEB 18 0619-0700 LA pop music, talk, ID, mention "HJCU", fair with interference. [Trelford-JAM]
- 730 MEXICO XEX, Mexico, MAR 5 0520 Good, boxing, many Corona beer ads, ID "XEX, la acción, transmitiendo 730 kilohertz de la banda amplitudo modulata, con cien mil wats de potencia." [Conti-NH]
- 740 MEXICO XEKV Villahermosa, MAR 12 0645 Fair signal with music and lots of SS talk about Villahermosa, new! [DX*MB]
- 740 PUERTO RICO WIAC, San Juan, MAR 15 0300 Fair, ID 'Desde San Juan, la capital de Puerto Rico, transmite WIAC..." and nostalgic Latin American music. [Conti-NH]
- 740 VENEZUELA R.Caroni, Puerto Ordaz, MAR 18 0205 Good, Radio Caroni jingles and "en Caroni" ID, Spanish soca music, over WJIB. [Conti-NH]
- 750 JAMAICA JBC1 Port Maria, MAR 12 0320 Good signal with reggae music and BBC radio cricket scores and a clear JBC ID fading up to be on top of the frequency // 700 et al. [DX*MB] MAR 17 0006 Tentative, Caribbean-EE dedication, soul music in WSB null good, lost to R. Caracas after 0008. [Yocis-CT]
- 760 COLOMBIA, HJAJ Barranquilla, MAR 7 0500 "RCN" and "Bogotá" mentions over/under WJR. [Connelly-MA]
 780 VENEZUELA YVNM R. Coro, FEB 11 music, talk, singing ID "Radio Coro", while trying for
- WWOL Test. [Trelford-JAM]
 780 MEXICO UNID. MAR 12 1200 Poor signal with programming and the same whistle ID a
- 780 MEXICO UNID, MAR 12 1200 Poor signal with programming and the same whistle ID as heard on XEQR, could not figure who this was, ideas? [DX*MB]
- 840 HAITI R.4VEH, Cap Haiten, MAR 14 0020 Fair, Spanish lessons with French followed by slow Spanish sentences until 0030, then Caribbean and Christian music. [Conti-NH] MAR 16 2350 All alone with Haitian news in FF, 4VEH IDs, very good. [Yocis-CT]
- CUBA CMHW Santa Clara, MAR 27 0556-0600* With light music program, then announcements, including ID as "CMHW", mention that they would return at 6:00 AM, anthem, off. [Renfrew-NY]
- 850 MEXICO XEUS Hermosillo SON, MAR 11 0250 Program entitled "La Venganza de Chunga" or similar, consisting of 60-ish EE and SS rock tunes with commentaries about the groups and music. Break at 0303 for ID and program notes, then back to program at 0307. "Esta es XEUS, R. Universidad de Sonora, para la ciudad de Hermosillo ...", also gave address (A.P. 1817) and sked (0600-0020) horas, very good in KOA null. [Wilkins*AZ2]
- 860 DOMINICAN REPUBLIC, HILR Santo Domingo, MAR 17 0130 festive music, R. Clarín ID; atop Cuban Reloj station with not a sign of CJBC Toronto. [TB/BC/MC-MA] MAR 18 0045 Good, ID "...por Radio Clarín, la emisora mas potencia" and merengue dance mixes. [Conti-NH]
- 870 MEXICO XEFIL? Mazatlan SIN, MAR 10 "Audio A" slogans, ranchera music. Program note at 0401 was followed by an ID: "XE_X ... Mazatlan ... Grupo Sinaloa". Not sure of call, listed as XEFIL. Fair signal but troubled by WWI, QRM. Slogan is new anyway. [Wilkins*AZ1]
- 870 COLOMBIA R.Mar Caribe, Barranquilla, MAR 18 0055 Fair, many Radio Mar Caribe Internacional IDs along with mention of CARACOL. [Conti-NH]

885 MONTSERRAT, ZIB Plymouth, MAR 16 2349 - black gospel style vocal; fair to good.

[Connelly*G-MA] 890 MEXICO XENZ Culiacán SIN, MAR 10 0319 - "La estación mas grande de su radio ... en los 890 de su dial ...", Mexipops, phone requests, PSAs. Slogan is "Fiesta Mexicana". Heard often at home too with that slogan. Thought it was a program name when I first heard it last year. [Wilkins*AZ1]

895 ST. KITTŚ & NEVIS Charlestown, MAR 16 2348 - MoR vocal; good. [Connelly*G-MA] MAR 16 2355 - Man with Caribbean accent promoting an event (Billy Graham?) at 7:30 p.m. on MAR 16, 17, 18; clips of US pops as bumper music, "bring the family," good. [Yocis-CI]

900t BARBADOS CBC R.900, Bridgetown, MAR 18 0140 - Poor but with a couple of good fade-ins, steel band instrumentals and some U.S. pop music, mixed with a couple of unID Spanish

stations in CKTS null, lost by 0200. [Conti-NH]

950 MEXICO XEKAM Tijuana BCN, MAR 20 0259 - List of stations in Radio Formula net, then into hour-long program "Tiempo de Bellas Artes", with man and woman chatting about art, museums, etc. Break for a local ID at 0330 ("Radio Formula California"), followed a few seconds later by call ID and Tijuana phone number. Program ended at 0400, but only the ubiquitous "XEDF" ID was given. XEDF-970 is the flagship station for the net, local stations hardly ever break in with local IDs. [Wilkins*CA]

960 COLOMBIA, HJOP Magangue, MAR 17 0309 - Colombian sports // 5075. [TB/BC/MC-MA]

970 MEXICO XEJ Cd. Juarez CHIH, MAR 20 0315 - Nice program "Tríos de Mexico" ("seranata musical"), which has been around for a number of years. Frequent IDs and slogans. Fair/good all over CA/AZ. [Wilkins*CA]

970 MEXICO XEEZ Caborca SON. MAR 11 0232 - Obituaries, ads, program notes, ad for Super Carnes, MST timechecks, then into music after a few dedications, "La Super Zeta" slogans.

990 MEXICO XEPF Jalpa, MAR 12 1100 - Poor signal in CBW silent period and a drop in XET's usual big signal to reveal music and a clear Radio Alegría ID, new! [DX*MB]

1000 GUATEMALA TGWC Guatemala City, FEB 24 0143-0246 - Classical music, ID in part as "Nacional", poor under interference. [Trelford-JAM]

1000 COLOMBIA Cartagena HJAQ, MAR 27 0020 - SS talk, RCN ID; atop others. [Connelly-MA]

1040 MEXICO XEHES Chihuahua CHIH, MAR 11 0330 - XE rock on program "El Show de Las

Estrellas", strong signal. [Wilkins*AZ2]

1050 MEXICO XEQOO Cozumel, MARCH - This was a strong daytime station from my listening post at Fort Myers, Florida. Is listed in WRTH as 1000 watts on 1000 kc, so must have moved and increased power. IDs as XEQOO, Radio Cozumel, Quintana Roo, Mexico, and plays Mexican music all the time. [Dangerfield*FL]

1090 JAMAICA JBC1 Morant Bay, MAR 12 0337 - Fair to poor signal under KAAY with programming // 700 and 750, new! [DX*MB] (I heard this quite well while in the Dominican Republic some years ago, but I don't recall any North American loggings of

this one, nice - Jim)

1160 BERMUDA, VSB3 Hamilton, MAR 12 2316 - BBC discussion; good over strong 1161 het. MAR 27 0049 - BBC classical music program // 5975 & WADN-1120; good, dominant,

way over WOBM/WSKW. [Connelly-MA]

1170 COLOMBIA, HJNW Cartagena, MAR 17 0220 - Colombian sports // 5075. [TB/BC/MC-MAI MAR 27 0016 - SS news including item about Mike Tyson's release from prison, then "CARACOL" and "Colombia" mentions; good, totally dominant during auroral conditions. WKPE was off at the time. [Connelly-MA]

1180 CUBA R.Taíno, Villa Maria, MAR 5 0600 - Good, IĎ in SS and EE, 'This is Radio Taíno, your tour station in Cuba, broadcasting from Radiocentro Havana, 24 hours a day", Cuban big band music, over R.Reloj. [Conti-NH] MAR 27 0052 - Cuban SS political speech; good,

alone on channel. [Connelly-MA]

1200 MEXICO XEYF (presumed from Radio Fórmula list in DX News) Hermosillo SON, MAR 11 0225 - "Linea Directa" program on R. Fórmula net, at 0228 the usual "XEDF-AM 970 kHz" ID, // 1150 (XERM) and 1370 (XEHF) and 950 (XEKAM). Good on peaks in WOAI null. [Wilkins*AZ2]

1240 HAITI 4VSJ Port-au-Prince, FEB 14 0104-0136 - Haitian music, ID as "Radio Antilles Internacionales, Haiti", poor through interference. First Haitian station heard since the

invasion. [Trelford-JAM] (This one is also being noted in Europe - Jim)

1260 CUBA CMBF? Arroyo Arenas, MARCH - Excellent daytime signal at Fort Myers. All classical music. Not sure of exact ID, but think this was the one formerly on 950. Has to be at least 5000 watts. [Dangerfield*FL]

1270 ARUBA P4AB San Nicolaas, FEB 28 0244-0310 - Oldies or semi-classical music, female announcer in Dutch, poor under unID EE and R. Reloj. [Trelford- JAM]

1290 MEXICO XEQIN Şan Quitin BCN, MAR 11 0150 - Public affairs program in Indian language, ID at 0208 "XEQIN, La Voz del Valle ...", also mentioned 1500 watts, address (Calle Octava 139, A.P. 217, San Quintin BCN 22930) and phone 52023. "Emisora Cultural de la Institucion Nacional Indigenista", 0211-31 program "Hablando Claro" in SS, then program in Indian language at 0232 after another full ID. Noted at other southern CA/AZ locations with very good signals and varying levels of XEAP/KCUB QRM. On MAR 17 logged with SS/Indian programs 0242-0400*. Off at 0401 after XE anthem. [Wilkins*CA/AZ]

1310 MEXICO XEC Tijuana BCN, MAR 17 0545 - Program notes, call IDs and what sounded like the listed "Radio Enciso" slogans. Fair. [Wilkins*CA]

1400 CUBA CMDZ Santiago de Cuba, FEB 8 0948-1000 - LA pop music, poor. [Trelford-JAM]

1420 MEXICO XEXX Tijuana BCN, MAR 17 0210 - Lite pop vocals, ads, dedications, "La Doble Equis", fair/good over/under ORM. [Wilkins*CA]

1440 CUBA CMIO Ciego de Avila, FEB 3 0200-0225 - LA pop music, ID as "Radio Surco", fair. [Trelford-IAM]

1500 MEXICO Piedras Negras, MAR 12 0601 - Fair with sign-off leaving XEAI and KSTP to fight it

out for the frequency, new! [DX*MB]

1520 MEXICO XEEH San Luis Rio Colorado SON, MAR 18 0254 - ID "R.Exitos, 1520 kHz, mil wats de potencia desde Sa Luis Rio COlorado ...", more closing comments to 0257 sign-off announcement "Canciones y campeones ... musica del Momento ... XEEH", XE anthem at 0258. [Wilkins*CA]

1590 MEXICO XEHC Ensenada BCN, MAR 19 0305 - Buy/sell program with man and woman announcers, prices in dollars, 0309 brief religious message ("Momento de Paz"), then ads with announcements of Ensenada. Fair with ORM from C&W station calling itself

Thunder 105.5. [Wilkins*CA]

1610 ANGUILLA The Valley, MAR 16 2320 - preacher; strong over TIS's. [Connelly*G-MA]

1620 UNID "LO03", MAR 26 0620-0700 - Code IDs repeated twice, then about three minutes before next code group. Weak through the CTTIS, looped SE/NW. [Renfrew-NY]

1651-1656 UNID - last night I came across another UNID station. It was a different station than the 1645 one. I could hear it from 1651-1656 with drifting frequency and rough modulation. It was in loud but with no S-meter reading and was received best with the AGC off. It was in when I first tuned in at 0400 UTC and still there an hour later when I shut down. There was lots of music and also an ID and other talk. I have it all on tape if anyone's interested. I don't know what language it was but it wasn't English! I left the tape rolling and the R-8 on in the timer mode when I went to bed. I just finished playing the tape back. The station signed off at 0600 UTC with some talk and anthem. [Beaton-MA] (I think Cuba has been reported around here, check your back issues of DXN - Iim)

2199.9 ISLA SAN ANDRES, MAR 12 0120 - Fair signal with LA music and clear ID as La Voz de Las Islas, image from 1110, their listed frequency, but never heard on that frequency.

[DX*MB]

2200 ISLA SAN ANDRES, La Voz de las Islas, MAR 20 0140 - Poor, traditional merengue and vallenato music, sign-off at 0201 with mention of Colombia and anthem. When their 1110 kHz transmitter was destroyed by fire last year, the new transmitter must have also resulted in a frequency change to 1100 kHz which would produce a harmonic at 2200. The '95 WRTH lists them at 1110 kHz. [Conti-NH]

Ben speaks: "I spent the 2nd week of March in Fort Myers, Florida, and this is a great listening post for Cuba. Also had daytime reception [noon] from Mexico and Bahamas [810]. I counted Cubans on at least 42 frequencies at noon, quite remarkable as the closest is 250 miles and many are 300 miles. The strongest Cubans were on 1180, 640, 670, and 710, in that order. 670 and 710 are //. There are blocks of stations that carry the same programs, such as 880 to 920, 1000 to 1030, and 1080 to 1120. The Cubans cover just about any Florida station on the same frequency. And I was surprised at the signal strength of Cozumel on 1050 [ex-1000]"

STATION NEWS

GERMANY: Now that DLF has vacated 1539 Mainflingen, the transmitter is under the control of the Hessischen Landesantalt fuer privaten Rundfunk, and it is for hire for use at 350/700 kW non-directional. Presumably it will go to the highest bidder, but likely to be German with service obligation to the Hessen area. [Richard Hunt in Medium Wave News, MAR 95]

SINT EUSTATIUS (Netherlands Antilles): PJR-1 92.3 FM went on the air JAN 95, eventually to have an antenna on top of the highest point on the island. They are also planning to set up an AM station on 1470 kHz on the same island. PIE-3 on 1120 kHz failed about ten years ago. The FM is being programmed from US-based Freedom Satellite Network, along with locally-

produced programs of blues, jazz and contemporary Gospel music. Address is PJR-1 FM Radio, Sint Eustatius, Netherlands Antilles. The island is locally known as "Statia". [Bob Bittner in WTFDA VUD Digest, MAR 95]

OUERIES, ANSWERS, ETC.

ANTIGUA: Caribbean Radio Lighthouse has been heard in Finland recently on 1160 kHz, so they have moved from their split frequency 1165 kHz to the official 10 kHz channel as used in the Americas. By the way, reception on 1160 has been poor; presumably the transmitter power has been reduced. [Jorma Mantyla, FINLAND via Tropical Tuning #39]

COLOMBIA: "I have noticed the off-frequency Colombian on 1100 kHz. The latest information I have indicates that that is the station from Caracol and that it is only running 15KW. It surprises me that I would get it as well as I do for only 15KW. Do you know if that is the correct identification and whether or not they have increased their power?" [Snowbarger-IA] (They have been reported on 1100.3 kHz for years, and get out quite well, especially during auroral conditions. Station is HIAT, Barranguilla, 15 kW. - Jim)

GUATEMALA: Regarding Chuck Hutton's recent report: Actually, the Guatemalan Emisoras Unidas was an active network when I lived in Honduras in 1982-1984. There is also a Honduran Emisoras Unidas headed by HRN. No connection between them (or at least wasn't ten years ago). R. 5-60 on 550: They were doing this back in the early 1980s, too. You'd think now that digital radios are common they could get it right, hi! La Voz de Atitlan has been on 2390 since at least the late 1970s, so only a new station on MW. They did not have MW before, at least not during my 1983 and 1987 visits to the town and station. I wrote a column on this station for my NASWA column in 1993. I'll e-mail a copy to anyone interested, contact me at MOORE@ACC.MCREST.EDU [Moore-IA]

USA: "The Spanish on 1120 kHz reported by Greg Coniglio-NY is likely WPRX- Connecticut, which broadcasts in Spanish and IDs as "La Primera". I've been fooled into spending hours on 1120 myself thinking it was a new Latin American logging." [Conti-NH]

UNID: "I often hear a station at night on 1644 or 1645 which I'm hoping you may be able to ID for me. It comes in weak but clear with Middle Eastern sounding programming including flutes and vocals very much as is found on the Morocco or Algerian stations. It often has fadeouts of several minutes. Would you happen to know about this station and it's location?" [Beaton-MA]

CONTRIBUTORS (@ = e-mail report)

Shawn Axelrod, Wayne McRae, and Lorne Chestnut, DXing from Valhalla Beach MB [DX*MB]; 2 ICOM ICR-70s with filter mods and Plam board and Grundig 700, 9 beverages or longwires.

@Tom Beaton, Manchester MA.

@Tom Beaton, Bruce Conti, Mark Connelly, DXing from Tom's house - Manchester MA [TB/BC/MC*MA]; Lowe HF-225E Europa, Drake R8, IRC NRD-525, longwires, phasing unit, regen, tuner

David Braun, Wyoming, DE: R-5000, Quantum Loop, Palomar Loop

@Mark Connelly, DXing from Gloucester MA [Connelly*G]; Realistic DX-440, RTL- 2 remotelytuned loop with MWT-3 regenerative tuner / controller.

@Mark Connelly, Billerica MA; Drake R8, two 37-m. slopers with 50 m floating ground for noise reduction; MWDX-5 phasing unit; MWT-3 regenerative preselector. [MarkWA1ION@aol.com] @Bruce Conti, Nashua, NH; Lowe HF-225E, regen tuner, MWDX-5, 30-m wire, 30-m east sloper [bc@lexicon.com]

@Ben Dangerfield, Wallingford PA, HQ-180, KIWA loop for TA report, SONY SW1 with whip antenna DXing at Fort Myers FL.

@Harry Helms (AA6FW), San Diego CA; Drake R8, two-foot Sanserino loop.

Joe Kureth, Uniontown MD; SX-99 longwire.

@Don Moore, Davenport IA.

Raymond S. Moore, Key Largo FL; Receiver homebuilt, Model 305 loop.

@lim Renfrew, Rochester; HO-180, Radio West Loop. [JimRenfrew@Delphi.com]

@Jim Snowbarger, Marshalltown IA. (Jim conducted the WMT-600 Special Test of a few years ago) Don Trelford, St. Anns Bay, JAMAICA.

John Wilkins, DXing at Nogales AZ1, DXing at Why AZ2 (well, why not?), DXing from Death Valley CA, with GE Superadio II, scorpion repellant.

@David Yocis, Darien CT; R390Â, Kiwa loop [73564.203@compuserve.com]



Ultralinear Amplified One-Meter Whip Antennas ... By Dallas Lankford

Preface

In the following article, two ultralinear amplified one meter whip antennas are described. The development of these amplifiers and antennas took place during most of the summer of 1994, and was motivated by some of the work described in my recent article, "Ultralinear 2N5109 and 2N3053 amplifiers," DX News, Vol. 62, No. 7 [sic], Nov. 21, 1994, pages 31-41.

The first of these two ultralinear amplified one meter whip antennas uses a rather conventional two stage amplifier, each stage using negative feedback. In head-to-head competition with a top rated DX-one (AKA DX-1), the first of these two ultralinear amplified one meter whip antennas equaled or exceeded the performance of the DX-one.

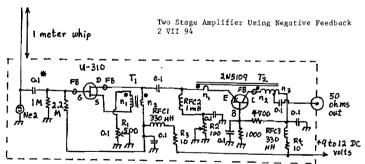
The second of these two ultralinear amplified one meter whip ancennas uses global negative feedback from the second stage to the first stage, in addition to negative feedback in each stage. With some (hand-selected) U-310 FET's and 2N5109 BJT's, improved performance can be obtained from the global negative feedback amp (compared to the first amp), as described in the following article.

When used as broadband whip antennas, both of these antennas offer strong signal handling performance equal to or better than semi-professional and professional grade active whip antennas costing hundreds of dollars. When used as tuned whip antennas (with the tuned circuits described in the following article), they are virtually crunch-proof.

Although this is not a step-by-step construction article, enough details are provided so that these two ultralinear amplified one meter whip antennas

The two active whip antennas described in these notes are not panaceas, as you will learn as you read through these notes. In fact, unless you simply must have the very best, state-of-the-art, active whip antenna, and are willing, able, and determined to build it yourself, you are better off buying one of the better indoor or outdoor active antennas available from electronics suppliers.

I am presently using the second (global negative feedback) version indoors with my near-mint Collins 51J-4 receiver, mainly as a SW antenna for frequencies above 5 MHz. In that application, unless the active whip is too near my telephone answering machine (a surprise! RFI emitter), my active whip is as good as or better than any passive outdoor SW antenna I have used. Indoors below 5 MHz, man-made noise becomes progressively worse, and my indoor active whip is definitely not a DX antenna for weak daytime MW DX. If mounted outdoors, which I have not done, I expect that my active whip would perform much better at lower frequencies.



- $T1 = 24 \text{ turns} : 8 \text{ turns } (n_1:n_2)$ #26 enameled copper wire on Teflon wrapped Amidon FT-50-75 ferrite toroid
- R1 = 500 ohm 25 turn cermet 1/2 watt pot, Spectrol 64Y 500R-K (Mouser 594-64Y501)

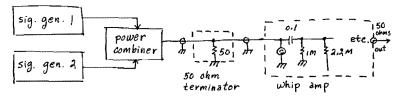
T2 = 2 turns : 11 turns : 4 turns (n₁:n₂:n₃) #24 enameled copper wire on Teflon wrapped Amidon FT-50-75 ferrite toroid R2 = 100 ohm 25 turn cermet 1/2 watt pot, Spectro1 64Y 100R-K (Mouser 594-64Y101)

RFC1, RFC3 = Mouser 43LS334

RFC2 = Mouser 434-02-102J All fixed resistors 1/4 watt 10%. FB = Amidon FB-101-64

All 0.1 capacitors 50 volt monolithic ceramic paralleled with 1000 pF 50 volt disc ceramic, except *, which are 500 volt.

The 2N5109 is heat sinked with a Mouser 567-7-120-BA heat sink, an IERC heat sink rated at 35 degrees C/W. R2 is used to adjust the 2N5109 amp for 25 mA current, i.e., for 0.25 volts drop across the 10 ohm resistor R4. R1 is used to adjust the U310 amp for 13 mA current; i.e., for 0.13 volts drop across the 10 ohm resistor R3. The U310 probably does not need a heat sink because of its modest power dissipation, but a home made heat sink was used anyway.



Method Of Measurements

noise power output = -124 dBm, 6 KHz BW amp voltage gain = -6 dB

Antenna Factor V $_{\rm out}/E$ = about 0.1 meter (assumes a one meter whip antenna factor of about 0.2 meter, followed by a -6 dB voltage gain amplifier)

ICP2 in = variable, decreases slowly with frequency, e.g., +75 dBm for two tones at 600 KHz and 700 KHz and 2nd order product at 1300 KHz, and +67 dBm for two tones at 1.6 MHz and 1.64 MHz and 2nd order product at 3.24 MHz, and +59 dBm for two tones at 6 MHz and 7 MHz and 2nd order product at 13 MHz, and so on.

ICP3 in = variable, decreases slowly with frequency, e.g., +46 dBm for two tones at 600 and 700 KHz and 3rd order product at 1900 KHz, +43 dBm for two tones at 1.6 MHz and 1.64 MHz and 3rd order product at 4.84 MHz, but then rises again as frequency is increased further, e.g., +46 dBm for two tones at 5 MHz and 7 MHz and 3rd order product at 29 MHz.

Antenna And Amplifier Specifications

The method used for making measurements is given above, followed by some specifications for the antenna and amplifier. The upper and lower frequency limits of the antenna have not been determined at this time, but extend from below 500 KHz to above 30 MHz.

The two stage amplifier circuit uses a common source U-310 FET with high negative feedback applied to the FET source, followed by a 2N5109 BJT transformer feedback amplifier with a non-standard turns ratio transformer (as described in my recent article, "Ultralinear 2N5109 And 2N3053 Amplifiers"). The U-310 amp voltage gain is about -12 dB, and the 2N5109 voltage gain is about 6 dB, which gives about -6 dB gain for the two stage amp.

Comparisons with other amplified one meter whip antennas are difficult to make because the manufacturers or vendors generally do not provide enough specifications and/or details of measurement for an accurate comparison to be made. Nevertheless, it appears that the ultralinear one meter whip antenna described above compares favorably with and in some cases exceeds the performance of the Rohde & Schwarz HE 010 and the Surrey Electronics Advanced

Active Aerial. For example, the HE 010 is specified as having an Antenna Factor Vout/E of about 0.1 meter, a 2nd order intercept point of greater than or equal to +55 dBm, and a 3rd order intercept point of greater than or equal to +32 dBm. Assuming that the HE 010 intercepts refer to input intercepts of the amplifier, it would appear that the ultralinear one meter whip antenna described above has substantially better 3rd order performance and at least as good 2nd order performance between 0.5 MHz and 15 mHz. A direct comparison of the ultralinear one meter whip antenna with the Surrey Electronics Advanced Active Aerial is more difficult because the Antenna Factor Vout/E of the AAA is given as 0.3 meter. Presumably, the amp gain of the AAA is considerably higher, namely about +4 dB, than the ultralinear one meter whip antenna. The noise output of the AAA is given as -110 dBm for a 10 KHz BW, which is equivalent to -112 dBm for a 6 KHz BW. Already one can see the difficulty of making a direct comparison. To equalize the antenna noise output powers, a 10 dB attenuator would need to be inserted between the output of the AAA and the input of the receiver, selective RF voltmeter, spectrum analyzer, or whatever measuring device is used. This consideration raises another issue, namely the proper way to specify active antenna intercepts. We have specified the intercepts as input intercepts of the whip amplifier with the method of measurement given above. According to correspondence with Surrey Electronics, they used the same method of measurement, and presumably so did Rohde & Schwarz. However, we would suggest that the proper way to specify active antenna intercepts is to give the output intercepts of the amplifier. Here is why. The output intercepts of an amplifier are related to the input intercepts of an amplifier by the formulas ICP2in = ICP2out + G and ICP3in = ICP3out + G, where G is the amp gain in dB. In the case of the ultralinear one meter whip antenna give above, the output intercepts are 6 dB lower than the input intercepts given in the specifications above because the amp gain is -6 dB. And in the case of the AAA, assuming an amp gain of +4 dB, followed by a 10 dB attenuator (to equalize the noise outputs), one would also subtract 6 dB from the AAA input intercept values. The AAA intercepts were specified in a Surrey Electronics data sheet as 0.9 + 1.0 MHz +90 dBm ICP2in and +55 dBm ICP3in, 2.7 + 3.0 MHz +75 dBm ICP2in and +45 dBm ICP3in, 9 + 10 MHz +45 dBm ICP2in and +20 dBm ICP3in, and 27 + 30 MHz +25 dBm ICP2in and +15 dBm ICP3in. With the assumptions above, the output intercepts of the AAA followed by a 10 dB attenuator are 0.9 + 1.0 MHz +80 dBm ICP2out and +45 dBm ICP3out, 2.7 + 3.0 MHz +65 dBm ICP2out and +35 dBm ICP3out, 9 + 10 MHz +35dBm ICP2out and +10 dBm ICP3out, and 27 + 30 MHz +15 dBm ICP2out and +5 dBm ICP3out. If the above assumptions are correct, it would seem that the AAA has better 2nd and 3rd order performance than the ultralinear one meter whip antenna below about 5 MHz, but not as good 2nd and 3rd order performance above about 5 MHz.

The two stage amplifier given at the beginning of this article can be configured in other ways by changing the turns ratios of the transformers T1 and T2. It appears that the turns ratio of T1 should not be changed based on measurements with other T1 turns ratios. The 2:11:4 turns ratios of T2 may be changed to 1:11:4, which increases the two stage amp gain to about 0 dB, increases the amp noise output about 4 dB, decreases the input 2nd order intercept ahout 8 dB, and decreases the input 3rd order intercept about 3 dB. However, in view of the issue of output intercepts raised above, there is very little change in the output intercepts for the two stage amp with 1:11:4 turns ratio T2. Such a variation may be useful for an indoor version of the ultralinear one meter whip antenna with some receivers which are not as sensitive as the NRD-525. However, for a remote mast mounted version of the ultralinear one meter whip antenna, the 2:11:4 turns ratio T2 is recommended.

The ultralinear one meter whip antenna described in these notes has not been tested as a remote mant mounted antenna, but only as an indoor table top antenna. When used indoora, man-made noise (noise due to house or apartment wiring, TV's, VCR's, cable decoder homes, computers, fluorescent lights, and so on) can limit its usefulness as a DX antenna below shout 5 MHz, but above about 5 MHz it is an extremely effective antenna. If you can turn off all TV's, VCR's, fulorescent lights, and so on in your house, the indoor one meter whip antenna is also quite effective helow 5 MHz, provided your receiver does not emit strong RFI below 5 MHz (like the NRD-525, NRD-535, R-71, RA6790/GM, and so on).

While testing the U-310 amp "wand alone," it was found that ICP2in varied with amp current (i.e., varied with the setting of R1), and that maximum ICP2in occurred for about 13 mA current, while ICP3in was relatively constant for all currents between 10 and 20 mA. For this reason, the U-310 amp should not be operated at currents higher or lower than 13 mA because ICP3in will not be improved, while ICP2in will be decreased.

It may be possible to increase ICP2in by using a different FET, followed by a push-pull 2N5109 transformer feedback amp. Possible FET candidates would be one of the power PET's, such as a VN66AF or VN66AK. However, the ICP2in

of the ultralinear one meter whip antenna already exceeds the ICP2in of most receivers at most frequencies, so perhaps such improvement is moot. For example, the ICP2in of the NRD-525 and R-390A is in the high 50's to low 60's for two tones in the MW band, which is higher than any other receivers I have measured. The ultralinear one meter whip antenna ICP2out is about the same as the 525 and 390A ICP2in for MW band use, so any 2nd order IMD products observed would originate both in the antenna and in the 525 or 390A. On the other hand, the NRD-525 and R-390A have higher ICP2in's and higher wide-spaced ICP-3in's than the ultralinear one meter whip antenna above about 5 MHz, so it would be worthwhile to improve the intercepts of the ultralinear whip at higher SW frequencies. As MW DXers know, 2nd order IMD products due to strong SW signals can appear in the MW band. For example, the difference of 22 and 25 meter band signals falls into the 1470-2270 KHz range, while the difference of 19 and 22 meter band signals falls into the 1230-2230 KHz range. The ICP2in of the ultralinear one meter whip antenna is +67 dBm at 1700 KHz for two tones at 11.9 and 13.6 MHz, which should be more then enough to banish those kinds of SW 2nd order IMD products from the MW band under most conditions. But on empty channels at local sunset, and above 1600 KHz during the evening hours, some SW 2nd order IMD products could occur in the MW band with a +67 dBm ICP2in. Top DX receivers, such as the NRD-525 and R-390A, have ICP2in's of about +90 dBm at 1700 KHz for two tones at 11.9 MHz and 13.6 MHz. Similar intercepts should be the goal of an active broadband whip builder.

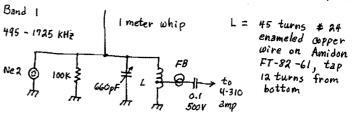
The ultralinear one meter whip antenna has been tested in an extremely harsh RF environment due to multiple 5000 watt MW band transmitters between one and two miles distant from the test site by a knowledgeable person who wishes to remain anonymous. At this test site, the ultralinear one meter whip antenna was compared side-by-side with a DX-one mounted outdoors on a 15 foot mast. The DX-one (AKA DX-1), marketed by RF Systems (Doeven Elektronika, Schutstraat 58, 7901EE Roogeveen, The Netherlands), was rated in the 1988 WRTH as giving the best overall results of the active antennas they tested, including the Datong AD-370 and the Dressler ARA-30. In the 1993 WRTH, an advertisement for the DX-one gives "+66 dBm 2nd order, +40 dBm 3rd order," which are presumably intercepts, but does not specify whether they are input or output intercepts, and does not specify the method of measurement. In this harsh RF environment due to nearby MW transmitters, both the DX-one and the ultralinear 1 meter whip antenna produced observable 2nd order products between 2 and 3 MHz and 3rd order products between 4 and 5 MHz during the daytime. At night, neither antenna produced any 2nd or 3rd order IMD products in the 2 to 3 or 4 to 5 MHz ranges because the MW band transmitters went to much lower powers, and, presumably, because atmospheric noise was considerably higher at night. The DX-one was also quite noisy in the 2 to 5 MHz range during the daytime, presumably because the high RF levels due to nearby MW band transmitters cause VHF or UHF parasitics. At night the DX-one was not noisy in the 2 to 5 MHz range. No such noise was observed in the ultralinear one meter whip antenna day or night. Except for the IMD products noted above, the DX-one and ultralinear one meter whip antenna were otherwise free of IMD products, and the output signal levels and noise levels were similar. In general, the performance of the DX-one and ultralinear one meter whip antenna were similar, except for the 2 to 5 MHz frequency range during the daytime where the DX-one was unuseable as a DX antenna while the one meter ultralinear one meter whip was fine except for a few discrete IMD products.. One can extrapolate these observations to higher powers based on ground wave field strength curves, such as contained in Fig. 22, page 807 of Electronic And Radio Engineering, 4th Ed., F. E. Terman, McGraw-Hill, 1955. For multiple 50,000 watt transmitters, a similarly harsh RF environment would be expecienced at about 15 miles distant from the transmitters.

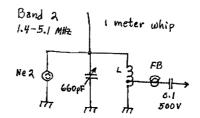
In such harsh RF environments as the one described above, substantially higher 2nd and 3rd order intercepts would be required to eliminate the observed 2nd and 3rd order IMD products. And there is precious little published information on how to proceed with the development of broadband active whip antennas with substantially higher intercepts. In the Nov. 1973 issue of the Proc. IEE, Vol 120, No. 11, an article published by J. Betts and D. Ebenezer, "Intermodulation interference in mobile multiple-transmission communication systems operating at high frequencies (3-30 MHz)," Table 1 listed the following circuits and associated ICP3in's: BFR36 emitter follower +59 dBm, CP651 source follower +59 dBm, 807 cathode follower +69 dBm, and 2N4128 emitter follower +72 dBm. No circuit details were given, and no ICP2in were given.

For the hobbyist, a potentially simpler way to proceed to deal with such harsh RF environments is to use a tuned active whip antenna. However, merely inserting a parallel LC tuned circuit between the U-310 amp input and ground may not lead to the desired result of IMD free reception because IMD can be generated in the parallel LC tuned circuit, and a parallel LC tuned circuit can raise signal levels at the input to the U-310 amp to much higher levels than for the broadband ultralinear one meter whip antenna, which in turn can

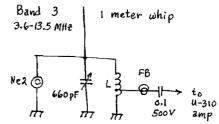
cause observable IMD products to originate in the U-310 amp as before even after the raised signal levels are reduced by the attenuation characteristics of the LC tuned circuit. In such harsh RF environments, large (Amidon T-106) powdered iron toroids should be used, and the output to the U-310 amp should be reduced by tapping down on the inductor as discussed below.

My RF environment is not especially harsh, so I implemented the two low bands with ferrite toroids as shown below. However, as stated above, where RF environments are especially harsh, large powdered iron toroids should be used whenever feasible. For example, band 1 (495-1725 KHz) could be implemented

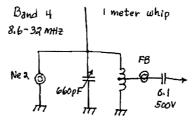




L= 16 turns #44 enameled copper wire on Amidan FT-50-61, tap 4 turns from bottom



L= 22 turns #24 enameled copper wire on Amidon T-50-2, tap 5 turns from bottom



L = 6 turns # 24 enameled copper wire on Amidon T-50-6, tap 3 turns from bottom

FB in all bands is one loop # 24 enameled copper wire through Amidon FB.101.43

with 84 turns #26 enameled copper wire on an Amidon T-106-1 toroid with tap 21 turns from the bottom with approximately the same band 1 tuning range. Experience with many Amidon toroids has taught me that there is sometimes variability in inductance for a given number of turns from one toroid to another, perhaps due to variations in toroid size or mix from one batch to another. For this reason, minor changes in the number of turns specified in this article are sometimes required. For band 2 (1.4-5.05 MHz), a T-106-2 toroid with 36 turns #24 enameled copper wire and tap 9 turns from the bottom should be used in extreme RF environments. It is unlikely that larger powdered iron toroids would be required for bands 3 and 4 except in the most extreme RF environments.

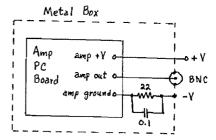
For each band, an Amidon ferrite bead type FB-101-43 was used to suppress possible WHF or UHF parasitics. In each case, the tap was implemented with a short length of #24 enameled copper wire: a 43 bead was slipped over the enameled wire tap, and the enameled wire tap was carefully threaded back through the ferrite bead to form a one turn mini-toroid as close to the tap junction as possible. Care should be taken not to rough up the enameled wire insulation, i.e., so that the small one turn coil is not shorted. In a bandswitched protptype of the tuned ultralinear one meter whip antenna using the inductors given above, parasitic oscillation (evidenced by noise and spurious responses for various positions of the main tuning capacitor () was experienced for both bands 2 and 3. Initially I suppressed the bands 2 and 3 parasitic oscillations by the simple expedient of slipping a 43 bead over the tap lead. But subsequent investigation of this problem revealed that a single FB-101-64 ferrite bead (which has very similar characteristics to the 43 bead) did not suppress bands 2 and 3 parasitics. For that reason, 43 beads with one turn loops were used for all bands. If parasitics are experienced with the broadband version of the ultralinear one meter whip antenna, a 43 bead with a one turn loop should be placed as close as possible to the point where the one meter whip enters the metal box containing the amplifier. And the lead from that point to the amplifier should be made as short as possible, not only for parasitic suppression, but also to prevent signal level reduction due to excessive input wiring capacitance. The whip mount capacitance should also be minimized, again for both parasitic suppression, and to prevent signal level reduction. I used H. H. Smith 9550 ceramic feedthrough insulators with 6-32 stainless hardware and a 42 inch telescoping whip with a 6-32 threaded base.

The tuned active whip may be made single band or multi-band with a suitable rotary switch. If a multi-band active whip is constructed, the rotary switch should short all taps and hot ends of coils not in use. In view of this requirement, a complex rotary switch is needed. I fabricated the rotary switch required by modifying several sections of some rotary switches I had on hand. If you compare this switching arrangement (and tapped LC tuned circuit arrangement) with consumer grade tuned active whips, such as the MFJ-1020A, you will see that consumer grade tuned multi-band active whips use very simple switching arrangements and do not tap down on the coil. In addition, consumer grade tuned active whips use inexpensive solenoid chokes which have considerably lower Q than the toroid inductors used in the ultralinear one meter tuned whip aptenna. The net result is that the ultralinear one meter tuned whip antenna gives a noticeably better signal-to-noise ratio on some very weak signals when man-made noise levels are low in the 10 to 30 MHz tuning range. Below about 10 MHz, there is seldom any difference between the less-than-optimal circuit of the MFJ-1020A and the tuned ultralinear whip because man-made noise seldom drops to low enough levels below 10 MHz that the difference can be heard. The MFJ-1020A amplifier also produces noticeable hiss on weak signals above 10 MHz or so, while the ultralinear whip amplifier does not. Typically, the MFJ-1020A and ultralinear tuned whip have about equal output signal levels, but MFJ-1020A noise output is about 12 dB greater than the ultralinear tuned whip with the whip antennas disconnected from both. The difference in weak signal reception above 10 MHz when man-made noise is low can be quite striking. Another difference which contributes to the superior high frequency performance of the ultralinear tuned whip is that the MFJ-1020A whip is only 15 inches long, about half the length of the one meter whip. That alone gives the ultralinear one meter whip antenna about a 6 dB advantage in signal-to-noise ratio.

The LC tuned circuits of the tuned ultralinear whip antenna were arrived at by a combination of theoretical considerations and repeated measurements with the antenna connected to various receivers. For example, the 100 K ohm resistor across the LC tuned circuit of band I is a Q spoiling resistor. Without the resistor, the Q of the tuned circuit was so high that objectionable bandwidth narrowing was observed at the low end of the MW band. The tap ratios were chosen to minimize the noise floors of the LC tuned circuits consistent with adequate signal levels. The general rule of thumb is that the taps should be about 1/4 up from the bottom of the inductor for tuning ranges below 10 MHz. Above 10 MHz. it was found that a center tap gave the desired results.

The ultralinear one meter whip antenna should probably be powered from a regulated power supply to insure that the amp currents, once adjusted, remain stable. This would insure that the intercepts remain stable, since the intercepts depend on amp currents. At present I am powering my active whips with Raddo Shack 9 volt DC 300 mA AC to DC adapters, # 273-1455, and using a #274-1565 molded DC jack to connect at the amp box. I don't like this #273-1455 adapter because it is hard wired for negative center conductor and positive shell, and there is alarmingly little space between the resulting positive contact of the # 274-1565 molded DC jack and one of the jack mounting screws. Careless installation of the DC jack could short the positive contact to ground, or lead to a subsequent short if the mounting screw loosened. In addition, there is not enough DC head room with this 9 volt DC adapter to use a 9 volt three

pin regulator. When this unsatisfactory situation developed, I trotted down to Radio Shack and bought a 12 volt DC 500 mA AC to DC adapter \$ 273-1652. But when I changed over to this \$273-1652 AC to DC adapter, I got an unpleasant surprise. Bad hum was observed on many 19, 22, 25, and 31 meter band signals. The bad hum was probably due to a ground loop introduced by the \$ 273-1652 adapter, but I do not know that for a fact. In any case, I returned to the \$273-1455 9 volt DC adapters which were hum-free. Craig Siegenthaler of Kiwa Electronics, who suggested that the hum mentioned above was due to a ground loop, also suggested one way to reduce or eliminate ground loop hum, as shown below.



The general idea behind the above ground loop reduction circuit is that the 0.1 mF capacitor provides a very low RF resistance (0.1 is suitable to about 500 KHz, while a 1 mF tantalum should be added in parallel for frequencies down to about 50 KHz), but a high 60 Hz resistance, while the 22 ohm resistor provides a moderate 60 Hz resistance to help break up the ground loop. The disadvantage of the 22 ohm resistor is that it drops about 1 volt DC for the 40 mA current of the ultralinear one meter whip, and there is not enough head room for a 9 volt regulator even with a 12 volt DC adapter. For this reason, I did not re-test the 12 volt DC #273-1652 adapter after implementing the above ground loop reduction circuit.

I am not absolutely certain that there was any residual ground loop hum with the 9 volt # 273-1455 adapter before I implemented the above ground loop reduction circuit. Comparison of two ultralinear one meter whip antennas, one with the ground loop reduction circuit and one without, seemed to show that there was occasional weak residual ground loop hum on a few SW signals which the ground loop reduction circuit eliminated. Most people would not notice the difference unless they were listening for it. The difference was only observable between brief pauses in spoken program material and for very strong signals.

Two other sources of hum, presumably due to ground loops, were traced to an Isobar Ultra 8 Diagognostic Suppressor 8 Socket Power Strip, made by Trip Lite, and to a Radio Shack (Archer) Transient Voltage Spike Protector # 61-2791A. The Ultra 8 caused bad to very bad hum when the ultralinear whip antenna was used with either an NRD-525 or R-390A. The Ultra 8 was the worst offender of the two, and produced stronger hum at SW frequencies when used with the R-390A than when used with the NRD-525. The Archer spike protector did not seem to cause any ground loop hum when used with the R-390A, but caused ground loop hum in the NRD-525 even when it was not connected to the NRD-525, but connected to the R-390A with the R-390A turned off. The amount of hum depended on the suppressor/protector used, the receiver used, the frequency received, and the placement of the ultralinear whip antenna. For example, the ultralinear whip antenna produced no hum sitting on top of the top dust cover of the R-390A, with or without the Archer spike protector, while it produced hum in the NRD-525 with no protectors used if placed too close to the NRD-525. As a general rule of thumb, if hum is encountered when using the ultralinear whip antenna, remove all surge suppressors and move the whip antenna away from the receiver.

I would like to express my appreciation to Craig Siegenthaler for educating me about some aspects of hum caused by ground loops, and for suggesting and explaining the ground loop reduction circuit discussed above, to Denzil Wraight for sending me much of the background information used in this article, and to the anonymous person who compared the DX-one and the ultralinear whip antenna.

Glogal Negative Feedback

Recently I bagan to investigate the feasibility of using global negative feedback to raise the intercepts of the two stage ultralinear amplifier. The basic approach of global negative feedback is to feed some of the output of the second amplifier of a two stage amplifier to the input of the first

amplifier. However, this simple global feedback principle is not simple to implement and test because of the large number of possibilities for turns ratios of the transformers T1 and T2 and because of the several possibilities of how to obtain the feedback signal from the 2N5109 amp and how and where to feed the output of the 2N5109 amp back to the U-310 amp. One can also eliminate T1 entirely and feed the output of the 2N5109 amp back to the source of the U-310 amp. As a matter of fact, that is what I tried first, but I did not get good results (perhaps because of problems with the n. output of T2 as will be related below, which means that I should re-test the approach of global feedback to the source of the U-310). While testing a breadboard version of the approach I am currently using, which will be described below, I found during intercept measurement that the intercepts were unstable, and could be changed as much as 20 dB in the case of ICP2 and as much as 10 dB in the case of ICP3 by hand capacitance effects (while adjusting R1 and R2). The intercept instability was isolated to the leads of the n, winding of T2. Usually I twist the #24 enameled wire leads of the n winding several twists to help hold the n, winding in place on T2. But this particular time I was in a rush to make some intercept measurements, and had just changed n, from I turn to 2 turns, and I did not bother to twist the leads (#24 wire is fairly stiff and will usually stay in place long enough to make a few measurements). I hypothesized that the intercept instability was due to lower than usual capacitance between the untwisted lead pair for n. To test this hypothesis, I soldered very short leads to a miniature 1-15 pF ceramic trimmer and inserted the trimmer in the proto board. With the trimmer adjusted for 15 pF, the two stage amp was completely stable. But as the capacitance of the trimmer was reduced, a point was reached (about 5 pF) where the intercepts began to decrease quickly. Several kinds of fixed 15 pF capacitors were also tried for this application: high quality tubular ceramic capacitors (1950's vintage) and older small voltage disc ceramic capacitors (1960's vintage) were fine, but Radio Shack catalog # 272-806 low-pF ceramic capacitors were not (the RS's 15 pF's caused the intercepts to be 10 to 20 dB lower). Finally, I removed the external capacitors and twisted the #24 enameled leads of the n, turns of T2, 5 half twists in about 3/8 inch, and that was fine. The twists were tight, but not so tight that the enamel could have been broken. The measured capacitance of such twists is only about 2 pF, so the transmission line properties of the twists could also be involved in the intercepts stability or instability. This intercept instability problem has only been observed in the non-standard turns ratio CBTF amp using 2:11:4 turns, and has not been observed in any of the standard turns ratio CBTF amps.

In addition to seeking a higher intercepts whip amp, a problem which has developed with the original whip amp has also motivated me to investigate global feedback amps. When the broadband non-bandswitched prototyped ultralinear amplified one meter whip antenna returned from its head-to-head comtetition with the DX-one, I decided to measure its intercepts in-situ. I had not done this before, but rather measured its intercepts while it was in breadboard

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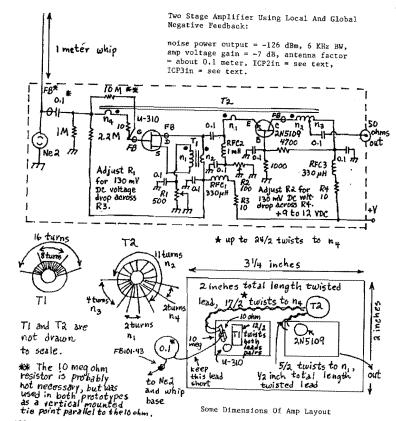
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All parts as before, except:

T1 = 16 turns : 8 turns (n,:n₂) #26 enameled copper wire on Teflon wrapped
Amidon FT-50-75 ferrite toroid; see winding details above
T2 = 2 turns : 11 turns : 4 turns : 2 turns (n,:n,:n₂:n₄) #24 enameled copper
wire on Teflon wrapped Amidon FT-50-75 ferrite toroid; see winding details
above

FB* = Amidon FB-101-43

form. I got a masty surprise. The ICP2in at 3.24 MHz due to $1.6\,\pm\,1.64$ MHz tones was not +67 dBm, as it had been in breadboard form, but +59 dBm. Intercepts at other frequencies, both 2nd and 3rd order, were similarly lower for two tones in the 0.5 to $5.0 \; \text{MHz}$ range. So I got out my multiband prototype and measured it. At first it seemed fine, with +67 dBm ICP2in at 3.24 MHz due to tones at 1.6 and 1.64 MHz. But then I remembered that due to bandswitch wiring capacitance, the input signal levels were down about 6 dB compared to a non-bandswitched version. After disconnecting the bandswitching, and rewiring it for broadband only (with care taken to minimize wiring capacitance), the signal levels increased about 6 dB, and the 3.24 MHz ICP2in due to 1.6 + 1.64 MHz tones was about +59 dBm. AAAAggggghhhh!!!! I think (but I don't know this for a fact) that I could duplicate the performance of the breadboard versions of the original amp by placing small pF capacitors here and there to duplicte the stray capacitance of the push-in lead type breadboard I use. But I have decided not to take this approach because such an amp would be unesthetic, and it would be difficult to reproduce. However, it may be that such an approach is necessary for fabrication of ultralinear amps. For example, I recall the interesting story a RACAL engineer told me about the early production RA6790/GM (R-2174(P)/URR) receivers, namely how bags of SD215DE FET's were sorted to match sets of four closely enough to obtain the +30 dBm ICP3in of the passive quad FET first mixer. Nevertheless, for the present I have opted against such heroic efforts because my first prototype of a global feedback amp did not exhibit any significant intercept changes between the breadboard version and the prototype version. It remains to be seen if this first smooth transition from breadboard to prototype can be repeated.

The new two stage amplifier using both local and global feedback, together with some details of transformer winding and circuit board layout, are given above. The new amplifier is identical to the old amplifier except for two main differences: (1) an additional winding n_{i} on T2 provides negative feedback to the gate of the U-310 amp, and (2) the turns ratio of Tl is changed. There are also three minor (but perhaps important) differences: (1) the lead from the n, winding of T2, which was and is about 1/2 inch long total, now contains five half twists for about the first 3/8 inch, (2) a 10 ohm resistor was added just before the gate of the U-310 as further precaution against VHF and UHF parasitics, and (3) the lead of the n, winding of T2 contains seventeen half twists which occupy about 1 3/4 inches of the total 2 inches lead length. This particular two stage amp was fabricated using the Hayward & Hayward "ugly weekender" method of using 4.7 meg ohm resistors as standoff insulators to mount two tiny PC boards, one containing the U-310 amp, and the other containing the 2N5109 amp. Placement of the two amp boards above the 3 1/4 by 2 inch PC board ground plane is shown, together with the approximate positions of the U-310 FET, 2N5109 BJT, T1, T2, and twisted leads for the n_i and n_{ij} windings

The measurement and testing cycle for this amp are not complete, but preliminary results are quite encouraging. The noise power output of the new amp is about -126 dBm in a 6 KHz BW, about 2 dB less than the old amp. Input intercepts, both 2nd and 3rd order, appear the be constant at +70 dBm ICP2in and +41.5 dBm ICP3in, though not all possible tones frequencies have been measured. The intercepts above apply for the following IMD and tone pairs: 2nd order: 1.6 + 1.64, 6.0 + 6.04, 13.6 - 11.9 (= 1.7), 1.64 - 1.13(= .51) MHz; 3rd order: 2x1.6 + 1.64, 1.6 + 2x1.64, 6.0 + 2x6.04, 2x6.0 + 6.04 MHz. All intercept measurements were made with each amp set up for 13 mA current. It is not known at this time if the intercepts given above are the maximum intercepts which this global feedback two stange amp can achieve. The U-310 amp was set for 13 mA, and the current for the 2NS109 amp was varied while intercept measurement was in progress to determine if a maximum intercept existed. A vary broad ICP2 maximum was found for 2N5109 current in the neighborhood of 13 mA; changing the 2N5109 current between 10 and 20 mA did not change the ICP2 more than 4 dB. The ICP3 maximum, if one exists, was even broader: ICP3 varied little for 2N5109 currents between 10 and 20 mA. These currents are so low that no heat sinks are required. However, I have not removed the heat sinks and re-measured the intercepts at this time. Previously I would have assumed that the presence or absence of heat sinks could not possibly have any effect on intercepts, but in view of my recent experiences with the leads of the n, winding of T2, I have become much more cautious about making assumptions about intercepts of ultralinear amps.

Strange Experiences 25 VII 94

Before proceeding to modify my second ultralinear whip, the bandswitched version, I measured the intercepts again and got a pleasant but strange surprise. The 1.6 + 1.64 MHz ICP2in was the same both with bandswitched wiring and with the input rewired broadband, namely +67 dBm. This was so curious that it delayed my global feedback conversion for several hours while I rewired the front end several times to alternately measure broadband and bandswitched ICP2in. But I kept getting +67 dBm in both cases, despite the additional loss due to input wiring for bandswitched mode. I cannot explain how I got a lower ICP2in for the broadband rewiring previously, but apparently I made a meaurement error or calculation error previously. This strange turn of events should have prepared me for what was to come, and eventually it did, but not until I went through some really wild gyrations as I will relate below.

The first problem I encountered in converting the second protptype to global feedback was that the input of the U-310 amp was farther away from T2 than for the first prototype. This caused me to delete the 10 ohm resistor at the gate of the U-310 and bring one lead directly to the gate. Also, due to space limitations, and because I attempted to preserve the 17 half twists for the n, leads, the twisted leads of n, passed within about 1/8 inch of the U-310 leads. I did not like any of this, but I fired it up anyway, and got terrible spurious responses when I attempted to measure the intercepts.

So I redid the conversion, using a 10 ohm resistor at the gate of the U-310 (as shown on the schematic), and used 24 half twists to get a longer twisted pair of \mathbf{n}_4 leads so that I could route the twisted pair farther away from the U-310 leads. When I fired the amp up this time and started intercept measurements, the spurious responses were not as bad, but still there. I listened to the spurious responses on 3.24 MHz for a while, and decided that they sounded somewhat like one of my local FM stations. So I tried an Amidon

FB-101-43 ferrite bead on the lead of the 0.1 mF input coupline capacitor, and the spurious responses were reduced to the ambient noise floor, and barely audible. I should point out that these tests were being conducted with the amp outside the metal box and rather long power and signal leads plugged into a push-in-lead proto board, while the testing and measurement of the first prototype was done inside a metal box. I had noticed what sounded like some spurious responses down in the moise while measuring the intercepts of the first global feedback amp, but they did not interfere with the testing and went away when the metal box cover was replaced, so I had not bothered to follow up on that problem. Naturally, I have subsequently added a FB-101-43 bead to the previous conversion, and have added this ferrite bead to the schematic above.

And now came the big surprise. The ICP2in of the second global feedback amp did not occur for 13 mA currents of both amps. ICP2in for the second global feedback amp continued to increase as the currents of either or both amps were increased, and reached +70 dBm with the U-310 drawing 16 mA and the 285109 drawing 25 mA at 3.24 MHz for tones at 1.6 and 1.64 MHz. Moreover, with the amp drawing those currents, the ICPs varied slowly, with higher intercepts at lower frequencies, and lower intercepts at higher frequencies. For example, 2x1.13 - 1.64 = 0.62 1CP3in = +46 dBm, 1.64 - 1.13 = 0.51 1CP2in = +83 dBm, 13.6 - 11.9 = 1.7 1CP2in = +75 dBm, 11.9 + 11.94 = 23.84 1CP2in = +59 dBm, 2x9 + 9.04 = 27.04 1CP3in = +40 dBm.

The difference in intercept behavior between the first and second prototypes of the global feedback amp were so dramatic that I suspected some layout or component difference must account for it. The most obvious difference, the 17 half twists versus the 24 half twists, was not it, as I learned after converting the first global feedback prototype to 24 half twists. Many hours were spent making minor changes to the first prototype to make it more closely resemble the second prototype, but nothing I did made the slightest change in the intercepts of the first prototype. Finally, out of desperation, I replaced the U-310 and 2NS109 in the first prototype. Lo and behold, the intercepts of the first prototype. Lo and behold, the intercepts of the same as the second prototype: ICP2in increased as the current of either or both amps was increased.

I am at a loss to explain this situation. The U-310 / 2N5109 pair I removed can hardly be called "bad" because they gave excellent intercept performance in the global feedback amp. Or are they "bad"? What is "normal" intercept behavior for a U-310 / 2N5109 pair in this global feedback circuit? Is there a single "normal," or is there more than one "normal." Maybe both behaviors are "normal." I don't know,

An unrelated but interesting phenomenon was observed during this most recent phase of testing. According to theory, the signal levels and signal-to-noise ratio of a short whip are dependent on the average diameter of the whip. A larger average diameter gives higher signal levels and higher signal-to-noise ratio than a smaller average diameter. This effect was observed while comparing the signal levels developed with a 41 inch telescoping whip with 7 sections 5 inches long and one section 6 inches long to the signal levels developed with a 72 inch telescoping whip with 6 sections 12 inches long. The longer whip was adjusted to 41 inches long using the 4 largest sections, which gave it a considerably larger diameter than the fully extended 41 inch whip. A 4 dB advantage in signal level was observed with the larger average diameter whip. This advantage could be useful for weak signal listening above

The intercept variation is not a serious obstacle for the hobbyist who would like to build one of these active whips because the intercepts are so much higher than consumer grade and many professional grade active whips that even if you don't optimize intercepts, you will still have a better active whip than you could buy. As a compromize between the two possible kinds of U-310 / 2N5109 pairs, set the U-310 for 16 mA and the 2N5109 for 20 mA for the global feedback amp.

Tl Twisted Leads, RF Ground Loops, And Bad(?) U~310 28 VII 94

My experiences with the twisted leads of the n, winding of T2 should have directed my attention to the leads of the n, winding of T1, and I seem to recall poking around on those leads at that time and finding no evidence of instability. Nevertheless, when I repeated the "poke test" more recently, instability was observed due to the leads of T1 for a breadboard version of the global feedback amp. The broadband only prototype was duly modified with 12 half twists of the n, leads and 12 half twists of the n, leads of T1. When I fired up the newly modified protptype amp to measure the intercepts again,

much worse instabilities were observed with the prototype. These instabilities were traced to what seems to be RF ground loops caused by the DC ground loop hum reduction circuit because when another 0.1 mF (paralleled with a 5000 pF, both 500 volts) was added to provide an RF path from a circuit ground point near the U-310 to a nearby chassis ground point, the instabilities vanished. The twisted Tl leads had little, if any, measurable effect on the performance of the global feedback amp, except, perhaps to raise the 3rd order intercepts slightly for tones frequencies below about 2 MHz.

To try to tidy up loose ends, the "bad" U-310/ 2N5109 pair discussed above was examined in the breadboard circuit (to facilitate quick changes of transistors). When the U-310 of that pair was used with another 2N5109, the same "bad" behavior was observed. When the 2N5109 of that pair was used with another U-310, no "bad" behavior was observed. Furthermore, multiple other pairs of U-310's and 2N5109's have now been measured, with no "bad" behavior observed. I have concluded that particular U-310 is somehow "bad," though it, like all the other U-310's, was manufactured by Siliconix. As yet I have not found any stand-alone measurable parameter which distinguishes this "bad" U-310 from the others.

In view of these results, I have concluded that the normal behavior of the global feedback amplifier is that intercepts, especially 2nd order intercepts, increase as currents are increased. In addition, there are "knees" at about 14 - 16 mA for the U-310 and at about 20 - 25 mA for the 2N5109 where the increase in 2nd order intercepts due to increased currents is marginal. For this reason, there seems to be little advantage to adjusting the U-310 current much above 16 mA or the 2N5109 current much above 25 mA. This applies also to the non-global feedback amp given at the beginning of this article. The "bad" 0-310, together with the twisted leads problems, probably account for much of the measurement inconsistencies encountered during the development of these amps as described above. In addition, because the "bad" U-310 was in the prototype which went head-to-head with the DX-one, I would expect the global feedback amp with a good U-310 to do much better in that harsh RF environment. I would not expect the 14 dB higher ICP2in to completely eliminate the 2nd order products observed before, but I would expect them to be substantially reduced. Whether or not the 3rd order products observed in that harsh RF environment will be completely eliminated remains to be seen.

Parts

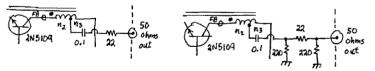
Some of the parts used to construct these whip antennas have already been specified on the schematics or in the text above. Many of the parts were purchased from Mouser. You can get a free Mouser catalog by calling (800) 992-9943. Mouser has no minimum order, but orders less than \$20 have a \$5 small order fee. I use H. H. Smith 9550 ceramic feedthrough insulators as whip mounts. The only source I know for these is Radiokit, P.O. Box 973, Pelham, NH 03076, (603) 635-2235. Friends of mine have been trying to get a Radiokit catalog for years, without success. I suggest you phone Radiokit and discuss the things you want, including prices and shipping charges. I have always had good results with this approach. The fellow who runs Radiokit is friendly and helpful. In addition to H. H. Smith 9550 feedthroughs, according to my old catalog, Radiokit also carries 2N5109's, U-310's, ferrite toroids and beads, and powdered iron toroids with the same numbers used by Amidon, Hammond 1590E boxes which I used to build the indoor versions of the whips, and all kinds of hard-to-find parts. Between Mouser and Radiokit, you should be able to get most of the parts you need to build one of these whip antennas. At present I know of no source for 6-32 threaded telescoping or single-piece whips. The simplest solution here is to buy a Radio Shack #21-952A Stainless Steel Replacement Whip and modify the mounting base. The base has a large threaded mount, maybe 5/16 - 24, which is drilled and tapped for a 4-40 screw, if memory serves me correctly. Or maybe I drilled entirely through the mount and tapped it for 4-40. I don't remember. In any case, you can use a disk sander to grind off the threaded part, drill a larger hole from the new flat base up to the Allen set screw for attaching the whip with a 7/64 bit, and tap the 7/64 hole for 6-32. You should not drill or tap past the Allen set screw for attaching the whip. You can then counter-sink the 6-32 opening with a 5/32 bit, and deburr with #400 and #600 wet-dry sandpaper. The finished mod gives you a professional looking detachable stainless steel whip. The base appears to be plated brass, and in any case is easy to drill and tap with the base clamped firmly in a vise with wood tongue depressors used to protect the base from the hard steel of the vise jaws. I do not know if there is any difference between one brand of transistor and another. I got all of my 2N5109's from RF Parts, (800) RF PARTS for orders, and (619) 744-0700 for information. RF Parts has a \$20 minimum order. RF Parts also sells U-310's, but I got my U-310's from Active Electronics, (800) 677-8899 for orders. 1 use only Siliconix U-310's, and when I buy from Active I must specify Siliconix

U-310's, otherwise I will get Active plastic package stock, which may include other brands. Active Electronics has a \$25 minimum order. To mount the H. E. Smith 9550 feedthrough, you will need a 1/2 inch chassis punch. These are available from Mouser, 586-3801, currently \$17.99 (ouch!). Or you can drill a hele (I would start with 1/8 inch as a pilot hole, and enlarge it successively to 1/4 inch, 5/16 inch, and 3/8 inch) and enlarge it to about 1/2 inch with a cylindrical file. I used UG-1094/U BNC connectors for the RF output connectors. They require a special D mounting hole, which you can make by drilling a smaller hole, and enlarging it to the required D shape with small cylindrical and flat files.

50 Ohm Termination, And Bad(?) Variant U-310's 6 VIII 94

Earlier in this development 1 should have investigated how the reactive loads of a receiver effected the intercepts of the whip amps. But I did not expect the effect to be significant based on experiences with 2N5109 transformer feedback amps in the past. However, the global feedback U-310 / 2N5109 amp is much more sensitive to reactive loads than common base 2N5109 transformer feedback amps, which I learned much to my dismay two days ago. For two tones at 1.6 and 1.64 MHz, the NRD-525 has ICP2in at 3.24 MHz of about +73 dBm, and ICP3in at 4.84 MHz of about +43 dBm. Given the good intercepts of the whip amp, one would expect similar intercepts when the whip amp is connected to the NRD-525. Unfortunately, this is not the case. The IMD products at 3.24 and 4.84 MHz are about 27 dB higher than expected, which means the whip amp intercepts are degraded by the reactive load to about +46 dBm 1CP2in and about +34 dBm ICP3in. Similar reduction of whip amp intercepts were observed when the amp was connected directly to an R-390A for these two tone frequencies of 1.6 and 1.64 MHz. With both receivers, the reduction in whip amp intercepts was not independent of frequency. Whip amp intercept reduction decreased as frequency increased, and at sufficiently high frequencies, no intercept reduction was observed. For example, no ICP2 reduction was observed at 23.840 MHz for tones at 11.9 and 11.940 MHz.

There are generally two ways to miligate the negative effects of a reactive load for a high intercept amplifier: (1) use a diplexer immediately following the amp, or (2) use an attenuator immediately following the amp. A breadboard diplexer was tried with a breadboard amp, but it caused the amp to become unstable, especially at higher frequencles. I suspect too many parts out in the open provided too many stray signal paths, and intend to re-evaluate the diplexer approach when I have built a tunable diplexer in an RF tight box with BNC connectors. As a first approximation to an attenuator, various low value resistors were inserted in series with the output of the amp, and the intercepts at 3.24 and 4.84 MHz (tones at 1.6 and 1.64 MHz) were measured in each case. Some improvement was observed with 10 ohms, still more improvement with 15 ohms, and with 22 ohms, ICP3in was about +40 dBm and ICP2in was about +63 dBm. The 22 ohm resistor introduced about 3 dB loss, which, though not desirable, is acceptable. A 4 dB resistive attenuator was also tried, but no further improvement in intercepts was observed. The low frequency intercepts of the whip amp when used with an R-390A were similarly improved when a 22 ohm resistor was inserted at the output of the whip amp. This change to the whip amp output is shown below. Alternately, you may use a 4 dB resistive attenuator, which is also shown below.



Tests with the U-310 part of the two-stage global amp showed that the U-310 part is as sensitive to reactive loads as the two-stage amp. This suggests that the U-310 part is primarily responsible for the sensitivity of the two stage amp to reactive loads. This also suggests that any similar broadband whip amp will be equally sensitive to reactive loads. This would include, for example, the MFJ 1024, the active whip antennas discussed by R. W. Burhans in his May 1986 Ham Radio article, "Active antenna preamplifiers," pages 47-54, and in his 1983 Radio-Electronics articles, "All about VLF active antennas," (Eeb. 1983), pages 63-66, Part 2 (Mar. 1983), pages 65-72, and the active antenna described by J. Jirmann in his 1/92 UKW-Berichte article, "Aktive antenna described by J. Jirmann in his 1/92 UKW-Berichte article," Aktive antennen fur den Frequenzbereich von 10 kHz bis 30 MHz." pages 39-42.

To the best of my knowledge, no receiver has a 50 ohms resistive antenna input impedance at all frequencies, which is a prerequisite for high intercept broadband whip antennas to function correctly. For example, receivers like the NRD-525 and R-390A with tracked tuned front ends may have approximately 50 ohms resistive antenna input impedances at the frequency f to which the receiver is tuned, but the antenna input impedances at frequencies considerably different from f will be highly reactive. Even receivers without tracked tuned front ends often have bandpass filters of some kind, which can present highly reactive loads to a whip antenna at frequencies considerably removed from the tuned frequency. I would venture to guess that few, if any, broadband active Whip antennas have achieved their rated intercepts in practice because their intercepts are measured in a laboratory setting with a purely resistive load, while in the real world the whips are used with reactive receiver inputs. Moreover, none of the schematics I have examined show any evidence of the designer having considered the reactive load problem or taking appropriate preventive measures for intercept reduction due to reactive loads.

I did not dig deep enough into my inventory of U-310's when I tested the U-310 /2N5109 pairs previously and concluded that the U-310 which behaved differently was bad. A few days ago I went on a massive U-310 testing program, and found that I have lots of U-310's which behave like the "bad" one. So it appears that there are at least two types of U-310's. Let's call them "type 1" and "type 2" (formerly called "bad"). All U-310's tested were manufactured by Siliconix, and came from several different production runs as evidenced by several different date codes from 1987 to 1992. The only distinguishing feature between the type 1 and 2 was that all type 1 had dull cases, while all type 2 had shiny cases. Further breadboard measurements with both types revealed that ICP2 performance can be made more uniform by replacing the 2.2 meg ohm resistor at the gate of the U-310 with a 3.3 meg ohm resistor. With this change, both types perform similar to type I with a 2.2 meg ohm resistor, namely, for best ICP2, set the U-310 current for 16 mA and the 2N5109 current for 25 mA.

Concluding Remarks

With the 22 ohm resistor inserted at the output of the whip amp, amp noise is at or below the noise floor of the R-390A. It is so quiet that when I turn it on with the whip removed, I sometimes think the amp has "died." Even so, below about 12 - 15 MHz, man-made and atmospheric noise is almost always heard clearly at my location with the whip attached. However, if you like to chase weak DX above 15 MHz, the broadband version will possibly not be satisfactory, especially if you live at a quiet location. In that case, you could make a two-band version, where band 1 was broadband and band 2 was the 8.6 - 32 MHz "Band 4" described earlier. Above 15 MHz, placement of the active whip antenna can cause signal levels to vary as much as 20 dB. For many locations, that difference can be enough to make a bandswitched version unnecessary.



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Formats

Tony Fitzherbert 356 Jackman Avenue Fairfield, CT 06430-1728

Changes in programming status; reported by listeners

Al Holtz of Conrail in Philadelphia writes that WPGR - 1540 is about to be sold to D.C.'s Global Radio, owners of WUST-1120. When the sale is approved, WPGR ("Philadelphia Gold Radio") will drop its Philly doo-wap sound and go to all brokered ethnic programming, similar to current WUST offerings. The 50,000 watt day, 500 watt night station will operate 24 hours a day.

This column comes from the M Street Journal.

580	WKTY	W I		- Adult standards,
590	CJCL	ON	Toronto	- Sports "The Fan" (see 1430).
680	WCNN	GA	Atlanta	- Sports and Sports Radio Network sports (SRN),
710	KNUS	C O	Denver	- All news.
730	WVFN	M I	East Lansing	- SRN Sports.
950	KAHI	CA		- News, talk, SRN sports.
950	KDSX	ΤX	Dennison	- PRN talk//KJIM, soon all sports, see 1500.
970	WNIV	G A	Atlanta	- MSG Christian CWM // WNVF-1400.
1090	WGLC	ΙL	Mendota	- SMN Real Country.
1150	KDEF	NM	f Albuquerque	- Talk and sports.
1230	WQDN	NC	Kinston	- SMN Real country.
1240	WMGJ	A L	Gadsden	- SMN Urban Gold.
1240	KLOA	C A	Ridge Crest	- SMN Oldies and talk.
1240	WWCO	CT	Waterbury	- Drops oldies for talk
1260	WJJJ	VA	Christiansburg	- SMN Oldies.
1300	KWCK	A R	Searcy	- WW-I country music. wccz radio
1310	KXAM	Λ Z	Mesa	- Talk.
1320	WGET	P A	Gettysburg	- AC and SRN sports.
1350	KBBL	A R	Cabot	- All sports.
1390	KMIX	CA	Turlock	- Regional Mexican / / KCVR.
1400	WVNF	G A	Appharetta	- MSG Christian country music//WNIV.
1400	WDUZ	WI	Green Bay	- Gold based AC, Sports Radio Sports.
1410	WLAQ	G A	Rome	- Talk, sports, SRN sports.
1430	KQLL	ОК	Tulsa	- Sports, classical music 12 noon - 5pm and 8pm
				to midnight.
1430	CKYC	O N	Toronto	- Country music, swapped with CJCL, now on
				590 khz.
1450	KNET	T X	Palestine	- WW-I oldies.
1470	KDEW	A R	DeWitt	- Gold based urban contemporary.
1490	WWPR	FL	Bradenton	- WW-I adult standards.
1490	WNDU	IN	South Bend	- WW-I 1970's oldies.
1500	KJIM	T X	Sherman	- PRN talk.
1530	KLRA	A R	England	- Country music.
1540	WECZ	P A	Puxsatawaney	- WW-I country music 'The Crown I II.
				- WW-I country music 'The Ground Hog - AM 1540".
1560	WCCP	s c	Clemson	- Sports Radio Network sports.
1570	KMYZ	ОК	Pryor	- New rock//FM.
1600	WSFN	M I	Muskegon	- SRN sports.
	_			OIGIN OPOLIO,

A short column this time. Do send your area's format changes in to your column...as you travel this summer. Remember....your local is someone else's DX catch!! 73's.



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DX'er

Confirmed Ken MacHarg kmacharg@mhs.hcjb.com.ec

HCJB - Box 39800 - Colorado Springs, CO 80949, or HCJB - Box 17-17-691 - Quito, Ecuador (.5 oz.: 50¢)

Your successes in obtaining QSL's and other station items

Hello again from Ecuador, where QSL cards both originate and arrive! A good selection this time, let's take a look:

ALABAMA, WXVI, 1600, Montgomery, personal letter on WCOV-TV stationery, and signed f/d prepared card 24 days after followup, 3 1/2 months after original report. V/s Philip B. Witt, CE.

ARKANSAS, KAAY, 1090, Little Rock, f/d card in 3 years. V/s Felix McDonald, CE (Reiser-IL) CALIFORNIA, KPIS, 830, Orange, Letter, sticker in 45 days for follow up. V/s Bruce Barker, PD. (Wilkins-CO)

FLORIDA, WCRJ, 1530, Jacksonville, stamped and signed f/d prepared card 4 days after f/u, 1 month after original report. V/s Ron Jenkins. (Lazarus-LA)

ILLINOIS, WGN, Chicago, full data card in 6 months V/s James J. Carollo. (Reiser, LA)

IOWA, WSUI, 910, Iowa City, F/d "Old Capitol" QSL card, letter, px. schedule, in 24 days for phone report of DX test. V/s Dennis Reese, PD. (Perdue-AL)

IOWA, WSUI, 910, Iowa City, F/d "Old Capitol" card in 3 weeks. (Reiser-IL)

IOWA, WSUI, 910, Iowa City, F/d "Old Capitol" card in 20 days, also program guide. WSUI is the oldest US station west of the Mississippi (1919). (Wilkins-CO) [And obviously getting out well and verifying nicely!!! -Ken]

KANŚAS, KFRM, 550, Salinas, handwritten personal note, keychain and signed f/d prepared card one month after 2nd f/u, 5 1/2 months after original report. V/s Herb Hoeflicker, President and GM. (Lazarus-LA)

KANSAS, WIBW, 580, Topeka, f/d card in 3 weeks. V/s Ed O'Donnell, l'D. (Reiser-IL)

KANSAS, WIBW, 580, Topeka, Letter, bumper sticker, map in 49 days. (Burns-IN)

KENTUCKY, WLLS, 1600, Hartford, hand written letter, bumper sticker, for test broadcast with 1948 xmtr. (Holbrook-MD)

MINNESOTA, KKIN, 930, Aitkan, Prepared card in 53 days for f/u. (Wilkins-CO)

MISSOURI, KDFN, 1500, Doniphan, signed f/d prepared card, personal letter, rate card, map, sticker, keychains in one month. V/s Raymond Hodo (Lazarus-LA) [What a haul!!! --Ken]

NEW MEXICO, KINN, 1270, Alamagordo, P/d letter, stickers in 8 days. V/s Robert W. Vaughn, GM. (Wilking-CO)

NEW YORK, WGNY, 1200, Newburgh, letter and magnet in 21 days. (Holbrook-MD)

NEW YORK, WLIX, 540, Bayshore, QSL in 20 days after f/up. (Holbrook-MD)

NORTH DAKOTA, KFJM, 1370, Grand Forks, F/d QSL card & sked for report on DX test. In 6 days for mint stamp. (Moore-IA)

WYOMING, KŘTY, 1470, Douglas, "This is correct" written on my report in 8 days. V/s Debbie Kromrey, (Wilkins-CO)

OUTSIDE OF NORTH AMERICA

BAHAMAS, Broadcasting Corporation of the Bahamas, 1540, Nassau, n/d sort-of confirmation letter in just over 5 months, after years of trying! V/s Wycliffe Miller. (MacHarg-EC)

COLOMBIA, HJLI, Ecos del Palmar, 1520, Bogota, "Confirmado" written on Christmas card, in 215 days from f/u. Am tickled pink! (Wilkins-CO) [We tried to explain "tickled pink" to a Spanish-

speaking Ecuadorian friend the other day. She thinks we are crazy! --Ken] COLOMBIA, Ondas del Porvenir, 1450, F/d ppc & ad rate/map folder in 10 days (!) for Venezuelan reception. Map says 10 kW, QSL says 7 kW, WRTH says 5 kW. V/s Hernando Parra

Pamplona, gerente. (Moore-IA) [Don, did you deliver that report while you were in Venezuela? It's hard to get a letter one way to or from Latin America in 10 days, let alone round trip! --Ken] COLOMBIA, RCN, 770, Bogota, QSL card, letter and bumper stickers in 41 days. V/s Antonio

Pardo Garcia--says first letter from NYC, and they appreciate foreign letters! (Kozlarek-NJ)

COLOMBIA, Radio Musical, 1280, F/d ppc, TODELAR net stkr, business cd in 7 wks for Venezuelan reception. V/s Carlos Arturo Tobon K., Vicepresidente Ejecutivo, TODELAR (Moore-

COSTA RICA, Radio Alajuela, 1280, F/d ppcs for f/ups on 1982 MW reception in Honduras & 1988 reception of 5120 harmonic in Ohio.

Also stkr, business cd, & colorful 29cm plastic station ruler. V/s Edgar Herrera Troyo, sub gerente. All this picked up on a visit to the station by MD DXer Ulis Fleming, visiting his in-laws who live 3 blocks from the stn! Ulis says Edgar laughed about the harmonic and admitted that it is a very old transmitter and that they have problems with it. Tnx, Ulis! (Moore-IA)

DOMINICA, DBS, 595, Date only form letter in 4 months for taped rpt & \$1. V/s Fred White, Chief Technician. (Moore-IA)

ECUADOR, HCJB, 690, Quito, f/d "Andean moonrise over Quito" card in 67 days for an e-mail report. V/s Rich McVicar. (Hardester-NC) [Boy, it's nice to type up that one!!!-Ken]

JAMAICA, JBC-Radio One, 750, Port Maria, signed, f/d prepared card in 3 months. V/s Mrs. Lois Gayle, Manager. (Lazarus-LA)

MEXICO, XEFD, 590, N/d note, business cd for co-owned XEOQ 1110, 3 cassettes of Mexican mx, & several stickers for local baseball team and bands. V/s Lic. Ever Duarte Villanueva, Director Artistico. In 5 wks for \$1. (Moore-IA)

MEXICO, XEFD, 590, Reynosa, stamped and signed f/d prepared card, handwritten note and business card in 6 weeks, V/s C. Pacheco, note from Lic, Ever Duarte Villanueva. (Lazarus-LA)

MEXICO, XEMQ, 810, Tus Panteras, Merida, stamped and signed prepared card, letter, sticker and business card 6 weeks after 2nd follow-up. V/s Lic. Roberto Dominguez Avila, Director General. (Lazarus-LA)

MEXICO, XEMH, 970, La Grande, Merida, stamped and signed prepared card, letter, sticker, business card, 6 weeks after f/up. V/s Lic. Roberto Dominguez Avila. (Lazarus-LA)

MEXICO, XEMU, La Rancherita del Aire, 580, Nice n/d fluent English ltr in 12 days. Returned my \$1 return postage. V/s Claudio M. Bres. USA address PO Box 196, Eagle Pass, TX 78853-0196. Reply mailed in USA. Says has received rpts from Hilo & New Zealand. Also complained that when they are on night power they can hear WIBW Kansas on their studio monitor! (Moore--IA) (Ed O'Donnell will be interested in that one, inasmuch as I can hear XEMU u/WIBW when they "forget" to go to that night power ... not to mention that WIBW has filed formal complaints with the FCC over their encroachment -pls)

MEXICO, XEQR, Radio Centro, 1030, Mexico City, personal letter with two indirect verie statements, stickers and calendar, in 3 months. V/s Manuel Trueba Aquirre, Gerente de Operaciones. (Lazarus-LA)

MEXICO, XERED, 1100, Mexico City, full data Certificado de Sintonia, letter by registered mail. 1 month after f/up. V/s Alicia Ibarguengoitia Gonzalez, Director. (Lazarus-LA)

MEXICO, XESFT, 780, La Bronca Nortena, stamped and signed prepared card, personal letter, 2 stickers, station information, 1 month after 2nd follow-up. V/s Lic. Raul Garza Salazar, Director. (Lazarus-LA)

MEXICO, XEW, 900, Mexico City, full data Certificado de Sintonia, letter, 5 huge pennants and 3 stickers in one month after f/up. V/s Maclovia Garciaconde, Coordinadora General. (Lazarus-LA)

MEXICO, XEWI., Nuevo Laredo, 1090, F/d ppc, letter, coverage map for taped rpt & \$1 in one month. V/s Ernesto Castro S. Power 1000 watts. (Moore-IA)

NETHERLANDS ANTILLES, TWR, 800, Bonaire, f/d "Bonaire House" card, tracts, calendar. V/s Bill Early. New address, Box 308. (Reiser-LA)

VENEZUELA, Radio Fe y Alegria, 800, F/d letter & ppc in 30 days for Venezuelan reception. V/s Lic. G. Celso Atencio Ch., gerente. (Moore-IA)

VENEZUELA, Radio San Carlos, 920, F/d ppc & press card in 27d via registered mail for Venezuelan reception. V/s illegible. (Moore-IA)

VENEZUELA, Sonera, 1450, F/d ppc, ltr, decal in 30 days via registered mail for Venezuelan reception. V/s Felipe Montero (Gerente de Produccion) and Carolina Noguera Messuti (Gerente de Relaciones Publicas). (Moore-IA)

THIS MONTH'S CONTRIBUTORS: Mark Burns, Terre Haute, IN, Mike Hardester, North Carolina, Hank Hoolbrook, Dunkirk, Maryland, Bob Kozlarek, Elmwood Park, NJ, Henry Lazarus, New Orleans, LA, Ken MacHarg, Quito, Ecuador, Don Moore, Davenport, IA, Neal Perdue, Madison, AL, Thomas Reiser, Chicago, Illinois, Joe Wilkins, Wheat Ridge, CO.

Thanks to all those who participated, and to those of you who took time to write a note as well. One question was, are letters faster through Colorado Springs or direct to Ecuador. The answer is, who knows, it depends on whether someone is coming here from HCJB's office in Colorado to carry it. I think in general it is faster direct via air mail. Keep those reports coming. --Ken



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